

# 1 The study of language change

## 1.1. Introduction

This book examines the topic of how and why languages change. This field of study has traditionally been called “historical linguistics” and under that label the history of particular languages has been studied, and methods for the comparison of languages and reconstruction of their family relations have been developed. While this book covers many of the traditional topics in historical linguistics, I have chosen to focus on the topic of how and why languages change because linguistic researchers see now more than ever before that language change is not a phenomenon of the distant past, but is just as evident currently in ongoing changes as it is when we look back into documents that show older stages of languages. Moreover, it has become clear that language change helps us explain the features of language structure because it provides a window onto how those structures come into being and evolve. Thus we identify explanations for the characteristics that language has by examining how language changes.

What we will see as we progress through the types of language change is that change is built into the way language is used. The mental processes that are in play when speakers and listeners communicate are the main causes of change. This helps us explain another very important fact: all languages change in the same ways. Since language users the world over have the same mental processes to work with and they use communication for the same or very similar ends, the changes that come about in languages from Alaska to Zambia fit into the same categories as changes found in English and French.

## 1.2. Languages change all the time and in all aspects

The changes in our language that are the most obvious to language users are changes in words. Most languages acquire new words fairly easily in ways that you are probably already familiar with. These include borrowing from other languages, derivation by adding prefixes or suffixes to existing words, compounding, and other types of word-formation. Here are some examples:

*Borrowing.* Most languages borrow words from other languages, especially when new items or concepts are introduced from another culture. Some recently

borrowed words in English are *karaoke* (from Japanese) and *ski* (from Norwegian), and some words borrowed long ago into English from French are *elite*, *poultry*, and *beef*.

*Derivation.* Most languages have affixes that can be applied to current words to form new ones: English *hyperactiveness*, *ethnicness*. Also English easily changes nouns into verbs: for example, when the name of a tool is used for the action of using the tool, as in *He was **hammering** a cedar plank*.

*Compounding.* Not all languages allow compounding, but Germanic languages use it quite a bit to form new words. *Text-message*, *text-messaging*, *YouTube*, *MySpace*. English compounds can be identified because they are two-word sequences that are stressed more heavily on the first word than on the second one.

Also, changes in spelling and punctuation (or the lack of it) have been cropping up since people started using a lot of e-mail and text-messaging. Examples are *LOL* ('laugh out loud') or *OMG* ('oh my god'). These are changes in the written form of language and do not have much effect on spoken language, except to the extent that we use these abbreviations in speaking.

However, most changes in language occur slowly and gradually, and sometimes we do not notice that these changes are going on right under our noses. This applies to changes in the sounds of a language and also to changes in morphological and syntactic constructions. A very distinguished American linguist, Leonard Bloomfield, wrote in his book *Language*, originally published in 1933, "The process of linguistic change has never been directly observed" (Bloomfield 1933: 347). We can see what he means if we consider how complex language change can be. One speaker can make a change, say by regularizing a verb such as *slept* saying *sleeped* instead, or by pronouncing *I don't think* without a real [d] sound in *don't* or extending a construction by saying *that drove me out the window* to mean 'that drove me crazy', but until the change is taken up by other members of the community, we do not regard an innovation as a change. Thus it is difficult to observe change since it requires knowledge of the mental processes that lead to the innovations as well as the social processes that allow them to spread.

Yet Bloomfield was probably being too pessimistic. Now it is possible to search large corpora of spoken and written language from different periods of time and different geographic regions and to observe how an innovation or a variant spreads and gains acceptability. Now we also know more about the mental processes within the speaker and hearer that make innovation and spread of change possible.

Even though changes in words are the most obvious sorts of changes, they are not usually very systematic nor do they have much impact on the general structure of languages. So in this book we will be more concerned with changes in the phonology and structure of languages and in semantic changes that correspond to structural changes. We will see that change can affect all aspects of language from the sounds to the morphology and syntax all the way to the meaning of words and constructions. Here are a few examples.

We have just read about some examples of how new words come into a language. Established words can also change their meaning. It is often the case that when a word has two or more meanings, one of them is the older meaning and the others were derived from it by usage in context. For example, the English noun *field* refers both to a piece of ground and an area of study or investigation. The more concrete meaning of ‘piece of ground’ came earlier, and the more abstract metaphorical meaning came later.

A different sort of example concerns the Spanish verb *quedar* in a construction with an adjective, such as *quieto* ‘still’ or *sorprendido* ‘surprised’. Earlier *quedar(se)* meant ‘stay’, but now in this construction it can also mean ‘become’ as in *se quedó quieto* ‘s/he became still’.

