Analogical Change

Sound change, borrowing and analogy are three linguistic changes that are traditionally considered the most basic and important changes in human languages.

Some of the definitions of analogy are given below:

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.

Analogy is a historical process which projects a generalisation from one set of expressions to another.

Despite the fact that analogy is very important, linguistics textbooks don’t offer a detailed account of it.

Many textbooks just begin straight away by presenting examples of analogical change and don’t even provide any definition for it.

Arlotto (1972: 130), has recognised the problem and offers a very general definition for it', ' ….analogy is a process whereby one form of a language becomes more like another with which it has some association'.

If we examine all these definitions and try explaining the salient feature in them, we would say that *analogical change involves a relation of similarity*.

If we place the three main kinds of aforementioned changes, we would say that the sound change has been considered regular by the Neogrammarians, borrowings are needed to be identified in languages, and analogy is, in effect, everything else that was left over.

In other words, analogy is mostly everything that is not sound change or borrowing. Analogy, thus, becomes the default category of changes.

In analogical change, some instances of the language change become more like another in the language where speakers perceive the changed-part as similar to the items which bring the change.

Analogy is sometimes referred as 'internal borrowing’ with an idea that in analogical change a language may 'borrow' some patterns from language-internally to change other patterns in the same language itself.

It is also so, because analogy is usually not conditioned by regular phonological factors, rather it depends on aspects of the grammar, especially morphology.

In order to make little better sense of what we have been saying , lets see some example:

Originally, *sorry* and *sorrow* were quite distinct words in Enlgish, 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 *sarig* * 'sore, painful, sensitive' (derived from the Old English noun *sar** 'sore'), which has cognates in other Germanic languages.

The original /a:/ of *sarig** changed to /o:/ 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 changes and we will discuss some important types of analogy in the coming slides.

We would also talk about the role of analogy for the traditional treatments of linguistic change.

Proportional Analogy:

Proportional analogical changes are those which can be represented in an equation of the form, a: b = c: x

The four-way analogy of the form a: b = c : x is also sometimes presented in other forms, such as:

a: b :: c: x;

or as:

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

For example: *ride: rode = dive : x,* where in this instance *x* is solved with *dove.*

The original past tense of *dive* was *dived,* but it changed to *dove* under analogy with the class of verbs which sound alike such as *drive : drove, ride : rode, write : wrote, strive : strove,* and so on.

In English, the pattern of the verb *speak/spoke/spoken* ('present tense'/'past tense'/'participle form') developed through morphological leveling or remodeling on analogy with verbs of the similar pattern such as *break/broke/broken,* though in Old English, it was *sprec/spræc/gesprecen.*

Finnish formerly had *laksi* 'bay(NomSg)'; and the Genitive form of this was *lahde-n,* just as words such as *kaksi* (nominative singular): *kahde-n* (genitive singular) 'two'.

However, 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 formula: *lehden: lehti :: lahden: lahti* (< *laksi*).

A grammatical example that depicts proportional analogical change is found in some Spanish dialects in the non-standard pronoun pattern called *leísmo*.

Leísmo ("using le") is about a dialect variation in the Spanish language that occurs largely in Spain.

It involves using the indirect object pronoun '**le**' in place of the (standard) masculine direct object pronoun '**lo**', especially when the direct object refers to a male person.

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 *leísmo,* the change has created a gender distinction even for 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)'.

Analogical Leveling:

Many proportional analogical changes are known as analogical levelling.

Analogical leveling reduces the number of allomorphs that a morphological form has i.e. it makes paradigms more uniform.

In analogical leveling, forms which formerly underwent alternations no longer do so after the change.

For example, some English 'strong' verbs have been leveled to the 'weak' verb pattern, 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 leveled to weak verbs (with a single stem form and *-ed* or its equivalent for 'past' and ‘participle form', as in *bake/baked/baked* or *live/lived/lived*).

Thus *cleave/clove/cloven* '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.

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'/ ‘participle form' 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 'participle' forms is now the same (*bear/bore/born*(*e*), *break/broke/broke(n*)).

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*.

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.

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.

Analogical Extension:

Analogical extension has extended the already existing alternation of some pattern to new forms which did not formerly undergo any change.

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.

In Modern English, we have *wear*/*wore*, which is now in the strong verb pattern.

It 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 *weared* if it had survived.

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*)

squeeze/*squoze* (Standard *squeeze*/*squeezed*)

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'.

The cases where Standard Spanish has no alternation in the vowels in forms such as *créa* 'he/she *creates.*

'creár 'to create', in many Spanish dialects undergo a change which neutralizes 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 originally did not have the neutralization.

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‘.

This has replaced the Standard Spanish *cámbia* 'he/she changes'/cambiár 'to change’, and

vacéo 'I empty'/vaciár 'to empty', replacing Standard Spanish vácio 'I empty'/vaciár 'to empty'.

The Relationship between Analogy and Sound Change

The relationship between sound change and analogy is captured reasonably well by the slogan (known as 'Sturtevant's paradox'): ***sound change is regular and causes irregularity; analogy is irregular and causes regularity*** (Anttila 1989: 94).

The core message in the slogan is that 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 and not across the board.

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 specialized meaning).

The history of the verb *to choose* in English shows the interaction of analogy and sound change.

In Old English, we had the forms *ceosan* * [ceosan*] 'infinitive', *ceas** [cæas*] 'past singular', *curon* [kuron] 'past plural' and *coren* [koren] ' participle'.

