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A Critical Introduction to Syntax, Jim Miller
The Grammar Detective, Gillian Hanson
Syntax in Functional Grammar, G. David Morley
To the memory of my parents
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Writing a textbook on morphology, particularly within the discipline of Cognitive Linguistics is a daring enterprise. It is fraught with difficulties and rife with pitfalls. In the course of preparing the textbook, a number of people have contributed directly or indirectly to its evolution. First, I owe a special debt of gratitude to Ronald Langacker for checking the linguistic content. His acute observations helped make the argument sound. Second, I record my indebtedness to Struan Robertson for proofreading the manuscript. His pertinent suggestions contributed to textual clarity. Third, I am grateful to Pavel Stekauer for devoting his time to reading an earlier draft of the work, giving perspicacious remarks and invaluable feedback. Fourth, I would like to express my deepest appreciation to Gurdeep Mattu, the Linguistics Editor at Continuum, for his guidance in bringing the project to fruition, and the remaining staff for their diligence in producing and distributing the textbook. Finally, I will be grateful if readers provide suggestions for improving future editions of the textbook. Responsibility for errors is, of course, entirely my own.

Zeki Hamawand
Morphology in English: Word Formation in Cognitive Grammar is a textbook which provides an in-depth analysis of English morphology. Theoretically, the framework is rooted in Langacker (1987, 1991). Practically, it is based on Hamawand (2007, 2008, 2009). Morphology is a branch of linguistics which studies the form-meaning relationships between the subparts of composite words in the lexicon. It aims to show how the subparts are integrated and how the resulting formations are interpreted. A composite word consists of two or more subparts, one of which imposes its profile on the entire structure. The description of a composite word involves two aspects. One is substance, which consists of two facades: form or the phonological representation, and meaning or the semantic content. The form serves to express meaning. The other is use, the purpose for or way in which a composite word is employed. The use of a composite word is determined by the way the language user construes a situation, which differs relative to the demands of discourse. The substance of a composite word is activated as a response to language use.

The lexicon is a network of morphological units which the language user associates in conformity with cognitive principles. Morphological units display three linguistic characteristics. One characteristic pertains to linguistic multiplicity, whereby a particular morpheme has a series of interrelated senses which gather around a prototype. The senses are organized in terms of distance from the prototype, based on the degree of similarity. Another characteristic revolves around linguistic relationship, whereby different morphemes cluster in domains defined by two types of relation: one is of similarity vis-à-vis the overall concept of the domain they form; the other is of difference with respect to the specific functions they perform within the domain. A further characteristic relates to linguistic alternation, whereby two, or more, rival morphemes attach to the same root and derive new forms. The resulting forms, namely the alternatives, differ with respect to the construal imposed on them. Each alternative represents a different construal, and thus has a meaning that is uniquely its own.
Goals

To come to grips with morphology, the textbook links theory with practice. It has, therefore, two goals: theoretical and practical. The theoretical goal is to acquaint students with the three theories of word meaning, highlighting its impact on form. In the light of category theory, morphemes are argued to have multiple meanings, which gather around prototypical examples, and so display minimal differences in meaning. By virtue of domain theory, morphemes expressing the same concept are argued to form domains, in which they represent discrete facets, and so have different roles to play in the language. With reference to construal theory, two or more morphemes attached to the same root are argued to be distinguishable in meaning, and so the word pairs they form are distinctive in use. The practical goal is to provide students with a comprehensive description of the two essential areas of vocabulary building: derivation and compounding. It aims to develop their skills in analysing morphological expressions, familiarize them with the mechanisms used in forming composite words, and inform them of the techniques employed to account for their interpretation.

Contents

The textbook starts with a chapter entitled ‘Fundamentals’, which serves to introduce the major terms involved in the field of morphology. The rest of the textbook is divided into four parts. Part I sheds light on the theoretical aspect of the discussion. It offers a synthesis of the leading tenets of the cognitive framework. It consists of three chapters. Chapter 1 introduces the cognitive assumptions. Chapter 2 touches upon the cognitive mechanisms. Chapter 3 addresses the cognitive operations. Parts II–IV pertain to the practical aspect of the discussion. Part II deals with prefixation. Part III copes with suffixation. Part IV grapples with compounding. Each part includes chapters on categorization, configuration and construal. Each chapter begins with an overview, where the subject matter, the objective and the procedure are stated. The overview aims to help the student to understand the content before delving into explanations. Each chapter is divided into sections. Each section closes with an exercise. The exercises are meant to reinforce the material presented or introduce new material for investigation. There are appendices at the end of the textbook, which are designed to give additional information about other important areas of morphology.
Audiences