In the West African language Yoruba, the verb *fī* ‘take’ can be used in a serial construction with other verbs, as in (1) (Stahlke 1970):

- (1)        *mo     fī     àdé     gé igi*  
              I        took machete cut tree  
              ‘I cut the tree with the machete’

In (1) the verb *fī* can either mean ‘take’ or ‘with’, but in (2) it can only mean ‘with’:

- (2)        *mo     fī        ogbòn     gé igi*  
              I        took     cleverness cut tree  
              ‘I cut the tree cleverly’

So this verb with the more concrete meaning of ‘take’ has also taken on the more abstract meaning of instrumental or manner.

The meanings of constructions can change, too. A resultative construction of the form

- (3)        SUBJECT   + *have/has*   +   OBJECT   + PAST PARTICIPLE

as in *I have the letter written* occurred in Old English and in fact still occurs in English. This construction gave rise to our present perfect construction, as in *I have written the letter*, which does not signal resultative but rather anterior or perfect, with the meaning ‘a past action has been completed and it has current relevance’.

Also the outward form of a word can change, especially if it is made up of more than one morpheme. Thus the English verb *work* formerly had *wrought* as its past participle (the form used in the passive and present perfect, as in *he has wrought*), but now the past participle is regular, as in *he has worked*. In Latin the verb meaning ‘to be able’ had stem forms based on *poss-* (first person present indicative as well as present and imperfect subjunctive) and also *pot-* (for most other forms). For instance, *possum* was the first person singular present indicative. This root became *pod-* /*pued-* in Spanish and the first person singular present indicative is *puedo* which replaced the irregular forms with the medial *ss*.

Pronunciations also change quite commonly, and such changes usually affect all the words that have a particular sound; we can see that by comparing American and British English. Since much of North America was colonized by people from Britain, in the seventeenth and eighteenth centuries the same varieties of English were spoken on both sides of the Atlantic. But since then, changes have taken place in both American and British English that now make them different in the way they are pronounced. For instance, American English speakers pronounce a /t/ or /d/ in the middle of a word before an unstressed syllable as a flap [ɾ] as in *butter* or *rider*, but most British English speakers still use a /t/ or /d/ in this position or substitute a glottal stop. Thus we can say that the sound change of flapping of /t/ and /d/ has occurred in American English.

Syntactic structure also changes over time. In English before the middle of the sixteenth century, in a question the verb was placed before the subject. These syntactic structures remained in some of Shakespeare's plays, as in the following:

- (4) *What say you of this gentlewoman? (All's Well that Ends Well, 1.3)*

In Present Day English, however, with most verbs, we use *do* in questions, as in (5), and it occurs before the subject rather than the main verb.

- (5) *What do you say about this lady?*

This change, among others in English, resulted in a special class of verbs designated as 'auxiliaries'.

A structural change took place in French when the construction for the negative *ne ... pas* developed. In Old French (ninth to fourteenth centuries) the marker of negation for a clause was *ne* and it appeared before the verb and also before any object pronouns, as in the fourteenth-century example in (6) from Jehan Froissart (*Chroniques, Livre Premier, Bataille de Cocherel*).

- (6) *mais on ne lui avoit voulu ouvrir les portes*  
 but one NEG them have wanted open-INF the doors  
 'but one had not wanted to open the doors for them'

Even at this period it was common to reinforce the negation by adding a noun after the verb such as *pas* 'step', *point* 'dot, point', *mie* 'crumb', or *gote* 'drop'. In Modern French negation is ordinarily made by putting *ne* before the verb and *pas* after it. Now *pas* no longer means 'step' but is just part of the negative construction, as in (7):

- (7) *avant c'était une institution, qui comme toutes les administrations, ne communiquait pas...*  
 'before it was an institution, like all administrations, it did not communicate ...'

Now while one can leave out the *ne* (see discussion below), the *pas* is essential to expressing negation.

All the languages that have ever been studied diachronically show changes in all these aspects. But it is not just the fact of change that attracts our attention, but

also the nature of change. There are certain common patterns and directions of change that occur over and over again in the same language or in different languages. We will be examining these patterns in the chapters of this book. We will see that change itself is inherent in language and can tell us something about the nature of language and its structures. Thus, studying how languages change is just another way to do linguistics, that is, to try to understand how language works.

