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23. Talking about Phonemics: Centralized Diphthongs in a Chicago-Area Idiolect

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o. It is well known that the diphthongs /ai/ and /au/ have marked positional variants in certain varieties of American English. Commonly, variants with a relatively central first element [ɐ~ə~ɜ~ʌ] are found before voiceless consonants, as in *twice* and *out;* such diphthongs will be called CENTRALIZED (abbreviated "CTRL") in the following discussion. In other positions there occur NONCENTRALIZED (abbreviated "nonCTRL") variants with [a ~ ɑ] as first element, as in *nine* and *town.*

This paper has two aims. First, data from my own speech are presented that show the diphthongs in a distribution which to my knowledge has not been reported elsewhere. Second, the question is raised whether it is appropriate to speak of these diphthongs as being phonemically distinct. Formulating the question in terms of appropriateness is intended to draw attention away from notions of absolute correctness and to focus on the usefulness of linguists talking with each other about phonemics in one

manner or another. No understanding of the term "phonemic" is presupposed.[1]

1.0 I am a WASP, born 1946 in Chicago. My first four years were spent in an inner suburb (Lincolnwood) before my family moved to an outer suburb (Arlington Heights), where I attended school. Lisbon, Illinois, and Frankfort, Indiana, are the birthplaces of my mother and father, respectively, but the latter spent a large part of his boyhood near Ithaca, New York. My pronunciation generally agrees with the findings of Pederson (1965) for Chicago speech.

1.1. Both [ɐɪ] and [aɪ] occur, the former typically before voiceless consonants and the latter elsewhere. Thus, *pipe, light, like, life, rice,* and *blithe* (with voiceless spirant, possibly because I learned the word in the title *Blithe Spirit*) are CTRL, while *buy, tribe, side, oblige, five, rise,* and *nine* are nonCTRL. Before tautosyllabic nasal plus consonant, centralization seems to depend on the voicing of the postnasal consonant since *pint* is CTRL but *kind, bind,* etc. are nonCTRL; cf. Avis 1972:249.

1.2. Posttonic intervocalic /t/ is voiced, so that *latter* and *ladder* are homophonous. The pairs *writer* ≠ *rider* and *title* ≠ *tidal,* however, are distinguished by CTRL versus nonCTRL, respectively.

1.3. *Ninth* and its base form *nine* are nonCTRL. Likewise, the plural forms *lives, knives,* and *wives* and their bases *life, knife,* and *wife* are CTRL, while *dives, hives,* and *thrives* are nonCTRL. Note that these forms contradict the statement of phonetic complementarity given in §1.1.

1.4. *Hire, tire, wire, fire, lyre, shire,* and *dire* are CTRL, while *higher, liar, shier, dyer* and *tier* 'one who dyes/ties' are nonCTRL; all the preceding forms are disyllabic. Furthermore, *wider* and *(out)sider* are nonCTRL, but *spider* and *cider,* as well as *fiber, hibernate, tiger, Geiger (counter), neither, iron, tyrant, hydrogen,* and *ivory* (disyllabic) are CTRL.

Thus, the diphthongs in the above forms are CTRL when followed by (syllabic or nonsyllabic) /r/ or a voiced consonant plus /r/ in the same morpheme but nonCTRL when a morpheme boundary intervenes; cf. Avis 1972:243. This rule also works for *pliers* (CTRL), which is not associated with the verb *ply* (nonCTRL).

1.5. *Briar* and *choir* are nonCTRL, however, which means that individual words must be listed as exceptions to the rule stated in §1.4; note the similar distribution of diphthongs reported by Swadesh (1947:145) for his variety of Chicago English.

The rule of §1.1 is broken by *nice* (nonCTRL), which does not rhyme with *ice* (CTRL), by *Idaho* (CTRL), and by certain relatively learned

words such as *tithe*, *lithe*, and *writhe* as well as *hymen* and *strident*, which are all CTRL. *Idle, Heidelberg*, and *ivy* are CTRL, while *bridle, bridal*, and *lively* are nonCTRL.