To achieve its mission, the textbook uses an approachable style and embellishes the presentation with cursory sketches. It uses actual data, offers numerous examples and gives vivid explanations. As a textbook, it targets two classes of audience. Primarily, it targets undergraduate and graduate students taking degree courses in linguistics. It provides them with a thorough discussion of the pivotal issues involved in the study of linguistic morphology. It informs them more fully about such productive processes in word formation in English as derivation and compounding. Secondarily, it targets students at English departments. It helps them to expand their vocabulary and understand the conditions under which lexical choices are made. As a guidebook, it targets two classes of audience. First, it targets linguists. Of central significance for them are the cognitive tools employed to account for morphological data. Second, it targets scholars from neighbouring disciplines. Of special interest for them is the description of an area in language study from a new perspective.

Notes

To teachers

To make maximum use of the textbook and achieve the goals of the course, teachers should consider two points. Concerning lesson plans, the textbook is organized in such a way that it allows teachers flexibility in designing a morphological course to meet teaching requirements. The textbook is ideal for a one-semester course of 12–14 teaching weeks. In this case, teachers are recommended to cover one chapter per week. However, the recommendations made here can be adjusted to meet different requirements. Teachers are, therefore, free to use the textbook in a way that suits the level of the course they teach and/or the time available. Concerning the data, it is taken exclusively from English. The main source for the choice and analysis of the data is the British National Corpus. The corpus provides exemplary sentences and collocational patterns. However, the general principles discussed here can be extended to apply to other languages. Teachers are, therefore, free to use cross-linguistic data in their lessons. To save time, the following is a possible format of a one-semester course.
To students

The textbook, which is couched within the theory of Cognitive Linguistics, is meant to give students an insight into the nature of English morphology and the principles which govern its mechanism. It does not necessarily presuppose any prior knowledge of linguistics. The definitions which it presents and the distinctions which it suggests should not be taken as a hard-and-fast criterion, but rather as a general rule of thumb. To get a grasp of any section or subsection, the students are advised to study its content carefully, make a brief summary of it, and then tackle the exercise which it contains. The purpose of this is twofold. First, it attracts attention to the core of the section. Second, it tests comprehension of the material presented. Finally, further reading including bibliographical sources are included at the end of the textbook. The purpose of this is twofold. First, it provides guidance on further reading on the topics covered in the analysis. Second, it acknowledges work which contributed in one way or another to the present discussion.
Conventions

- Bold face is used to introduce technical terms at their first occurrence, and thereafter ordinary type face is used unless particular emphasis justifies its repetition.
- Italics are used to cite a word or a sentence as a linguistic example to illustrate the terms.
- Asterisks are used to indicate that a word or an expression is semantically unacceptable.
- Single quotation marks are used to enclose a phrase to indicate the definition of a morpheme or word.
- The mark = is used to indicate that two words or phrases have the same value as each other.
- The mark [ ] is used to represent schemas and semantic structures of derivational morphemes.
- The mark / / is used to represent phonological structures of derivational morphemes.
- The mark ( ) is used to enclose words.
- The mark { } is used to enclose alternatives.
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This textbook is about morphology, the study of the form-meaning relationships between lexical units and their arrangement in forming words. This part introduces the basic components of the field of morphology and the necessary processes which it involves. It addresses two concerns. One concern relates to terminology. It introduces the terms used in the study of morphology and defines them in a way that is both concise and precise. The other concern pertains to delimitation. It identifies the scope of the investigation. This part is organized as follows. Section 1 focuses on the issue of what linguistics is and what morphology within linguistics does. Section 2 centres on the terms used in morphology to describe language. Section 3 concentrates on morphological areas. In all the sections, I pursue three steps. First, I introduce the term. Second, I explain its meaning. Third, I devise an exercise to test its application.

