25. *calvario* 'Calvary' (modern [kalβario], colonial [kalβario, kalvario]): Q'anjobal *karwal* 'cemetery, graveyard', K'iche' *kalwar*.
26. *clavos* 'nails' (modern [klaβos], colonial [klaβoș, klavoș]): Akateko *lawuʃ*, Chol *lawuʃ*, Tzeltal *lawuʃ*, Tojolabal *lawuʃ*. (Note that these forms mean 'nail', but are borrowed from the Spanish plural form.)
27. *rábanos* 'radishes' (modern [ráβanos], colonial [ráβanoș, rávanoș]): Tojolabal *lawuniʃ*, Motocintlec *luwaʔnʃa* 'rábano', Tzotzil *alavanuʃ*. (Note that these all mean 'radish', though borrowed from the Spanish plural form. Tzotzil has a phonemic contrast between /v/ and /b/, but has no /w/; the other languages have no /v/, but do have /w/.) (See also 1 above.)
28. *botón(es)* 'button(s)' (modern [botón], colonial [botón]): Q'eqchi' *ɓoto:nʃ*, K'iche' *ɓotona*, *ɓotoniʃ*, Tojolabal *ɓoton* 'button, knot in wood', Tzotzil *ɓoton*.
29. *bolsa* 'bag, pocket' (modern [bolsa], colonial [bolșa, borșa]): Chol *borʃa*, Q'eqchi' *ɓo:ʃ* 'pocket', K'iche' *ɓorʃa*, Tzeltal *ɓolsa*.
30. *nabos* 'turnips' (modern [naβos], colonial [naboș]): K'iche' *napuʃ*, Tzotzil *napuʃ*, Motocintlec *kolinaʔwa*. (See also 2 and 7 above.)

4

Analogical Change

They have been at a great feast of languages, and stolen the scraps.
(William Shakespeare [1564–1616],
Love's Labour's Lost, V, 1, 39)

4.1 Introduction

Sound change, borrowing and analogy have traditionally been considered the three most important (most basic) types of linguistic change. In spite of the importance of analogy, linguistics textbooks seem to struggle when it comes to offering a definition. Many do not even bother, but just begin straight away by presenting examples of analogical change. Some of the definitions of analogy that have been offered run along the following lines: analogy is a linguistic process involving generalisation of a relationship from one set of conditions to another set of conditions; analogy is change modelled on the example of other words or forms; and analogy is a historical process which projects a generalisation from one set of expressions to another. Arlotto (1972: 130), recognising the problem of offering an adequate definition, gives what he calls 'a purposely vague and general definition': '[analogy] is a process whereby one form of a language becomes more like another with which it has somehow associated'. The essential element in all these definitions, vague and inadequate though this may sound, is that *analogical change involves a relation of similarity* (compare Anttila 1989: 88).

For the Neogrammarians, sound change was considered regular, borrowings needed to be identified, and analogy was, in effect, everything else that was left over. That is, almost everything that was not sound change or borrowing was analogy. Analogy became the default (or

wastebasket) category of changes. In analogical change, one piece of the language changes to become more like another pattern in the language where speakers perceive the changing part as similar to the pattern that it changes to be more like. Analogy is sometimes described as 'internal borrowing', the idea being that in analogical change a language may 'borrow' from some of its own patterns to change other patterns. Analogy is usually not conditioned by regular phonological factors, but rather depends on aspects of the grammar, especially morphology.

By way of getting started, let us consider some examples of analogy. Originally, *sorry* and *sorrow* were quite distinct, but in its history *sorry* has changed under influence from *sorrow* to become more similar to *sorrow*. *Sorry* is from the adjective form of 'sore', Old English *sārig* 'sore, pained, sensitive' (derived from the Old English noun *sār* 'sore'), which has cognates in other Germanic languages. The original *ā* of *sārig* changed to *ō* and then was shortened to *o* under influence from *sorrow* (Old English *sorh* 'grief, deep sadness or regret'), which had no historical connection to *sorry*. This is an analogical change, where the form of *sorry* changed on analogy with that of *sorrow*.

There are many kinds of analogical change. In this chapter, we explore the different types of analogy and the role of analogy in traditional treatments of linguistic change, and we see how it interacts with sound change (and to a more limited extent with grammatical change, looking forward to Chapter 9 on syntactic change).

Some equate analogical change with morphological change, though this can be misleading. While it is true that many analogical changes involve changes in morphology, not all do, and many changes in morphology are not analogical. In this book, aspects of morphological change are treated not only in this chapter, but also in Chapters 2, 3, 9 and 12.

4.2 Proportional Analogy

Traditionally, two major kinds of analogical changes have been distinguished, *proportional* and *non-proportional*, although the distinction is not always clear or relevant. Proportional analogical changes are those which can be represented in an equation of the form, a : b = c : x, where one solves for 'x' – *a* is to *b* as *c* is to what? (*x* = 'what?'). For example: *ride* : *rode* = *dive* : *x*, where in this instance *x* is solved with *dove*. In this analogical change, the original past tense of *dive* was *dived*, but it changed to *dove* under analogy with the class of verbs which behave like *drive* : *drove*, *ride* : *rode*, *write* : *wrote*, *strive* : *strove*, and so on.

