symbolize as  $\{-Z\}$ . (/-z/ is the most common allomorph of  $\{-Z\}$ . The use of  $\{\}$  distinguishes morphological transcription from phonemic and phonetic transcription.) On the other hand *horse* consists of just one morpheme. /'hos/ is a morpheme with lexical meaning while  $\{-Z\}$  is a morpheme with grammatical meaning. The difference between lexical and grammatical meaning seems to be that, as Gleason puts it: "With some morphemes, meaning in the sense of reference to human experience outside language is wholly or largely lacking. Consider *to* in *I want to go*. The elements *I*, *want*, and *go* are referable, through the intermediary of English content structure, to aspects of human experience. But it is impossible to find a specific factor in the situation which can be considered as the 'meaning' of *to*. Nevertheless, *to* does have a function, since without it *\*I want go*. means nothing... *To* merely fulfills a requirement of English structure in that *want* cannot be followed by *go* without *to*." (Gleason 1961, p. 55).

That is one way of classifying morphemes. Another way is into *roots* and *affixes*. Roughly speaking *roots* are lexical morphemes which form the centres of words. *Roots* consist of a **maximum of one morpheme**. Most morphemes in English and German are roots. A closely related phenomenon is the notion of *stem*. A *stem* is any morpheme or combination of **morphemes to which another morpheme may be added**. Thus /'hos/ is a root, because it consists of one lexical morpheme only, and it is also a stem, because the morpheme {-Z} can be added to it. /'frend/ is both a root and a stem; a root because it consists of one lexical morphemes may be added to it. /'frend/ is a stem, because other morphemes can be added to it. /'frend\_Ip/ is a stem, because other morphemes may be added, e.g. {-Z}, but it is not a root because it consists of more than one morpheme.

A morpheme which is subsidiary to a root is usually an *affix* of some sort. Affixes tend to be of three types, *prefixes*, *suffixes* and *infixes*. English and German do not have infixes, so infixes will not be discussed here. Both languages have the other two types of affixes. *Prefixes* go *before* other morphemes. *Suffixes* go *after* other morphemes. (*Infixes* go *inside* other morphemes.) Henceforth prefixes and suffixes will be indicated by putting hyphens (-) after and before them respectively. This practice has already been anticipated in the discussion of the English plural. The English noun plural morpheme {-Z} consists of a number of suffixes, e.g. /-s, -z, -əz, -ən, -Ø/ plus some replacives. /-JIP/ is a suffix which, when added to a noun, forms another noun which is some sort of abstract concept, e.g. *friendship*, *scholarship*, *mateship*. Sometimes suffixes can be added to suffixes, e.g. *friendships* consists of the root /'frend/ plus the suffix /-JIP/ plus the allomorph /-s/ of {-Z}. Typical prefixes in English include the negative prefix, which sometimes appears as /an-/, as in *uncomfortable*, and sometimes as /III-, IF-/, e.g. in *impossible*, *incredible*, *illegal*, and verb prefixes like /bə-/ (*befriend*) and /ri-/ (*redo*).

Finally we can divide morphemes into *free* and *bound* types. *Free* morphemes, as the name implies, occur freely, i.e. they can stand alone. In other words, **a free morpheme has word status**. Typical examples of free morphemes are English and German nouns, inasmuch as they consist of only one morpheme, e.g. *friend*, *Freund* and English verb stems, e.g. *go*, *get*, *lose*. *Bound* morphemes, on the other hand, cannot stand alone. **Bound morphemes must occur in conjunction with another morpheme**. Examples of bound morphemes are the affixes which have just been discussed, English and German inflections (more about inflection in the next chapter) like noun plural markers and verb agreement markers, German verb stems and abstract noun-forming suffixes like English -ship, German -schaft.

In this chapter you have had a short introduction to morphological analysis. The data have come from English and from a few exotic languages. In the next chapter you will be given an overview of German word formation and a fragment of German inflectional morphology. The notions *root, stem, affix, bound* and *free* will be further exemplified.