1 Introduction

In communicating with one another, we use a set of vocal sounds or written marks called language. **Language** is a vehicle for communicating ideas and feelings. The scientific study of language is linguistics. **Linguistics** studies the principles that govern the structure and use of a language. In forming expressions, language users employ the resources provided by the lexicon. The **lexicon** is a language’s stock of lexical expressions. It is a language user’s knowledge of vocabulary. It contains a set of lexical options which language users are free to choose from in describing their experiences. Any variation in choice reflects a distinction in meaning, which is processed by cognition. **Cognition** is the mental faculty of acquiring knowledge by the use of intuition, perception or reasoning. Relevant to the study of language then is the detection of the motivation behind the choice of lexical items. A **lexical item** is an item of vocabulary which has semantic interpretation and embodies a distinct concept. It may be a single word or a group of words. Investigating the use and meanings of words or word groups is the subject matter of **lexicology**, the study of the lexicon of a language. Exploring the internal structure of words, which is the focus of the present explanation, is the task of **morphology**, the study of
Exercise 1

Read the following statements and write whether they are true or false. Then, correct the false ones.

1. Language is a dynamic set of auditory or visual symbols of communication.
2. Linguistics studies what language is and how it is represented in the mind.
3. Lexicon is an inventory of all the words in a particular language or subject.
4. Lexicology is concerned with the combination of structures to yield words.
5. Morphology is concerned with the meaning and usage of words as wholes.

2 Morphology

As a lexical word, morphology consists of two parts: *morph* referring to ‘form’ and *-ology* referring to ‘study’. As a linguistic term, **morphology** is the study of how words are built of form-meaning units. It studies the ways in which form alterations reflect meaning distinctions. This amounts to saying that the morphological structure of a word mirrors its semantic structure. Morphology is an essential subfield of linguistics. Generally, it aims to describe the structures of words and patterns of word formation in a language. Specifically, it aims to (i) pin down the principles for relating the form and meaning of morphological expressions, (ii) explain how the morphological units are integrated and the resulting formations interpreted, and (iii) show how morphological units are organized in the lexicon in terms of affinity and contrast. The study of morphology uncovers the lexical resources of language, helps speakers to acquire the skills of using them creatively, and consequently express their thoughts and emotions with eloquence.

2.1 Word

A fundamental unit with which morphology is concerned is the word and its constituents. A **word** is a symbolic unit which is a combination of meaning and sound. A word like *car*, for example, has two aspects which cannot be separated: the sound image /ka:/ and the concept [CAR], a type of vehicle. Words may be simple, composite or compound. A **simple word**, also known as **monomorphemic**, is composed of only one lexical structure, which is
morphologically indivisible. The word use, for example, consists of just one lexical constituent. It is the minimum free form which can stand by itself and act as a meaningful utterance. A **composite word**, also known as **complex** or **polymorphemic**, is composed of two or more substructures which is morphologically divisible, one of which is a word. The word *useful*, for example, is a derivation from the lexical substructures *use* and *-ful*. A **compound word** is composed of two substructures, namely words, which is morphologically divisible. The word *birthday*, for example, is a combination of the lexical substructures *birth* and *day*. Simple, composite and compound words are subsumed under the general term **morphological expression**.

**Exercise 2**

Examine the structures of the following morphological expressions and write whether they are simple or composite.

<p>| | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>1. jabber</td>
<td></td>
</tr>
<tr>
<td>2. realize</td>
<td></td>
</tr>
<tr>
<td>3. modern</td>
<td></td>
</tr>
<tr>
<td>4. invention</td>
<td></td>
</tr>
<tr>
<td>5. bookstore</td>
<td></td>
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</tbody>
</table>

**2.2 Morpheme**

A composite word is made up of two or more substructures. The substructures are referred to as morphemes. A **morpheme** is the minimal meaningful unit in a language. It is minimal because it cannot be further divided into smaller units. It is meaningful in that it stands for something conceived in the speaker’s mind. Morphemes can be either **free** or **bound**. A **free morpheme** can appear as an independent word, whereas a **bound morpheme** can only appear as part of another word. For example, the word *undress* consists of two morphemes: one is *dress* which is free, the other is *un-* which is bound. Each morpheme contributes to the overall meaning of the composite word. Each morpheme is associated with a certain conceptual representation in the mind of the speaker. A free morpheme can be either a root or a base. A **root** is a word substructure that cannot be decomposed into further elements, as in *move*. A **base** can be decomposed. It consists of a root and a bound morpheme to which a further bound morpheme can be added. The word *movable* functions as a base for a bound morpheme like *in-* to give the new word *immovable*. 
Consider the following morphological expressions and segment them into their free and bound morphemes.