(Today, both *dived* and *dove* are considered acceptable in Standard English, though the use of these forms does vary regionally.) The four-term analogy of the form a : b = c : x is also sometimes presented in other forms, for example as: *a* : *b* :: *c* : *x*; or as:

$$\frac{a}{c} = \frac{b}{x}$$

Not all cases considered proportional analogy can be represented easily in this proportional formula, and some cases not normally thought to be proportional analogical changes can be fitted into such a formula. In the end, the distinction may not be especially important, so long as you understand the general notion of analogy. Let us turn to examples of four-part proportional analogy, which will make the concept clearer.

(1) A famous example comes from Otto Jespersen's observation of a Danish child 'who was corrected for saying *nak* instead of *nikkede* ('nodded'), [and] immediately retorted "stikker, stak, nikker, nak," thus showing on what analogy he had formed the new preterit' (Jesperson 1964: 131). That is, the child produced the proportional formula: *stikker* 'sticks' : *stak* 'stuck' = *nikker* 'nods' : *nak* 'nodded'.

(2) In English, the pattern of the verb *speak/spoke/spoken* ('present tense'/'past tense'/'past participle') developed through remodelling on analogy with verbs of the pattern *break/broke/broken*. In Old English, it was *sprec/spræc/gesprecen* (compare the *spake* 'past tense' of Early Modern English with present-day *spoke*).

(3) Finnish formerly had *laksi* 'bay (nominative singular)'; its possessive form ('genitive singular') was *lahde-n*, just as words such as *kaksi* (nominative singular) : *kahde-n* (genitive singular) 'two'. However, under the weight of Finnish words with the different nominative–genitive pattern as in *lehti* : *lehde-n* 'leaf', *tähti* : *tähde-n* 'star', the *laksi* nominative singular of 'bay' changed to *lahti*, as in the proportional fomula: *lehden : lehti :: lahden : lahti* (< *laksi*). The past tense form of the verb 'to leave' had the same fate: originally the pattern was *lähte-* 'leave' : *läksi* 'left', but this alternation was shifted by the same analogical pattern to give *lähti* 'left' (past tense) in Standard Finnish.

(4) A more grammatical example of proportional analogical change is found in some Spanish dialects in the non-standard pronoun pattern called *laísmo*. Standard Spanish has distinct masculine and feminine third person pronominal direct object forms, but the indirect object pronominal forms do not distinguish gender, as in:

lo ví 'I saw him' [him I.saw], *la ví* 'I saw her' [her I.saw]
le di 'I gave him/her (something)' [him/her I.gave].

In the dialects with *laísmo*, the change created a gender distinction also in the indirect object pronoun forms:

le di 'I gave him (something)', *la di* 'I gave her (something)'.

The proportional analogy in the formula would be:

lo ví 'I saw him' : *la ví* 'I saw her' :: *le di* 'I gave him (something)' : *x*
where *x* is solved for *la di* 'I gave her (something)'.

(5) Proto-Nahua had a single verbal prefix to signal reflexives, **mo-*, still the basic pattern in a majority of the modern varieties of Nahua, as in Pipil *ni-mu-miktia* 'I kill myself', *ti-mu-miktiat* 'we kill ourselves', and *mu-miktia* 'he/she kills himself/herself'. However, on analogy with the subject pronominal verbal prefixes, Classical Nahuatl has created distinct reflexive pronouns, *-no-* 'myself', *-to-* 'ourselves' and *(-)mo-* 'yourself/himself/herself', as in: *ni-no-miktia* 'I kill myself', *ti-to-miktia?* 'we kill ourselves' and *mo-miktia* 'he/she kills himself/herself'.

4.3 Analogical Levelling

Many of the proportional analogical changes are instances of analogical levelling. (Others are extensions; see below.) Analogical levelling reduces the number of allomorphs a form has; it makes paradigms more uniform. In analogical levelling, forms which formerly underwent alternations no longer do so after the change.

(1) For example, some English 'strong' verbs have been levelled to the 'weak' verb pattern, as for instance in dialects where *throw/threw/thrown* has become *throw/throwed/throwed*. There are numerous cases throughout the history of English in which strong verbs (with stem alternations, as in *sing/sang/sung* or *write/wrote/written*) have been levelled to weak verbs (with a single stem form and *-ed* or its equivalent for 'past' and 'past participle', as in *bake/baked/baked* or *live/lived/lived*). Thus *cleave/clove/cloven* (or *cleft*) 'to part, divide, split' has become *cleave/cleaved/cleaved* for most, while *strive/strove/striven* for many speakers has changed to *strive/strived/strived*. (*Strive* is a borrowing from Old French *estriver* 'to quarrel, contend', but came to be a strong verb very early in English, now widely levelled to a weak verb pattern.)