### 1.3. Languages also keep old features around a long time

The previous section mentioned the importance of the social dimension in language change. Language is conventional. What this means is that it has to be used in pretty much the same way by speakers and listeners in order to be effective as communication. In addition, language is specific to communities of people and helps to define these communities. For this reason, each speaker tends to use language in a way that is very, very similar, if not identical, to the way it is used by other members of the same community. Here ‘community’ refers to social or geographic groups, usually both together. That is, you might speak very similarly to your parents and siblings and/or the people you went to school with or the people you hang out with now. Actually, we all have the ability to adapt to current situations by modifying our choice of sounds, words, and structures to fit in better if we choose.

The conventionality of language holds back change to a certain extent. Since speakers have to use established words, sounds, and patterns to be understood, these established patterns are reinforced and that contributes to their stability. Today we use many expressions, words, sounds, and constructions that have been used continuously for centuries and even millennia. Because of this, languages contain within them nuggets of information about their histories. The following are some examples.

Modern European languages contain many words that can be traced back thousands of years to the reconstructed language Proto-Indo-European. For instance, when you refer to your nose with the English word *nose* or the French word *nez*, Russian *nos*, or Swedish *näsa* you are continuing a tradition that started more than 6000 years ago! The similarity among these words is part of the evidence that the words for ‘nose’ in these languages are of very ancient origin.

Another place we find ancient patterns is in irregular morphology. The vowel changes we find in English verbs such as *take/took*, *choose/chose*, *fight/fought* are similar to vowel changes found in other Germanic languages, such as Dutch, German, Icelandic, and other Scandinavian languages. The fact that they are shared by these sister languages shows that they originated more than 2000 years ago. Yet we still use them today to signal past tense.

Relics of older forms can also be found in idiomatic expressions, though they are rarely as old as the preceding examples. For instance, the phrase *far be it from*

*me* contains the subjunctive form *be* as a finite form; while the subjunctive was quite alive in Old English, it is all but lost in Present Day English. Also, this expression has the verb inverted with the subject after the adverb, *far*. This is also an older pattern that is not used as often today.

Compounds, idioms, and derived words also sometimes preserve old words that have been lost elsewhere. For instance, the English compound *werewolf* contains the old word for ‘man’, which was *were*, *wera*. The phrase *the quick and the dead* uses the word *quick* in its old meaning of ‘alive’.

Older syntactic structures can be preserved in particular contexts. In the last section we saw that in sixteenth-century English, main verbs came before the subject in questions, such as *What say you of this gentlewoman?* In current English, this verb does not appear before the subject, but the auxiliaries still do:

(8)           What can you say about this lady?

(9)           What should I do to help you?

The auxiliaries were verbs at an earlier stage, but because they are of relatively high frequency in this type of construction, they maintained the older inverted position when other verbs came to form questions with *do*.

Languages such as Latin, which used suffixes to mark nominative, accusative, and other cases, have case forms for both nouns and pronouns. Today many European languages, such as English, Spanish, French, Italian, and Portuguese, no longer distinguish different cases for nouns. However, all of these languages maintain different forms for nominative vs. accusative in pronouns, and some also distinguish a dative case, too. Thus Spanish has nominative singular forms *yo* ‘I’, *tú* ‘you (familiar)’, *él* ‘he’, and *ella* ‘she’, and these contrast with accusative forms *me* ‘me’, *te* ‘you (familiar)’, *lo* ‘him’, and *la* ‘her’. These accusative forms also behave differently from nouns that are functioning as objects, because the pronouns come before the verb, while noun objects come after. This difference in position is probably a retention of an older characteristic as well.

So we see from these examples that, despite the many changes that languages undergo across time periods, many aspects of languages can also stay the same for long periods of time. Although we know that some changes occur more readily than others – for instance, that changes in vowels and consonants occur more rapidly and more often than changes in the basic order of subject, object, and verb in a language (Perkins 1989) – we are still a long way from predicting what is going to change in a language and what is going to stay the same.

#### 1.4. Evidence for language change

There are many sources of evidence for language change which we will be relying on for examples in this book. Traditionally, the most typical source of evidence comes from the comparison of two stages or different periods

of the same language, as, for instance, the comparison of Middle English and Present Day English, or the comparison of Latin and Romance languages, Old Norse and modern Norwegian, Chinese from the Han dynasty with twenty-first-century Mandarin Chinese. Of course, such comparisons require that the earlier stages have a written record, so this type of evidence is not available for all languages. For languages for which earlier written records are available, we can easily spot changes that have occurred.