<table>
<thead>
<tr>
<th></th>
<th>Free</th>
<th>Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. amoral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. payment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. boldness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. misquote</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. nonsense</td>
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</tbody>
</table>

### 2.3 Allomorph

Some morphemes may have more than one phonemic form, depending on the context in which they occur. These phonemic forms are referred to as allomorphs. An allomorph is a variant form of a morpheme which differs only in sound, not in meaning. It is an alternative manifestation of a morpheme which varies in pronunciation according to phonological conditions. In English, for example, the past tense morpheme, usually written as -ed, has three phonemic forms, depending on the nature of the preceding sounds. After voiceless sounds other than /t/, it is pronounced /t/ as in stopped. After voiced sounds other than /d/, it is pronounced /d/ as in named. After the sounds /t/ or /d/, it is pronounced /id/ as in waited. The three phonemic forms /t/, /d/ and /id/ are thus considered allomorphs of the past tense morpheme -ed. They are said to be in complementary distribution, the phenomenon in which linguistic forms have the same meaning but cannot occur in the same environment due to phonological conditions. Each form occupies its own territory and does not trespass on that of another.

### Exercise 4

The negative morpheme in- has more than one allomorph. Write the resulting linguistic forms of the following expressions, and then give the phonological conditions which govern their distributions.

<table>
<thead>
<tr>
<th></th>
<th>Free</th>
<th>Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. in + moral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. in + logical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. in + correct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. in + regular</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. in + possible</td>
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</tbody>
</table>
2.4 Characteristics

Free and bound morphemes in English display certain characteristics on both general and individual levels. On the general level, they share two characteristics. First, they are expressive. They serve to convey particular meanings. They are attributed semantic values which motivate their morphological behaviour. Their presence adds semantic import to the expressions in which they occur. Second, they may be polysemous. They have multiple meanings which are related to one another. They are rich in semantic content. Their meanings are not fixed. They change relative to the contexts in which they occur, which reflect the communicative demands of discourse. On the individual level, they show particular characteristics. As shown below, each type has characteristics which affect its behaviour in the course of forming words. The rest of the book will elaborate on these characteristics through argumentation, exemplification and evidence.

2.4.1 Free morphemes

Examining morphological data shows that free morphemes display three characteristics. First, free morphemes often belong to different word classes. For example, the free morpheme region is a noun, serve is a verb and legal is an adjective. When they host bound morphemes, their word classes or parts of speech mostly change, as in regional (adjective), servant (noun) and legalise (verb). Second, free morphemes can combine with more than one bound morpheme horizontally. Each bound morpheme causes a special tinge of meaning. In informality, for example, the free morpheme form combines with the two final bound morphemes -al and -ity and the initial bound morpheme in-. In bookcase, the free morpheme case combines with the free morpheme book. Third, free morphemes can take two or more bound morphemes vertically. Each bound morpheme brings about an important change in meaning. For example, the free morpheme continue can take such bound morphemes as -al and -ous, resulting in such formations as continual and continuous. In each formation, the bound morpheme shapes the meaning in a particular way. Continual describes separate actions of the same sort which go on with interruption. Continuous describes one action that goes on without interruption.

Exercise 5

Write the parts of speech of the roots and then of the adjacent resulting formations.
2.4.2 Bound morphemes

Considering morphological data shows that bound morphemes display three characteristics. First, bound morphemes often have a wide range of application. For example, in *non-cooperation* the bound morpheme *non-* is attached to a noun. In *non-essential*, it is attached to an adjective. In *non-skid*, it is attached to a verb. Second, bound morphemes sometimes express more or less the same meaning and so form semantic sets. For example, the bound morphemes *de-, dis-* and *un-* can be used to denote the concept of removal, but each represents a different aspect of it. In *defuse a row*, a thing is removed. In *dispossess a player*, a human is affected. In *unhook a headphone*, an object is removed. Third, bound morphemes occasionally attach to the same roots or occur in the same position. For example, the bound morphemes *non-* and *in-* can attach to the base *rational* to form *non-rational* and *irrational*. Nonetheless, they bring about a change in meaning. They are not in free variation, the phenomenon in which two or more linguistic items can occur in the same environment without signalling any change in meaning.

Exercise 6

Identify the different meanings which the bound morpheme *-er* signals in each of the following morphological expressions.