(2) Some English strong verbs have shifted from one strong verb pattern to another, with the result of a partial levelling. For example, in earlier English the 'present'/'past'/'past participle' of the verb *to bear* was equivalent to *bear/bare/born(e)*, and *break* was *break/brake/broke(n)*.

They have shifted to the *fight/fought/fought*, *spin/spun/spun* pattern, where the root of the 'past' and 'past participle' forms is now the same (*bear/bore/born(e)*, *break/broke/broken*).

(3) In a rather large class of verbs in Standard Spanish, *o* (unstressed) alternates with *ue* (when stressed), as in *volár* 'to fly', *vuéla* 'it flies'. Many speakers of Chicano Spanish have levelled the alternation in favour of *ue* alone in these verbs: *vuelár* 'to fly', *vuéla* 'it flies'.

(4) In English, the former 'comparative' and 'superlative' forms of *old* have been levelled from the pattern *old/elder/eldest* to the non-alternating pattern *old/older/oldest*. Here, *o* had been fronted by umlaut due to the former presence of front vowels in the second syllable of *elder* and *eldest*, but the effects of umlaut were levelled out, and now the words *elder* and *eldest* remain only in restricted contexts, not as the regular 'comparative' and 'superlative' of *old*.

(5a) *Near* was originally a 'comparative' form, meaning 'nearer', but it became the basic form meaning 'near'. If the original state of affairs had persisted for the pattern 'near'/'nearer'/'nearest', we should have had *nigh/near/next*, from Old English *nēah* 'near'/*nēarra* 'nearer'/*nēahsta* 'nearest'. However, this pattern was levelled out; *nearer* was created in the sixteenth century, then *nearest* substituted for *next*. Both *nigh* and *next* remained in the language, but with more limited, shifted meanings. (5b) Similarly, *far* was also comparative in origin (originally meaning 'farther'), but this became the basic form meaning 'far', which then gave rise to the new comparative *farrer*, which was replaced by *farther* under the influence of *further* 'more forward, more onward, before in position'. (5c) The pattern *late/later/latest* is also the result of an analogical levelling without which we would have had instead the equivalent of *late/latter/last*, with the 'comparative' from Old English *lætra* and the 'superlative' from Old English *latost*. (In this case, *later* replaced *latter*, which now remains only in restricted meaning; and *last*, though still in the language, is no longer the 'superlative' of *late*.)

(6) In Greek, **k*^{w} became *t* before *i* and *e*, but *p* in most other environments. By regular sound change, then, the verb 'to follow' in Greek should have resulted in variant forms such as: *hépomai* 'I follow', *hétēi* 'you follow', *hétetai* 'he/she/it follows'. However, by analogy, the *p* (from original **k*^{w} before *o* in this case) spread throughout the paradigm, levelling all the forms of 'to follow': *hépomai* 'I follow', *hépetai* 'you follow', *hépēi* 'he/she/it follows' (Beekes 1995: 73).

(7) Many verbs which have the same form in the singular and plural in Modern German once had different vowels, which were levelled by analogy. Thus, for example, Martin Luther (1483–1546) still wrote *er*

bleyb 'he stayed'/*sie blieben* 'they stayed' and *er fand* 'he found'/*sie funden* 'they found', where Modern German has *er blieb/sie blieben* and *er fand/sie fanden* (Polenz 1977: 84).

4.4 Analogical Extension

Analogical extension (somewhat rarer than analogical levelling) extends the already existing alternation of some pattern to new forms which did not formerly undergo the alternation. An example of analogical extension is seen in the case mentioned above of *dived* being replaced by *dove* on analogy with the 'strong' verb pattern as in *drive/drove*, *ride/rode* and so on, an extension of the alternating pattern of the strong verbs. Other examples follow.

(1) Modern English *wear/wore*, which is now in the strong verb pattern, was historically a weak verb which changed by extension of the strong verb pattern, as seen in earlier English *werede* 'wore', which would have become modern *weared* if it had survived.

(2) Other examples in English include the development of the non-standard past tense forms which show extension to the strong verb pattern which creates alternations that formerly were not there, as in: *arrive/arrove* (Standard English *arrive/arrived*), and *squeeze/squoze* (Standard *squeeze/squeezed*).

(3) In some Spanish verbs, *e* (unstressed) alternates with *ie* (when in stressed positions), as in *pensár* 'to think', *piénso* 'I think'. In some rural dialects, this pattern of alternation is sometimes extended to verbs which formerly had no such alternating pairs, for example: *aprendér* 'to learn'/*apriéndo* 'I learn', where Standard Spanish has *aprendér* 'to learn'/*apréndo* 'I learn'. Others include *compriendo* 'I understand' for *comprendo*, *aprieto* 'I tighten' for *apreto*; this also extends to such forms as *diferiencia* for *diferencia* 'difference'.