For instance, we can look back at earlier stages of English and find that the second person singular pronoun for subjects was *thou*, for objects *thee*, and for possessives *thy/thine*. Today, of course, these pronouns are not in use except in very special circumstances (usually religious), and instead for second person singular we use *you* for subjects and objects and *your* for possessives. Consider this passage from the work of William Shakespeare, from the end of the sixteenth century (*As you Like it*, 1.3):

- (10) CELIA  
*O my poor Rosalind, whither wilt thou go?*  
*wilt thou change fathers? I will give thee mine.*  
*I charge thee, be not thou more grieved than I am.*

In the 400 years since Shakespeare wrote this, these second person singular pronouns have disappeared from ordinary conversational speech. In their place we use the forms of *you*, which earlier indicated second person plural.

Changes in sounds also can be tracked in historical documents. For instance, words that are spelled with a *t* between two vowels in Latin are spelled with a *d* in Spanish (which descended from Latin, as did all the Romance languages). Examples are given in (11). (As is traditional in Romance linguistics, the Latin nouns are cited without their case endings to represent what is called Vulgar Latin.)

- |      |                 |               |         |
|------|-----------------|---------------|---------|
| (11) | Latin           | Spanish       | Gloss   |
|      | <i>vita</i>     | <i>vida</i>   | ‘life’  |
|      | <i>metu</i>     | <i>miedo</i>  | ‘fear’  |
|      | <i>rota</i>     | <i>rueda</i>  | ‘wheel’ |
|      | <i>civitate</i> | <i>ciudad</i> | ‘city’  |

When using written documents, we must have evidence about the value of the symbols used. How do we know that Latin *t* stood for [t], a voiceless dental or alveolar stop? In this case, we have the writings of Roman grammarians, who described the sounds of their language and report that *t* stands for a voiceless dental stop. In the case of Modern Spanish, we also need to question the value of the written symbol. While *d* usually stands for a voiced stop at the same point of articulation as [t], indicating that between Latin and Spanish, this stop became voiced, if we listen carefully to the Spanish of today, we find that now between vowels the letter *d* is pronounced as a voiced interdental fricative.

Just as in this example, another source of evidence about sound change is in differences between the written representation and the current pronunciation.



If we have good evidence that the spelling in a language once represented the pronunciation more or less accurately, then cases where the pronunciation no longer matches the spelling indicate a change has occurred. In the Spanish example above, we can be pretty certain that at one time the letter *d* represented a stop. The fact that now it is a fricative means a sound change has occurred. Another example is the post-vocalic *r* in English dialects. Though it is there in the spelling, speakers of British, Australian, and some American dialects of English do not produce an [ɹ] in words such as *car*, *here*, and *bird*. They produce a long vowel or a schwa-like vowel rather than the retroflex [ɹ].

For languages that do not have documented earlier stages and whose writing systems have been so recently developed that they do not show much difference from pronunciation, there are other sources of evidence for changes that have taken place. Changes are revealed when we compare related dialects and languages. Because languages are changing all the time, when speakers of the same language become separated geographically by one group migrating away from the other group, the language of the two groups may change in different ways. Over time the accumulation of many changes will result in the two groups speaking different languages and no longer being able to understand one another. But when we compare the two resulting languages, we will see similarities and differences. The differences will represent changes, so from these differences we can reconstruct what changes must have occurred. For example, among the varieties of Quechua (the language of the Incas now spoken across a wide area in South America), one variety, Ancash Quechua, has an initial /h/ in words such as *hara* ‘corn’ where the other languages have an initial /s/. Given certain other considerations, we can tentatively conclude that initial /s/ in the parent language changed to /h/ in the Ancash variety some time in the past.

Another such case appears in the Austronesian language To’aba’ita, where Lichtenberk 1991 found that some prepositions behave somewhat like verbs. For example, the ablative preposition *fasi* (meaning ‘away from’) takes a suffix much as verbs do to indicate the object. Yet *fasi* is never used as a verb in this language. However, in the related language Kware’ae, there is a verb *fa’asi* which means ‘leave, forsake, depart from’. This provides evidence for the hypothesis that *fasi* was once a verb in To’aba’ita.

In languages with and without written histories, ongoing changes create variation, and the study of this variation can also provide excellent evidence about how change occurs. For instance, there is a lot of variation in Spanish dialects about how /s/ is pronounced, especially at the ends of syllables. It is common for the /s/ to sound more like an /h/ or to be left out entirely. Many Caribbean dialects and some South American dialects have this variation. For instance, *estas casas* ‘these houses’ can be pronounced as [ehtahkasah] in these dialects or even [etakasa]. Such pronunciations represent a change that has occurred in these dialects.