1. driver
2. buzzer
3. sleeper
4. retriever
5. reminder

2.5 Relationships

A composite structure consists of two or more substructures, one of which is free while the other is bound. To describe a situation, the morphemes are chosen in a meaningful way and put together in an organized manner.
The skeleton of a composite structure is governed by two types of relationship. One occurs along a horizontal axis. The other occurs along a vertical axis. The two types of relationship are important in developing one’s concept of a composite structure and in shedding light on the dynamic nature of vocabulary building. They facilitate our understanding of the way in which a composite structure is formed. They uncover the way in which the morphemes collocate with each other and how they replace each other in creating a composite structure. They describe the function of the morphemes and reveal how they interact to give a composite structure its identity.

2.5.1 Syntagmatic

A syntagmatic relationship is a pattern of relationship between the morphemes of a composite structure in a linear order. It is based on the criterion of juxtaposition, the ability of morphemes to combine horizontally. Bound morphemes can occur before and after a free morpheme simultaneously. A free morpheme like *law, for example, can take the bound morphemes un- and -ful to form *unlawful. The occurrence of the morphemes of a composite structure in sequence has consequences at the lexical and semantic levels. On the lexical level, a syntagmatic relationship between the morphemes of a composite structure helps one to understand their co-occurrence restrictions. For example, the prefix in- takes Latinate bases as in inedible, whereas the prefix un- takes English bases as in uneatable. On the semantic level, a syntagmatic relationship between the morphemes of a composite structure helps one to grasp their combinatorial compatibility. For example, the negative prefix un- cannot be used with adjectival roots that are negative in meaning as in *unsad. This is so because of the presence of the word happy in the lexicon.

Exercise 7

Arrange the morphemes in each of the following on a syntagmatic level to make a meaningful word.

1. vital, -ise, de- ........................................
2. -al, -ity, origin ........................................
3. throne, en-, dis- ........................................
4. -able, reason, -ness ........................................
5. -ism, colony, -al, neo- ........................................
2.5.2 Paradigmatic

A paradigmatic relationship is a pattern of relationship between the morphemes of a composite structure in a vertical order. It is based on the criterion of substitution, the ability of morphemes to replace each other vertically within a particular context. The occurrence of the morphemes of a composite structure on a vertical level has some consequences. On the lexical level, a paradigmatic relationship uncovers the speech part or the word class which the selected morphemes belong to. For example, in burdensome, famous and amateurish, the morphemes -some, -ous and -ish are all adjectival. They are added to nominal roots to form adjectives. On the semantic level, a paradigmatic relationship allows morphemes denoting a common concept to be grouped together. For example, the morphemes pseudo-, quasi- and semi- can be used alternately before the base religious. Thus, they can be grouped together because they denote the concept of ‘inadequacy’, describing an entity as having nothing or only some of the thing described. Yet, each morpheme has a tinge of meaning that is different from the other. Pseudo- describes an entity as being deceptive, false or a sham. Quasi- describes an entity as resembling the thing described. Semi- describes an entity as having the thing construed but only to some degree.

Exercise 8

Write the alternating bound morphemes which each of the following roots takes on a paradigmatic level.

1. tip --------------
2. wood --------------
3. excite --------------
4. fragment --------------
5. communicate --------------

3 Study areas

Traditionally, two main areas have been studied within morphology. One area is word formation, a lexical process which produces new vocabulary items out of the existing ones. It enables speakers to create new words in response to new thoughts, experiences or situations. For example, the ending -ity can be added to the root equal to derive the word equality. The derived word takes on a new meaning and serves a new purpose. The other area is inflection,
a grammatical process which produces forms of the same word. It enables
speakers to use words which conform to the rules of grammar. For example,
*rings, ringing, rang* and *rung* are all forms of the word *ring*. Each word takes on
a different grammatical form to fit a specific context. In what follows, I present
some details of the area of word formation, but make only a sketch of the area
of inflection. This is because inflection belongs, from the viewpoint of the
present approach, to the province of grammar.

### 3.1 Word formation

Word formation studies the creation of new words and the principles involved
in doing so. It involves different processes which are used to build new lexical
items from the existing ones. Each word-formation process results in the
production of a specific type of word. Word formation is a crucial tool in
the hands of speakers because it helps them to create words which symbolize
the experiences they encounter in the world. Each word reflects a special
conceptualization which represents in turn a different mental experience. In
this way, morphology is concerned first and foremost with the processes of
forming words, that is, how words are formed from smaller units and how the
smaller units interact in speech. In the course of forming words, two major
processes take place: derivation and compounding. These two processes of
word formation will be at the core of the remainder of the present discussion.
These two powerful processes of forming words are referred to as concatenation, the mechanism of building words by the linear addition of morphemes.

