

INTEGRATING THEORIES OF SOUND CHANGE INTO LANGUAGE VARIATION

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The Neogrammarian principle of sound change has been challenged by opponents ever since its day of proclamation. The early dialectologists were the first to voice their opposition to this theory, which states that sound change proceeds by imperceptible increments while affecting all relevant words simultaneously. Basing much of their own thinking on fieldwork results in language variation, dialectologists and other language specialists were more highly impressed by an alternative viewpoint that regarded each word as having its own history, that sound change affects the lexicon irregularly, word by word.

These two positions have served as the poles around which varying viewpoints are classified. Wang (1969), Labov (1981) and Janson (1983) have recently taken up anew the Neogrammarian controversy. This paper will attempt to summarize their positions on the operation of sound change. It will also offer some thoughts on Janson's model for a type of sound change he presents in his paper.

William S-Y Wang has done much work on sound change involving the Chinese language. His study of its morphological structure has given him evidence for a sound change contrary to the Neogrammarian principle, a sound change he has called "lexical diffusion." He defined lexical diffusion as "change [that] affects the relevant morphemes severally in succession" (1969:15), and he considered it as a component in a scheme of four logical possibilities in viewing how a sound change operates on an individual's vocabulary. These possibilities are:

- (1) phonetically abrupt and lexically abrupt
- (2) phonetically abrupt and lexically gradual
- (3) phonetically gradual and lexically abrupt
- (4) phonetically gradual and lexically gradual

Type (3) represents the Neogrammarian hypothesis, and types (2) and (4) represent his lexical diffusion hypothesis. Type (1) is dismissed as theoretically impossible, while type (4) is seen as a combination of (2) and (3). He therefore proposed two types of sound change – (2) and (3) – in place of the single type adhered to up to that time.

In his paper, William Labov gave his support to Wang's lexical diffusion hypothesis, but based on his own research on sound change in New York City and Philadelphia, Labov sought to temper the visibility Wang gave to this type of change, stating that most of his own sound changes were of the Neogrammarian type. He also cited studies on sound change in progress by Fónagy (1956, 1967) and summarized his findings by saying that "lexical conditioning is comparatively rare, and that sound change begins in the majority of cases with the entire relevant vocabulary." (1981:

234-5).

As further evidence in favor of the Neogrammarian position, Labov observed that people correct one another's lexicon only in the late stages of a sound change and that these corrections are not at all systematic or regular. Rather than this irregularity of lexical correction being a support for the lexical diffusion hypothesis, it adds to the weight that words cannot be the fundamental units of change, the claim of Neogrammarian opponents.

Labov is not siding with either position. He wants to see further research done that incorporates support for both positions, and for researchers to throw out such self-limiting and dogmatic slogans as, "Every word has its own history." and "Words don't change; phonemes change." His paper is a demonstration of this spirit -- he arrived at a conclusion that supported both kinds of sound change: "In general we can look for lexical diffusion in these shifts across subsystems, i.e. changes of abstract features; and Neogrammarian change within the subsystems." (1981:299).

Two years later Tore Janson replied to Labov's call for more research. Labov had asked for findings on sound changes that are discontinuous but regular, i.e. the apical [r] to uvular [R] in Western Europe. This is a sound shift that fits neither established type: "It cannot be effected gradually, since it is phonetically discontinuous -- and yet is regular, i.e. is not implemented through lexical diffusion." (1983:19).

Janson fit this third type of sound change into Wang's scheme, and, with a change of terms, called it type (1) -- phonetically discrete and lexically abrupt. Wang had dismissed this category as "obviously unacceptable." Janson said that type (1) fulfills the description of those morphemes that, in Wang's words, "will at first have both the x-pronunciation and the y-pronunciation, fluctuating either randomly or according to some such factor as tempo or style." (1969:15). But rather than being a part of type (2), these words, said Janson, belong in (1). The apical [r] to uvular [R] is an illustration of such a sound change. The [R] was introduced discretely. Following such an introduction, both pronunciations were used for all relevant morphemes simultaneously. The author cited other such shifts: the re-introduction of /r/ in New York City English, and the change from [i'] to [j] in Charmey, researched by Labov (1966) and Gauch (1905) respectively.

Thus there are words that violate the Neogrammarian principle of gradual sound change over time, but they do adhere to the Neogrammarian idea that change is reflected in all applicable environments. Consequently, they violate Wang's classification as participants involved in lexical diffusion.