(4) Where Standard Spanish has no alternation in the vowels in forms such as *créa* 'he/she creates'/*creár* 'to create', many Spanish dialects undergo a change which neutralises the distinctions between *e* and *i* in unstressed syllables, resulting in alternating forms as seen in *créa* 'he/she creates'/*criár* 'to create'. This alternation has been extended in some dialects to forms which would not originally have been subject to the neutralisation. Thus, for example, on analogy with forms of the *créa/criár* type, illustrated again in *menéa* 'he/she stirs'/*meniár* 'to stir', some verbs which originally did not have the stress pattern have shifted to this pattern, as seen in dialect *cambéa* 'he/she changes'/*cambiár* 'to change', replacing Standard Spanish *cámbia* 'he/she

changes'/*cambiár* 'to change'; *vacéo* 'I empty'/*vaciár* 'to empty', replacing Standard Spanish *vácio* 'I empty'/*vaciár* 'to empty'.

From the point of view of the speaker, analogical levelling and extension may not be different, since in both the speaker is making different patterns in the language more like other patterns that exist in the language.

4.5 The Relationship between Analogy and Sound Change

The relationship between sound change and analogy is captured reasonably well by the slogan (sometimes called 'Sturtevant's paradox'): *sound change is regular and causes irregularity; analogy is irregular and causes regularity* (Anttila 1989: 94). That is, a regular sound change can create alternations, or variant allomorphs. For example, umlaut was a regular sound change in which back vowels were fronted due to the presence of a front vowel in a later syllable, as in *brother* + *-en* > *brethren*; as a result of this regular sound change, the root for 'brother' came to have two variants, *brother* and *brethr-*. Earlier English had many alternations of this sort. However, an irregular analogical change later created *brothers* as the plural form, on analogy with the non-alternating singular/plural pattern in such nouns as *sister/sisters*. This analogical change is irregular in that it applied only now and then, here and there, to individual alternating forms, not across the board to all such alternations at the same time. This analogical change in the case of *brethren* in effect resulted in undoing the irregularity created by the sound change, leaving only a single form, *brother*, as the root in both the singular and plural forms; that is, analogy levelled out the alternation left behind by the sound change (*brethren* survives only in a restricted context with specialised meaning). In this context, we should be careful to note that although analogical changes are usually not regular processes (which would occur whenever their conditions are found), they can sometimes be regular.

The history of the verb *to choose* in English shows the interaction of analogy and sound change well. Old English had the forms *cēosan* [čēosan] 'infinitive', *cēas* [čæas] 'past singular', *curon* [kuron] 'past plural' and *coren* [koren] 'past participle'. These come from the Proto-Indo-European root **geus-* 'to choose, to taste' (which had vowel alternations in different grammatical contexts which gave also **gous-* and **gus-* – the latter is the root behind Latin *gustus* 'taste' and the loanword *gusto* in English). From this Indo-European root came Proto-Germanic **keus-an* (and its alternates in different grammatical contexts,

**kaus-* and **kuz-*). The differences in the consonants among the Old English forms of 'to choose' come from two sound changes. The past plural and past participle forms had undergone Verner's law (see Chapter 5), which changed the **s* to **z* when the stress followed (as it did in the 'past plural' and 'past participle' in Pre-Germanic times), and then intervocalic *z* changed to *r* by rhotacism. The other change was the palatalisation in English of *k* to *č* before the front vowels. Together, these changes resulted in different allomorphs with different consonants in the paradigm, *čVs-* and *kVr-*. Analogical levelling later eliminated these consonant differences, leaving Modern English *choose/chose/chosen* uniformly with the same consonants. (In dialects, even the difference in vowels of the strong verb pattern was sometimes levelled, to *choose/choosed/choosed* or similar forms, though these have not survived well in the face of competition from Standard English.) In this example, clearly the regular sound changes, rhotacism (after Verner's law) and palatalisation, created different allomorphs (irregularity in the paradigm for 'choose' in Old English), and subsequent analogical changes restored uniformity to the consonants of this paradigm.

A somewhat more complicated but more informative example is seen in Table 4.1.

TABLE 4.1: Latin rhotacism and the interaction of analogy with sound change

Stage 1: Latin before 400 BC		
honos 'honour'	labos 'labour'	nominative singular
honōsem	labōsem	accusative singular
honōsis	labōsis	genitive singular
Stage 2: rhotacism: s > r /V__V		
honos	labos	nominative singular
honōrem	labōrem	accusative singular
honōris	labōris	genitive singular
Stage 3: after 200 BC, analogical reformation of nominative singular		
honor	labor	nominative singular
honōrem	labōrem	accusative singular
honōris	labōris	genitive singular

In this example, the regular sound change in Stage 2, rhotacism (s > r/V__V), created allomorphy (*honos/honōr-*), that is, irregularity in the paradigm. Later, irregular analogy changed *honos* and *labos* (nominative singular forms) to *honor* and *labor*, both now ending in *r*, matching the *r* of the rest of the forms in the paradigm. Thus irregular analogy has

regularised the form of the root, eliminating the allomorphic alternations involving the final consonant of the root.