#### 3.1.1 Derivation

Derivation is the morphological process of forming a new word from an exist-
ing one by the addition of a bound morpheme. Derivation assigns a lexical
item a semantic property so that it can fulfil a given discourse function. For
example, in *selfish* the bound morpheme *-ish* has a double import. First, it
changes the part of speech of the word it derives. It changes its part of speech
from a noun *self* into an adjective *selfish*. Second, it affects the meaning of
the word it derives. In the example, *-ish* implies disapproval by describing
someone as caring only about himself or herself and not about others.
However, not every bound morpheme causes a change in word class. The
bound morpheme *re-*, for example, derives *rewrite* from *write*, both of
which are verbs. Within derivation, there are two branches of morphological
process: derivation by affixation and derivation by non-affixation. Of the
two branches, **affixation** will be the focus of the book because it is highly productive in the creation of new vocabulary items in the language.

### 3.1.1.1 Affixation

Affixation is the morphological process of deriving a new word by adding an affix, namely a bound morpheme, to a root or base. For example, the verb *endear* is formed by adding the affix *en-* to the adjective *dear*. **Affixes** are bound morphemes which never occur on their own; they have semantic holes in their structure, and so must be joined to other morphemes to fill them. Affixes can function as derivational morphemes. A **derivational morpheme** is an affix by means of which one word is derived from another. All affixes change the meaning of the **derivative**, the word which results from derivation. Some affixes change the word class of the root as in the adjective *expensive* from the noun *expense*. Others do not change the word class of the root as in the noun *childhood* from the noun *child*. Affixation comprises two modes: prefixation and suffixation. **Prefixation** is the morphological process of forming a new word by attaching a bound morpheme to the front of a free morpheme. For example, the verb *disagree* is formed by adding the negative prefix *dis-* to the root *agree*. **Suffixation** is the morphological process of forming a new word by attaching a bound morpheme to the end of a free morpheme. For example, the adjective *agreeable* is formed by adding the suffix *-able* to the root *agree*.

### Exercise 9

State the mode of affixation, prefixation or suffixation, which is involved in the creation of the following morphological expressions.

1. subplot
2. stardom
3. anti-war
4. heighten
5. tiresome

### 3.1.1.2 Non-affixation

Non-affixation is the morphological process of coining a new word by using a set of morphological devices. **Acronymy** is a morphological device in which a new word is coined from the initial letters of other words, usually pronounced as such, as in UNESCO from *United Nations Educational, Scientific and Cultural*
Organisation. **Initialism** is a morphological device in which the initial letters of words are used as an abbreviation for a name or an expression, usually pronounced separately, as in EU from *European Union*. **Back formation** is a morphological device whereby a new word is coined from an existing one by removing actual or supposed affixes, as in *burglar* which is formed by deleting the suffix -ar from *burglar*. **Blending** is a morphological device by which a new word is coined by combining parts of two words, usually the first part of one with the last part of another, as in *smog* from *smoke* and *fog*. **Clipping** is a morphological device whereby a new word is coined by retaining only one of its parts: the beginning as in *lab* from *laboratory*, the end as in *plane* from *aeroplane*, or the middle as in *flu* from *influenza*. **Reduplication** is a morphological device by which a new word is coined by repeating the entire of the word or part of it: full as in *bye-bye*, partial as in *willy-nilly*, and ablaut as in *ping-pong*. **Conversion** is a morphological device wherein a new word is coined from an existing word by a change in its part of speech, as in the verb *to house* from the noun *house*, or in its stress, as in the verb *fre’quent* from the adjective *frequent*. From the standpoint of the present explanation, conversion belongs to the area of phonology. This is so because it involves neither a change in form nor a change in arrangement of substructures.

**Exercise 10**

State the devices of non-affixation used in forming the following morphological expressions. Then, give the originals from which they are formed.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. edit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. VIP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. motel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. NATO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**3.1.2 Compounding**

Compounding, also called **composition**, is the morphological process of forming a complex structure by combining two, or more, free morphemes, of same or different word classes. The resulting form which serves to convey a new message is called a **compound**, a complex structure made up of more than one free morpheme. The first or left-hand free morpheme modifies the second or right-hand free morpheme. The first free morpheme usually receives primary **stress**, the relative prominence with which a syllable is pronounced in
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a word, and is not marked for **number**, the grammatical category of a word that expresses count distinctions. The second or right-hand free morpheme usually determines the word class of the compound. The second free morpheme usually receives secondary stress and is marked for number. For example, the expression *homework* is considered a compound. It is composed of the substructures *home* and *work*, both of which are free morphemes before the compounding process takes place. The free morpheme *home* functions as the modifier, whereas the free morpheme *work* functions as the head.

