

HISTORICAL LINGUISTICS – LECTURE 6 – LEXICAL DIFFUSION THEORY

The later generative approaches sought to move beyond a mere recapitulation of history, i.e. beyond the simple description of changes in a language's history, toward an explanation of them including both the **actuation** and **transmission**. Recall that for **Neogrammarians** sound change is imperceptible and operates simultaneously for all speakers and all lexical items – this practically means that transmission is inaccessible for investigation, for **Structuralists** what matters is the change/or its lack in the inventory of phonemes, for **Generativists** the change in the system of rules. Both **S** and **G** compare and describe two stages in the development of a language but give us no insight into the interval between these two stages, i.e. how the change propagated.

The **lexical diffusion theory** (Wang 1969, 1977) offers the treatment of the transmission problem.

Theoretically a sound change could be implemented in one of the following four ways:

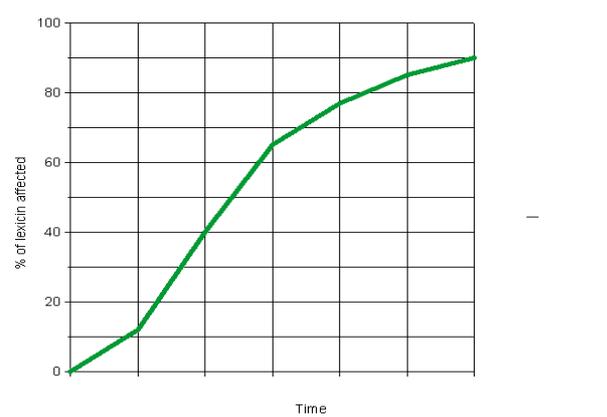
- phonetically gradual and lexically abrupt
- phonetically gradual and lexically gradual
- phonetically abrupt and lexically abrupt
- phonetically abrupt and lexically gradual

Option a. corresponds to the Neogrammarian view of sound change, although there are clearly types of sound changes which cannot be phonetically gradual (insertion, deletion, metathesis). The phonetic gradualness of a change might perhaps be maintained for some assimilatory or weakening processes. The **lexical diffusion theory (LDT)** argues that sound change is phonetically abrupt and lexically gradual (the exact opposite of neogrammarian type of change). The main assumption of LDT theory is that not all eligible items are affected by a sound change at the same time. Instead, a change will originate in a small subset of morphemes. Certain morphemes will undergo the change directly, while in others the pronunciation will fluctuate for a time for individuals and/or for the community. For example, the loss of /χ/ before /w/ in Welsh.

diffusion through the lexicon						
	→ t					
	t ₁	t ₂	t ₃	t ₄	t ₅	t
'to play'	χware	ware	ware	ware	ware	
'flea'	χwanen	χwanen	(χ)wanen	wanen	wanen	
'sister'	χwa:ir	χwa:ir	χwa:ir	χwa:ir	wa:ir	

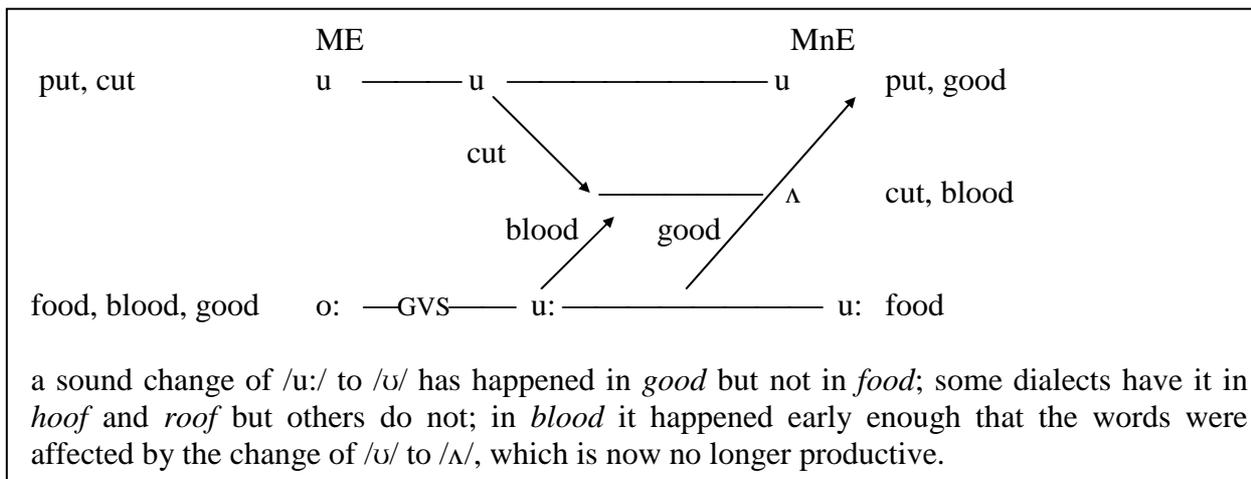
diffusion through the speech community					
Speaker	A	B	C	D	E
'to play'	χware	ware	ware	ware	ware
'flea'	χwanen	χwanen	(χ)wanen	wanen	wanen
'sister'	χwa:ir	χwa:ir	χwa:ir	χwa:ir	wa:ir

LDT is attractive to dialectologists and linguists since it gives some theoretical status to the variation which emerges from dialect surveys. Studies have shown that changes do not diffuse at a constant rate.