4.6 Analogical Models

In discussions of different sorts of analogical change, it is common to distinguish between ***immediate models*** and ***non-immediate models***. These have to do with the place in the language where we find the 'relation of similarity' which is behind the analogical change. Cases involving *non-immediate models* are, like those of the Latin *labos* > *labor* of Table 4.1, due to the influence of whole classes of words or paradigms which do not normally occur in discourse in the near vicinity of the form that changes. In a case such as *honos* > *honor* under analogy from other forms in the paradigm, such as *honōrem*, *honōris* and so on, in normal discourse these forms would not occur adjacent to (or nearby) one another. For the majority of analogical changes no immediate model exists, but rather the model is a class of related forms.

An *immediate model* refers to a situation in which the 'relation of similarity' upon which the analogical change is based is found in the same speech context as the thing that changes. This refers to instances where the thing that changes and the thing that influences it to change are immediately juxtaposed to one another or are located very near each other in frequently repeated pieces of speech. Thus, analogical changes based on an immediate model are typically found in frequently recited routines, such as sequences of basic numbers, days of the week, months of the year, or in phrases used so frequently they can almost be taken as a unit. For example, month names are frequently said together in sequence; as a result, for many English speakers, because of the immediate model of *January*, *February* has changed to *Febuary* [fɛbjuwɛɹi], becoming more like *January* [ǰænjuwɛɹi].

(1) In English, *female* ['fimeil] was earlier *femelle* [fɛ'mɛl]; however, in the immediate model of *male and female*, frequently uttered together, the earlier *femelle* (the Middle English form) changed to be more similar to *male*.

(2) Modern Spanish has the following days of the week which end in *s*: *lunes* 'Monday', *martes* 'Tuesday', *miercoles* 'Wednesday', *jueves* 'Thursday', *viernes* 'Friday'; however, *lunes* and *miercoles* come from forms which originally lacked this final *s*, but took it by analogy to other day names which ended in *s* in this immediate context, where the days of the week are commonly recited as a list. The day names are derived from shortened versions of the Latin names which originally contained

dies 'day', as in the following, where the last sound in these compounds reveals which forms contained the original final *s* and which lacked it: Spanish *lunes* < Latin *dies lunae* 'moon's day', *martes* < *dies martis* 'Mars' day', *miercoles* < *dies mercurī* 'Mercury's day', *jueves* < *dies jovis* 'Jupiter's day', *viernes* < *dies veneris* 'Venus' day'.

(3) Many examples of analogical changes based on an immediate model are found in numbers. For example, (1) Proto-Indo-European had **k^{w}etwer-* 'four', **penk^{w}e-* 'five'; **p* became Germanic **f* by Grimm's law, and **k^{w}* should have become **h^{w}*, but we get *four* (with *f*, not expected *whour*) by influence from the *f* of following *five*. (2) Latin *quinque* /k^{w}ink^{w}e/ 'five' (from **penk^{w}e-*) may be due in part to influence from preceding *quattuor* 'four' (from **k^{w}etwer-*). (3) In some Greek dialects, the sequence *hepta* 'seven', *oktō* 'eight' has become *hepta*, *hoktō*; in others, *oktō* has become *optō* 'eight', becoming more like the preceding *hepta* 'seven'. (4) In Slavic, originally 'nine' began with *n-* and 'ten' with *d-*, but they shifted so that 'nine' now begins with *d-*, making it more similar to following 'ten', as in Russian *d^{j}ev^{j}at^{j}* 'nine' (< Proto-Indo-European **newn̥*), *d^{j}es^{j}at^{j}* 'ten'(< Proto-Indo-European **dekm̥*).

The numbers in several Mayan languages illustrate this tendency for numbers counted in sequence to influence each other, as immediate models for analogical change. For example, Poqomchi' numbers have come to have the same vowel in *kiʔi:ɓ* 'two', *iʃi:ɓ* 'three', *kixi:ɓ* 'four', from earlier forms with distinct vowels: Proto-K'ichean **kaʔi:ɓ* 'two', **oʃi:ɓ* 'three', **kaxi:ɓ* 'four'. In Q'eqchi', 'ten' has been influenced by **ɓe:lex̱eɓ* 'nine': *ɓeleheɓ* 'nine', *laxe:ɓ* 'ten', from Proto-K'ichean **ɓe:lex̱eɓ* 'nine', **laxux̱* 'ten'. The Proto-Mayan forms **waq-* 'six' and **huq-* 'seven' have influenced each other in several Mayan languages: for example, the *w* of 'six' has influenced 'seven' to take *w* instead of its original **h*, as seen in Teco *wu:q* 'seven' and Tzotzil *wuk* 'seven'.

(4) An often-repeated example is Cicero's *senātī populīque Romanī* 'of the Roman senate and people', where *senātūs* 'senate (genitive singular)' is expected. In this case, different noun classes are involved, which had different 'genitive singular' forms:

'nominative singular':	animus 'soul, heart'	senātus 'senate'
'genitive singular':	animī	senātūs

The *senātus* class was small, and only a few nouns belonged to it. The class to which *animus* belonged was much larger. A frequent phrase, in the nominative case, was *senātus populusque romanus* 'the Roman senate and people' (the clitic *-que* means 'and'). Cicero gave it in the

genitive case, not with expected *senātūs* 'senate (genitive singular)', but *senatī* based on the immediate model of *populī* 'people (genitive singular)' in this phrase (compare Paul 1920: 106).