**Exercise 11**

Match the modifiers in column A with the heads in column B so as to form new compounds.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. note</td>
<td>ware</td>
</tr>
<tr>
<td>2. soft</td>
<td>book</td>
</tr>
<tr>
<td>3. duty</td>
<td>chair</td>
</tr>
<tr>
<td>4. chain</td>
<td>free</td>
</tr>
<tr>
<td>5. swivel</td>
<td>smoke</td>
</tr>
</tbody>
</table>

### 3.2 Inflection

Inflection is a grammatical process which produces alternative forms of the same lexeme. Unlike the area of word formation which yields different words, the area of inflection yields different forms of the same lexeme. A **lexeme** is a unit of lexical meaning which can take a set of inflectional endings. For example, *show, shows, showing* and *showed* are different forms of the lexeme *show*. The set of the inflected forms which a lexeme assumes is called **paradigm**. Inflection assigns the form a grammatical property so that it can fit a given syntactic slot. For example, the words *book* and *books* are different forms of the same lexeme. They differ only in number, in which the inflectional morpheme *-s* serves the grammatical function of plurality. It does not change its part of speech as both are nouns. English has several inflectional endings: plural as in *boys*, possessive as in *boy’s*, comparative as in *taller*, superlative as in *tallest*, present as in *walks*, past as in *walked*, past participle as in *written*, present participle as in *writing*, and adverb as in *slowly*. The area of inflection is part of grammar, and is therefore outside the scope of the present explanation.
Some inflectional endings, however, acquire characteristics of derivational morphemes. These include -ed, -en, -er, -ing and -ly. To make this clear, let us take an example. The morpheme -er can function both as an inflectional morpheme and as a derivational morpheme. As an inflectional morpheme, -er is attached to adjectives to show the comparative as in hotter, describing something as having a higher temperature. In this use, the morpheme expresses a difference in degree or quality. As a derivational morpheme, -er is highly productive in forming new nouns. In this use, the morpheme expresses mainly agenthood. It is attached to verbal roots to form nouns as in camper, describing someone who performs the action indicated by the verb. It is attached to adjectival roots to form nouns as in teenager, describing someone as having the quality denoted by the adjective. It is attached to nominal roots to form nouns as in freighter, describing a large ship or aircraft designed for carrying goods.

Exercise 12

Determine whether the function of the italicized morphemes in the following morphological expressions is inflectional or derivational.

1. She pleased everyone at the party.  --------------------------
   She gave a pleased smile to them.  --------------------------
2. She has written a message to him.  --------------------------
   She has read the written message.  --------------------------
3. Jack is considered a tough player.  --------------------------
   Jack is tougher than he looks.  --------------------------
4. The film is disturbing the viewers.  --------------------------
   The film contains disturbing scenes.  --------------------------
5. She has kindly offered to help them.  --------------------------
   She is considered a kindly old lady.  --------------------------

Summary

In this chapter, I presented a broad outline of what morphology is and what it covers. Morphology is the study of the patterns which describe the arrangement of morphemes in forming new words. In the outline, I did two things. First, I introduced the key notions which are necessary in the analysis of morphological data and essential for an understanding of morphological structure. One key notion is the morpheme, the minimal linguistic unit in a
language which has a semantic value. Morphemes are of two types. A free morpheme can appear as an independent word. A bound morpheme can only appear as part of another word. Second, I delimited the scope of the discussion, and identified the phenomena that morphologists study. The core area dealt with is word formation, a set of processes used for the creation of new words. It involves two subareas. One subarea is derivation, the morphological process of forming a new word by means of affixes. Derivation includes both prefixation, the morphological process of forming a new word by means of a prefix; and suffixation, the morphological process of forming a new word by means of a suffix. The other subarea is compounding, the morphological process of combining two free morphemes to form a composite structure.

In Figure 1, I present a sketch of morphology and the areas that are involved in its study.

![Figure 1: An outline of morphology](image-url)