Another case of variation that appears to represent a change in progress is the loss of French *ne*, part of the negative construction we discussed earlier in the chapter.



As we saw in Section 1.2, the usual way to negate a clause in French has two parts – *ne* goes before the verb and *pas* goes after it. The *ne* is a very small syllable with a reduced vowel that can be deleted, as in *n'est* ‘is not’. Now it is common for the consonant as well as the vowel to be deleted leaving *pas* to indicate negation. This is a change in progress as indicated by the fact that younger speakers delete the *ne* more often than older speakers (Ashby 1981).

Of all these sources of evidence, the best and most reliable are the most direct – the study of variation due to ongoing change. In these cases we can see change as it is going on and we can identify the factors that affect its origin and spread. The other sources of evidence are more or less reliable depending upon the time-depth – stages of a language separated by a few hundred years provide better evidence than stages represented by a thousand years; dialects separated by a few hundred years provide better evidence than languages separated by a few thousand years. But because the same types of change occur in different languages and at different times, we can use a broad range of evidence to help us understand the how-and-why of change. In this book I will be using all these types of evidence to help us understand the nature of change.

### 1.5. Why do languages change?

So far we have seen examples of changes that have taken place in different languages and I have commented on the fact that much also stays the same in a language across time. It is convention, that is, the tendency to speak like those around us, that keeps features of language the same across many generations of language users. But what makes it change? A very general answer is that the words and constructions of our language change as they cycle through our minds and bodies and are passed through usage from one speaker to another. This process is the topic we will study in this book. Right now I will list three tendencies in language change that seem to occur very commonly.

Because language is an activity that involves both cognitive access (recalling words and constructions from memory) and the motor routines of production (articulation), and because we use the same words and constructions many times over the course of a day, week, or year, these words and constructions are subject to the kinds of processes that repeated actions undergo. When you learn a new activity, such as driving a car, which has many different parts, practice or repetition allows you to become more fluent as you learn to anticipate and overlap one action with another and to reduce non-essential movements. A similar process occurs when you repeat words and phrases many times. Such a process is evident in many aspects of change in the sounds of a language, as we will see in Chapter 2. We also see the effect of repetition when words and constructions undergo a kind of reduction in the amount of meaning they carry, as when phrases that are repeated often, such as *how are you?* or *what's up?*, become just greetings and do not really require a literal answer.

Another pervasive process in the human approach to the world is the formation of patterns from our experience and application of these patterns to new experiences or ideas. Languages are full of patterns that are repeated, such as for English “add /s/, /z/ or /ɪz/ to a noun to make it plural” or “put the auxiliary before the subject to make a question” or more specific patterns, such as conventional word combinations like *good friends* to describe a close personal relationship rather than *nice friends*. When we use language we are constantly doing pattern-matching, and in so doing we reinforce certain patterns. Also, we apply patterns in novel ways. These acts during language use can change the language. Change occurs when new patterns arise, when patterns change their distribution, or when they are lost. Many of the chapters of this book will be concerned with how linguistic patterns change over time and what factors influence their change in a particular direction.

The other major factor in language change is the way words or patterns of language are used in context. Very often the meaning supplied by frequently occurring contexts can lead to change. Words and constructions that are used in certain contexts become associated with those contexts. If *what’s up?* occurs frequently as the first utterance when people meet one another, it becomes a greeting and no longer requires a literal answer. Listeners make inferences from the context in which constructions occur, and these inferences can become part of the meaning of the construction. The construction *be going to* + VERB is often used where an expression of intention can be inferred, as in *I’m going to visit my sister today*, so eventually the construction comes to express intention even where no motion is involved, as in *I’m going to tell him the truth*.

Because the processes that speakers and listeners use when they communicate are the same for all languages and their users, language change is very similar across languages. What I mean by this is that, for instance, for all the examples I have given so far in this chapter, we can find a different, unrelated language that has undergone or is undergoing a similar change. The details might be different in some respects, but there is an uncanny similarity in changes across languages and across time. It is this similarity that makes language change interesting and worthy of study.

### 1.6. Is language change good or bad?

Linguistic researchers view language change as an integral part of language and an inevitable outcome of language use. Changes are natural to language and they are neither good nor bad. This view contrasts with the view sometimes expressed in the popular press, that ongoing changes diminish or degrade the language. Because language exists by social convention, many people feel that it should stay the same as it was when they arrived on the scene. For instance, the dialect I grew up speaking used the English second person