4.7 Other Kinds of Analogy

Many different kinds of change are typically called analogy; some of these have little in common with one other. It is important to have a general grasp of these various kinds of changes which are all lumped together under the general heading of analogy, for these terms are used very frequently in historical linguistic works. As pointed out above, the proportional analogical changes which involve levelling and extension, though often irregular, can in some instances be quite regular and systematic. Most of the other kinds of analogy, normally considered non-proportional, are mostly irregular and sporadic (and many of these can be proportional, too). There is nothing particularly compelling about this classification of kinds of analogical changes. The names are standard, but one type is not necessarily fully distinct from another, so that some examples of analogical changes may fit more than one of these kinds of change.

4.7.1 Hypercorrection

Hypercorrection involves awareness of different varieties of speech which are attributed different social status. An attempt to change a form in a less prestigious variety to make it conform with how it would be pronounced in a more prestigious variety sometimes results in overshooting the target and coming up with what is an erroneous outcome from the point of view of the prestige variety being mimicked. That is, hypercorrection is the attempt to correct things which are in fact already correct and which already match the form in the variety being copied, resulting in overcorrection and getting the form wrong.

(1) Some dialects in the western United States have: *lawnd* < *lawn*; *pawnd* (shop) < *pawn*, *drownd* (present tense)/*drownded* (past tense) < *drown/drowned*. These changes came about by hypercorrection in an overzealous attempt to undo the effects of the loss of final *d* after *n*, found to one extent or another in many varieties of English, for example, *san'* for *sand*, *fin'* for *find*, *roun'* for round, and so on.

(2) The frequently heard instances in English of things like *for you and I* for what in Standard English is *for you and me* involve hypercorrection; schoolteachers have waged war on the non-standard use of *me*

in subject positions, in instances such as *me and Jimmy watched 'Star Trek'* and *me and him ate popcorn* and so on. Speakers, in attempting to correct these to *I* when it is part of the subject of the clause, sometimes go too far and hypercorrect instances of *me* in direct or indirect objects to *I*, as in *Maggie gave it to Kerry and I*.

(3) Some English dialects in the southern United States have *umbrellow* for 'umbrella' and *pillow* for 'pillar', a hypercorrection based on the less prestigious pronunciations of words such as *fella* and *yella*, changing to match to more formal (more prestigious) *fellow* and *yellow*.

(4) In many rural Spanish dialects, *d* before *r* has changed to *g* (d > g /__ r), as in: *magre* 'mother' (< *madre*), *pagre* 'father' (*padre*), *piegra* 'stone' (*piedra*), *Pegro* 'Pedro'. Sometimes speakers of these dialects attempt to change these *gr* pronunciations to match the standard and prestigious *dr* counterpart; however, in doing this, they sometimes hypercorrect by changing instances of *gr* to *dr* where the standard language in fact has *gr*, as for example *suedros* 'parents-in-law', where Standard Spanish has *suegros*, and *sadrado* 'sacred' instead of Standard *sagrado*.

(5) Standard Finnish has /d/, but many regional dialects do not; several have /r/ instead. An attempt to correct dialectal *suren* 'wolf (accusative singular)' to Standard Finnish *suden* would work out well through the replacement of dialect *r* by *d*. However, this sort of substitution leads to hypercorrections such as *suuden* 'big' (accusative singular) where Standard Finnish actually does have /r/, *suuren* (Ravila 1966: 57).

(6) In regional dialects of Spanish, *f* has become *x* before *u*, and this leads to the following sorts of hypercorrections, since the standard language preserves *f* in these cases, but also has other legitimate instances of *xu* as well (where [x] is spelled in Spanish with *j*): *fugo* < *jugo* 'juice', *fueves* < *jueves* 'Thursday', *fuicioso* < *juicioso* 'judicious'.

4.7.2 Folk etymology (popular etymology)

We might think of folk etymologies as cases where linguistic imagination finds meaningful associations in the linguistic forms which were not originally there and, on the basis of these new associations, either the original form ends up being changed somewhat or new forms based on it are created.

(1) An often-cited example is that of English *hamburger*, whose true etymology is from German *Hamburg* + *-er*, 'someone or something from the city of Hamburg'; while hamburgers are not made of 'ham',

speakers have folk-etymologised *hamburger* as having something to do with *ham* and on this basis have created such new forms as *cheeseburger*, *chiliburger*, *fishburger*, *Gainsburgers* (a brand of dog food in North America), just *burger*, and so on.

(2) In Spanish, *vagabundo* 'vagabond, tramp' has given rise also to *vagamundo* (same meaning), associated by speakers in some way with *mundo* 'world' and *vagar* 'to wander, roam, loaf', since a tramp wanders about in the world.

(3) Jocular Spanish has created *indiosingracia* 'idiosyncrasy' (for *idiosincrasia*), based on *indio* 'Indian' + *sin* 'without' + *gracia* 'grace'.