Note that (as the graph indicates) the change may not reach 100%. This is interpreted by LDT as resulting from sound changes which have not yet been completed, have come to a premature end, have been thwarted by a competing sound change. This approach can explain cases of apparent irregularity, when exceptional unaffected forms remain. Consider the following example:

/ʌ/ appears in English around 1700 as a result of the *cut/put* split. /ʊ/ tends to remain after labials, *put, bull, full, wool*; elsewhere it unrounds and lowers into /ʌ/, e.g. *cut, dull, tuck, thumb* (however, *but, bus*)



If change is taken to be lexically gradual its course is neither inevitable, nor inexorable even after it has begun. The story of *cut/put* split can be elegantly explained under LDT. Note that under Neogrammarian hypothesis all exceptions of the type created by *cut/put* split have to be explained by some other mechanisms – Neogrammarians usually invoked analogy or dialect borrowing. These are used as all-embracing explanatory strategies. In contrast, LDT has an ‘in-built’ mechanism which can explain residual forms. Crucially, the theory rests on the assumption that sound changes are **lexically gradual**. Although the theory does not indicate any factors determining which words will be affected first by a change it does make an important contribution to our understanding of the transmission problem.

Putting aside the issue of phonetic gradualness, if we compare the Neogrammarian and LDT points of view it can be observed that the difference between the two stems from looking at

sound change as effecting **sounds** (neogrammarians) or **words** (diffusionists). It is quite obvious that both positions cannot be true at the same time.

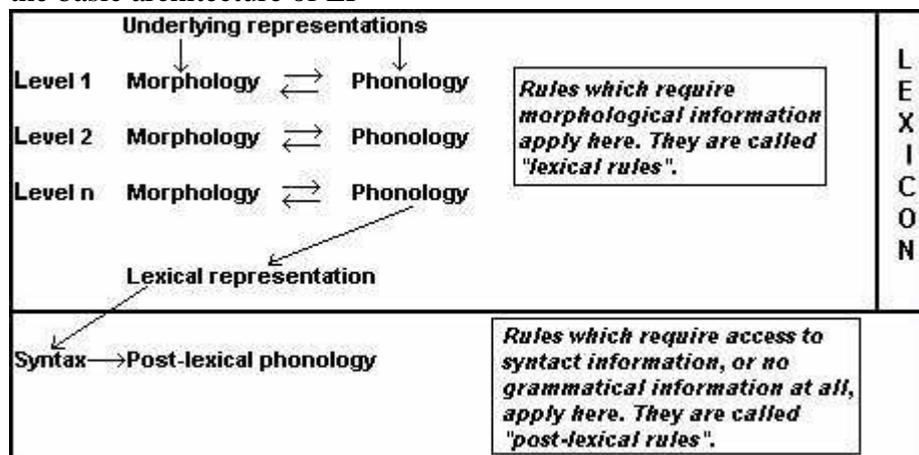
An important attempt to resolve this ‘Neogrammarian controversy’ was Labov’s 1981 paper.

- ❑ he refuted the Neogrammarian contention that sound change is unobservable by assuming that much of the synchronic variation can be interpreted as sound change in progress
- ❑ taking a sample of sound changes in progress he assessed which model characterised these best
- ❑ he found that some changes are best analysed as Neogrammarian, some others as diffusing
- ❑ the conclusion that he draws is that there are two distinct types of sound change

The recognition of two types of sound change was problematic for Standard Generative theory since it recognised only type of phonological rule. This even encouraged some linguists to claim that diachronic and synchronic linguistics are necessarily isolated from one another (sounds like structuralism). An attempt to solve the problem came from Lexical Phonology (Kiparsky 1982, 1985) developed in the early 1980s.

Lexical Phonology (LP) like SGP involves assignment of a single underlying form to each morpheme and the subsequent operation of phonological rules to produce surface forms, but it is innovative in two respects: it is less abstract, and more importantly it introduces a new organisation of the phonological component which is seen as integrative, with phonological and morphological rules interacting.

the basic architecture of LP



the main motivation for LP are data like: *átom-atómic, édit - éditor*

Level 1: *átom* (stress) → *átomic* (-ic affixation) → *atómic* (stress)

Level 1: *édit* (stress) → Level 2: *éditor* (-or affixation) stress rule cannot apply at level 2

For LP, Neogrammarian-type changes apply in the postlexical component, they are predictable, lay beneath the level of conscious awareness of the speaker. Lexically diffusive changes may be morphologically conditioned, yield a discrete output. According to Kiparsky, Neogrammarian changes can become diffusing changes over time – this follows from the architecture of the model.

References:

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