These come from the Proto-Indo-European root **geus-* 'to choose/taste' (which had vowel alternations in different grammatical contexts which gave also **gous*and **gus-* - the latter is the root behind Latin *gustus* 'choose/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 participle and past plural forms had undergone Verner's law, which changed the **s* to **z* when the stress followed (as it did in the 'past plural' and '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/c/ before the front vowels. Together, these changes resulted in different allomorphs with different consonants in the paradigm, *cVs-* * 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 given below:

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
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 the above example, the regular sound change in Stage 2, rhotacism (s > r/V__V), created allomorphy *(honos/honor-**) 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.

Analogical Models:

While talking about different kinds of analogical changes, it is common to distinguish between ***immediate analogical models*** and ***non-immediate analogical models***.

These types have to do with the place/position 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 the previous table.

In a case such as *honos* > *honor* under analogy from other forms in the paradigm, such as *honorem* *, *honoris** and so on,

These are cases of non-immediate as in normal discourse these forms would not occur adjacent to one another.

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 juxtaposed to one another in frequently repeated pieces of speech.

Thus, analogical changes that are based on an immediate-model are typically found frequently in examples such as sequences of basic numbers, days of the week, months of the year etc.

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* [febjuweri*], becoming more like *January* [jænjuweri*].

In English, *female* ['fimeil] was earlier *femelle* [fe'mel]; 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.*

Other Kinds of Analogy:

Many different kinds of change are typically called analogy despite the fact that some of these have little in common with one other.

It is important to have a general grasp of these changes which are all lumped together under the general heading of analogy.

As it has been pointed out, the proportional analogical changes which involve **levelling** and **extension**, though often irregular, can be quite regular and systematic in some rare cases.

Most of the other kinds of analogy, normally considered non-proportional, are mostly irregular and sporadic.

There is nothing particularly compelling about these kind 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 in more than one of these kinds of change.

Hypercorrection:

Hypercorrection involves awareness of different varieties of speech which are attributed with 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 way, sometimes results in overshooting the target and coming up with what is an erroneous outcome.

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. For example:

Some dialects in the western United States have: *lawnd* < *lawn; pawnd* (shop) < *pawn*, *drownd* (present tense)/*drownded* (past tense) < *drown*/*drowned.*

In many varieties of English, we find the examples such as ***san***' for sand, ***fin***' for find, ***roun***' for round. These changes are caused by hypercorrection in an over-doing attempt to undo the effects of the loss of final /d/ after /n/ and so on.

We often hear in English like ***for you and I*** for what in Standard English is *for you and me* involve hypercorrection.

Speakers, in attempting to correct the use of ‘ 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.*

Folk etymology (popular etymology)

We might think of folk etymologies as cases where linguistic imagination finds meaningful associations in the linguistic forms.

These forms were not originally there and, on the basis of these new associations, either the original form ends up being changed or a new forms based on the folk etymology is created.

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, and j*ust *burger*, and so on.

Back formation

As we know in case of back-formation, a word is assumed to have a morphological composition which it did not originally have in the language.

It is about a root plus affixes, so that when the affixes are removed, a new root is created, as when children, confronted with a plate of pieces of cheese, often say 'can I have a chee?', assuming that cheese is the plural form, and therefore creating the logical singular root, chee, by removing the final s, which they associate with the s of plural.

Examples which result in permanent changes in languages are quite common.

Cherry entered English as a loan from Old French cheris where the ‘-s’ was part of the original root, but was interpreted as representing the English 'plural', and so in back formation this ‘-s’ was removed, giving cherry.

English *pea* is from Old English *pise 'singular'/pisan* 'plural'; later the final ‘-s’ of the singular was reinterpreted as 'plural' and the form was back-formed to *pea.*

A number of new English verb roots have been created by back formations.

These have been created on the basis of the associations of something in the form of the original noun root with a variant of *-er* ‘doer of X':

to burgle based on *burglar; to edit* from *editor; to escalate* based on *escalator; to peddle* based on *pedlar; to sculpt* from *sculptor.*

Swahili *kitabu* 'book' is originally a loanword from Arabic *kitab* 'book'.

However, on analogy with native nouns such as *ki-su 'knife‘/bi-su* 'knives' (where *ki-* and *vi-* represent the noun-class prefixes for which Bantu languages are well known), Swahili has backformed *kitabu* by assuming that its first syllable represents the *ki-* singular noun-class prefix and thus creating a new plural in *bitabu* 'books‘.

Metanalysis (reanalysis)

Traditionally two things are treated under the title of metanalysis, *amalgamation* and *metanalysis proper or reanalysis.*

Metanalysis is from Greek *meta* 'change' *+ analysis* 'analysis‘.

Metanalysis involves a change in the structural analysis, in the interpretation of which phonological material goes with which morpheme in a word or construction.

English provides several examples: *adder* is from Old English *næddre* *; the change came through a reanalysis of the article-noun sequence *a + næddre**; as *an + adder.*

English has several examples of this sort. *Auger* is from Middle English *nauger, naugur,* Old English *nafo-gar** (*nafo-* 'nave [of a wheel]' + *gar** 'piercer, borer, spear', literally 'nave-borer').

Apron is from Middle English *napron,* originally a loan from Old French *naperon,* a diminutive form of *nape, nappe* 'tablecloth'.

The related form *napkin* (from the French *nape* 'tablecloth' + *-kin* 'a diminutive suffix', apparently ultimately from Dutch) still preserves the original initial *n-.*

Umpire < *noumpere* (originally a loanword from Old French *nonper* 'umpire, arbiter', *non* 'not' + *per* 'peer').

Blending (or contamination)

In *blending,* 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.

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 are sometimes treated as lexical change. The following English examples illustrate these various origins and outcomes.

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

The terminology related to computer , we have *bit* < *binary digit.*

In the field of media, we have *newscast* < *news* + *broadcast;* also *sportscast, sportscaster.*

That's all ☺