That words described as undergoing this type of change, type (1), should be systematically studied and typed seems to point to the ascending influence of the study of language variation within the inner circles of historical linguistics.

Its influence was negligible for many years. The Neogrammarians and the structuralists wanted nothing to do with dialect geography. They exclaimed that one could not do empirical studies on the observation of sound change. This attitude can be found in Hockett's *A Course in Modern Linguistics* (1958), an attitude Labov summarized with these words, "Sound change was too slow to be observed, and phonological change was too fast to be observed." (1981:273). Dialect geography was thus isolated from the general flow of linguistic research. With the advent of transforma-

tional grammar, dialect geography fared no better since Chomsky and the other theorists focused on rule formalisms and underlying competency. Sound change in the transformation grammar paradigm was described with the use of historical-generative rules that operated at the deep level. Language variation was neglected because of its association with the surface structure component.

The studies by William Labov in the early 1960's forced a reconsideration of language variation within historical linguistics. The phonological variable became a unit of study in theories on sound change, thus reversing the conception that sound change was unobservable. It is observable, provided one looks to the social factors that influence change, which linguists had rarely done until Labov's work.

Wang's efforts on recognizing the validity of lexical diffusion was a further step forward for language variation in theories of sound change. It seemed to verify Schuchardt's and Gilliéron's positions, and it gave more weight to conclusions one can draw from the step-like isoglosses on Wenker's dialect map (see Bynon 1977:178).

The assignment of variation by Janson to a descriptive scheme of sound change that also includes the Neogrammarian hypothesis is a further sign of this integration. After acknowledging this third type of sound change, Janson sets up a model to account for it, a model that takes into play speech perception in relation to speech production.

To illustrate his model, Janson treats the apical [r] to uvular [R] phenomenon, setting up a table with five stages to represent the shortest path for a type (1) change (1983:24):

Stage	Perception	Production
1	r	r
2	r ~ R	r
3	r ~ R	r ~ R
4	r ~ R	R
5	R	R

This model takes into account the stage of variation which must exist in a type (1) change. This is clearly represented in stage 3 where productive variation mirrors perceptual variation. But the two stages before and after stage 3 are also stages of variation. The model claims that before one can imitate variation, one must perceive it. It also claims that perceptual variation lingers after one has adopted the newer variant for his own speech. Thus the uvular [R], according to this model, is first perceived alongside the apical [r] in all relevant morphemes. It is then produced with its apical variant. Then it is expected to replace the [r] in production while yet sharing variability with it in perception. The final stage will represent the total replacement of [r] by [R] (thus giving the appearance of a standard Neogrammarian-type sound change since all relevant morphemes would have appeared to have undergone change simultaneously. (Here one sees an example of the limitations of working with idealized processes, which the Neogrammarians, the structuralists and the transformational grammarians all formulated in their efforts to explain sound change.))

If one has no reservations for the implementation of this model, then he can apply it to examples of language variation of type (1). Janson reclassifies Labov's observation of the re-introduction of /r/ in New York City speech to (1). One might accordingly set up the model for it in the following way:

Stage	Perception	Production
1	ϕ	ϕ
2	$\phi \sim (-r)$	ϕ
3	$\phi \sim (-r)$	$\phi \sim (-r)$
4	$\phi \sim (-r)$	$(-r)$
5	$(-r)$	$(-r)$

At stage 2 New York City residents perceived the new variant from outsiders moving in and from radio and television. Prestige was associated with this variant and it became attractive to incorporate it into one's own speech. At this point, stage 3, the variant became a phonological variable, and was subject to study under language variation. After a look at Labov's graphs (Bynon:207), I suspect that stage 4 had not yet been reached by most New Yorkers. Perhaps today the city can be claimed to be in stage 4. In order to determine this, it would be necessary to learn at what age level the $(-r)$ variable is still in variation with (ϕ) . The time at which stage 5 is reached cannot be predicted since sound change processes are inseparable from social movements.

If the model is to be successful it will need to be applied to other instances of language variation within a community. The Labovian-type studies are very suitable, not only in the United States, but in England as well. An example might be Trudgill's study on glottalized variants of /t/ in Norwich speech (Trudgill:1974).

Once proving the validity of the model on the established cases of type (1) sound change, one could then examine instances of stage 2 variation and, perhaps, by studying the social factors associated with the new variant, determine whether or not a stage 3 will crystallize. If language variation could be captured in its incipient stage, the study of its dynamics could be more closely watched and could therefore conceivably be better understood.

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