(4) The original name of the city of *Cuernavaca* in Mexico was *kwawnawak* in Nahuatl, but it was folk-etymologised by the Spanish as *cuernavaca*, based on *cuerno* 'horn' + *vaca* 'cow', though the place had no connection with either 'horns' or 'cows'. Its true etymology is Nahuatl *kwaw-* 'trees' + *nāwak* 'near, adjacent to', that is, 'near the trees'.

(5) *(Beef) jerky*, *jerked beef* in English comes from Spanish *charqui*, which Spanish borrowed from Quechua *č'arqi* – nothing is 'jerked' in the preparation of this dried meat, as the folk etymology seems to assume.

(6) *Handiwork* comes from Old English *handġeweorc*, composed of *hand* 'hand' + *ġeweorc* 'work (collective formation)', where *ġe* > *y* [j] or *i* in Middle English, and then was lost. The word was reformulated by folk etymology in the sixteenth century on the basis of *handy* + *work* (compare Palmer 1972: 240).

(7) Many today (mis)spell *harebrained* as *hairbrained*, apparently having shifted the original etymology from 'one having a brain like a hare (rabbit)' to a new folk etymology based on *hair*, 'one having a brain associated in some in way with hair'.

(8) Some dialects of English have *wheelbarrel* for *wheelbarrow*, folk-etymologising it as having some association with *barrel*.

(9) Some speakers have changed *cappuccino* to *cuppacino*, influenced analogically by the word *cuppa* 'cup of tea', unknown in American English but widely used elsewhere, from *cup of* (*tea* or *coffee*); a seven-year-old boy called it *caffeccino* (based on *coffee*). Compare also such blends – see below – as *mochaccino*, *muggaccino* and *cybercino* (involving a coffeeshop with World Wide Web access for its customers).

(10) Old Spanish *tiniebras* 'darkness' changed to Modern Spanish *tinieblas* through the folk-etymological assumption that it had something to do with *niebla* 'fog'.

(11) The true etymology of English *outrage* has nothing to do with *out* or *rage*, which are due to folk etymology. Rather, *outrage* is in origin a

4.7.5 Blending (or contamination)

In *blends*, pieces of two (or more) different words are combined to create new words. Usually the words which contribute the pieces that go into the make up of the new word are semantically related in some way, sometimes as synonyms for things which have the same or a very similar meaning. Some blends are purposefully humorous or sarcastic in their origin; others are more accidental, sometimes thought to originate as something like slips of the tongue which combine aspects of two related forms which then catch on. Examples of blending and contamination are sometimes treated as lexical change (see Chapter 10). The following English examples illustrate these various origins and outcomes.

(1) Often-cited examples include: *smog* < *smoke* + *fog*; *brunch* < *breakfast* + *lunch*; *motel* < *motor* + *hotel*, *splatter* < *splash* + *spatter*; *flush* < *flash* + *blush*.

(2) *(computer) bit* < *binary digit*.

(3) Based on a portion of *magazine*: *fanzine* (fan group newsletter-magazine), *videozine* (videotape featuring items comparable to print magazines), *webzine* (Internet sites in magazine format).

(4) A suffix-like element was created on the basis of a portion of *marathon*: *telethon*, *walkathon*, *bik(e)athon*, *danceathon*, and so on.

(5) *newscast* < *news* + *broadcast*; also *sportscast*, *sportscaster*.

(6) Based on part of *alcoholic*: *workaholic*, *chocaholic*, *foodaholic*, *gumaholic*, *shoppaholic*, and so on.

(7) *infomercial* < *information* + *commercial*; *infotainment* < *information* + *entertainment*.

(8) From combinations based on *hijack*: *skyjack(ing)* and *carjack(ing)*.

(9) *neither* < earlier *nouther* through influence from *either*.

(10) *-gate* (a new suffix-like element created on the basis of *Watergate* of the Richard Nixon Watergate scandal): *Contragate*, *Koreagate*, *Irangate*, *Camillagate* (involving Prince Charles's close friend, Camilla Parker Bowles).

Some non-English examples are:

(11) An often-cited case: Latin *reddere* 'to give back' and *pre(he)ndere* 'to take hold of, seize' influenced one another and resulted in the blend in Romance languages illustrated by Spanish *rendir* 'to yield, produce, render', Italian *rendere* 'to render, yield', French *rendre* 'to render' (English *render* is a borrowing from French).

(12) Spanish jocular *indioma* 'language' (from Cantinflas' films) is a blend of *indio* 'Indian' and *idioma* 'language'.

(13) Names of languages which borrow extensively from others or

are highly influenced by others are the sources of such blends as *Spanglish* < *Spanish* + *English*, *Finnglish* < *Finnish* + *English*, *manglish* was created in feminist discourse to reflect male biases in English, < *man* + *English*; *Franglais* < *français* 'French' + *anglais* 'English'.

There are also syntactic blends. Neogrammarians presented many examples (for example, Paul 1920: 165). Some are:

(1) *I'm friends with him*, from a contamination based on *I'm a friend with him* and *we are friends* (Paul 1920: 150).

(2) Non-standard German *mich freut deines Mutes*, from a contamination of the two perfectly normal constructions *ich freu-e mich dein-es Mut-es* [I please-first.person me.Reflexive your-Genitive courage-Genitive], roughly 'I'm pleased over your courage', and *mich freu-t dein Mut* [me.Accusative please-third.person your spirit], roughly 'your spirit pleases me' (Paul 1920: 149).

(3) Finnish has two alternative constructions for verbs meaning 'to command, order', as in 'she told/commanded the boy to come':

hän käski poikaa tulemaan (*poika-a* 'boy-Partitive.Singular' *tule-ma-an* 'come-third.Infinitive-Illative.case')
hän käski pojan tulla (*poja-n* 'boy-Genitive.Singular' *tul-la* 'come-first.Infinitive').

These two have blended for some dialects to give a third construction:

käski pojan tulemaan (*poja-n* 'boy-Genitive.Singular' *tule-ma-an* 'come-third.Infinitive-Illative') – not accepted in Standard Finnish.

4.8 Exercises

Exercise 4.1

Observe the language of your friends and of newspapers, television and so on, and attempt to find examples of your own of the various sorts of analogy.

Exercise 4.2 Identifying analogical changes

Determine what kind of analogical change is involved in the following examples. Name the kind of change, and attempt to explain how it came about, if you can.

(1) In some dialects of English, the pattern *bring/brought/brought* has become *bring/brang/brung*.

(2) Where Standard English has *drag/dragged*, some varieties of English have *drag/drug*. It appears in this case that the Standard English pattern is older.

(3) Old Spanish *siniestro* 'left' changed from Latin *sinister* 'on the left' to take on *ie* under the influence of the antonym *diestro* 'right', since *diestro* and *siniestro* frequently occurred together.

(4) In many Spanish dialects, an intervocalic *d* is regularly lost, as in *mercado* > *mercao* 'market'; in some instances, however, there are changes of the following sort: dialect *bacalado* < Standard *bacalao* 'codfish'; dialect *Bilbado* < Standard *Bilbao* (a place name).

(5) In the Dominican Republic, forms such as Standard Spanish *atras* 'behind' become *astras*; in this variety of Spanish, preconsonantal *s* is often lost, as in *ata* < *asta* (spelled *hasta*) 'until'.

(6) English *Jerusalem artichoke* (a kind of sunflower, with some similarities to an artichoke) is in origin from Italian *girasóle articiocco*, where Italian *girasóle* /jirasóle/ contains *gira-* 'turn around, revolve, rotate' + *sole* 'sun', and *articiocco* 'artichoke', with nothing associated with *Jerusalem*.

(7) In English, *Key West* (in Florida) comes from the Spanish name *cayo hueso*, where *cayo* is 'key, small island' and *hueso* is 'bone'.

(8) English *heliport* < *helicopter* + *airport*; *snazzy* < *snappy* + *jazzy*; *jumble* < *jump* + *tumble*.

(9) Colloquial and regional varieties of Spanish have *haiga* where Standard Spanish has *haya* (subjunctive, 'there may be') and *vaiga* where Standard Spanish has *vaya* (subjunctive, 'may go'). These have been influenced by Standard Spanish verb forms such as *traiga* (subjunctive of *traer* 'to bring', 'may bring') and *caiga* (subjunctive of *caer* 'to fall', 'may fall').

(10) Middle English had *help-* 'present tense', *holp* 'past tense'; Modern English has *help*, *helped* for these.

(11) English to *emote* is derived from *emotion*; to *enthuse* is derived from *enthusiastic*.

(12) Many varieties of English have a new verb *to liaise* based on *liaison*.

(13) English *to diagnose* is derived from *diagnosis*.

(14) Finnish *rohtia* 'to dare' resulted from both *rohjeta* 'to be bold enough, to dare' and *tohtia* 'to dare'.

Exercise 4.3 Analogical changes in Mayan languages

Name and attempt to explain where possible the analogical changes illustrated in the following examples from various Mayan languages.

(1) Uspanteko *ʃi:k'* 'hawk' (compare Proto-K'ichean **ʃihk* 'hawk', **ʃi:k'* 'wing'). (NOTE: the loss of *h* is not relevant to this problem; *k'* = a glottalised velar stop.)

(2) Tzeltal dialects *ik'ɓin* 'weasel' (other Mayan languages have *sahɓin* or *saqɓin*; compare Proto-Mayan **saq* 'white', Tzeltal *ik'* 'black').

(3) Kaqchikel *-iʃqaʔil* 'wife' became *-iʃxayil* in some dialects (compare *iʃ-* 'female prefix', *xay* 'house' + *-il* 'suffix' ('pertaining to').

(4) Yucatec *ič* 'face', *w-ič* 'my face' (compare earlier form **wič* 'face', **in-wič* 'my face'; note *w-* 'my' before vowels, *in-* 'my' before consonants).