1.6. My speech has both [aʊ] and [ɐʊ], but the latter is extremely limited in its distribution, occurring only in *mouse, house* (noun) and its plural *houses, house* (verb) and its forms, and *ouch*; the other diphthong occurs elsewhere. *Mouse* and *house* rhyme with each other but not with *blouse, douse, grouse, louse,* or *souse* (all of which are nonCTRL); *housing* does not rhyme with *rousing*, nor does *ouch* with *couch*. The distribution here clearly is not parallel to that of the diphthongs discussed above; cf. Labov 1963:§3.

1.7. When beginning to learn German I was troubled by the pronunciation of words like *mein* and *Haus* and, producing alternative pronunciations, specifically asked the instructor whether they were to have CTRL or nonCTRL diphthongs. Since I had not yet studied phonetics or learned the phonemic distinction between German /fal/ 'case' and /faːl/ 'fallow', it seems reasonable to regard the problem as a case of overdifferentiation stemming from a phonemic distinction in my English idiolect.

2.0. Aside from the particular data in question, the appropriateness of calling a phonetic difference "phonemic" presupposes some consensus among linguists about the meaning of the term. It is well known that generative phonology and most of its successors reject "phonemic" and related theoretical terms altogether, but the differences in the use of these terms even among American structural linguists tend to be underestimated.

2.1. The data of §1.1 taken alone show the diphthongs in phonetically definable complementary distribution. Confronted with similar forms, Francis (1958:143, 159–60) postulates /ay/, /əy/, /aw/, /əw/ for *nine, twice, town,* and *out* using the Bloch-Trager-Smith analysis, although he assumes that the nuclei cannot all occur in the same phonetic environment. Thus, a linguist accepting this analysis may consider my diphthongs to be phonemically distinct already on the basis of the weak evidence in §1.1.

2.2. The pair *writer ≠ rider* of §1.2 shows a case of what Bloch (1941) calls PARTIAL OVERLAPPING, which allows one to make a phonemic analysis with a single diphthong by shifting the phonetic distinction of centralization to identically pronounced but phonemically different intervocalic stops. Harris (1951:70–71) in fact follows this course, while Swadesh (1947:145) rejects the solution as being artificial and instead postulates phonemically distinct diphthongs Likewise, Joos (1942:143) recognizes distinct diphthongs for one group of Toronto speakers who distinguish *writer* and *rider* by their diphthongs (thus retaining the vowels of the base forms) while pronouncing *betting* with the vowel of *bed* rather than *bet*.

These analyses differ in the emphasis they place on phonetic realism and distributional criteria.

2.3. The examples of §1.3, like those of §1.2, show morphologically complex forms which retain the diphthongs of their respective base forms. They cannot be treated as cases of partial overlapping, however, since the diphthong centralization is not attributable to any feature of the phonemic environment.

Kenyon (1950:§§332, 336) notes such plural forms as *knives* (CTRL) and explains the diphthong as an analogical extension but does not recognize a phonemic distinction. Kurath and McDavid (1961) also balk at introducing new phonemes even when the sounds clearly are not in complementary distribution.[2] Lowman (1936), however, takes just such an analogical plural form as evidence of a phonemic distinction.[3] The terminological unclarity here is apparent: while Kenyon, Kurath, and McDavid may require minimal pairs (this is not explicitly stated), Lowman does not and instead relies on distributional evidence.

My own position is closer to Lowman's. When I say that sounds are phonemically distinct I mean that there is a native speaker who produces the sounds consistently in different forms, that they sound different to him, and that the difference cannot be accounted for by their phonetic environments. Furthermore, the sounds cannot be part of rhymes (cf. §1.6 above). Such a phonemic distinction might in principle be maintained in the speech of only a single person. A similar view has been presented by Hockett (1955:§31). I prefer this or a similar use of the term "phonemic" because I believe it reflects important facts about language, but this view cannot be elaborated here.

2.4 The forms of §1.4 show the distribution of the diphthongs in relation to morpheme boundaries. Linguists who include grammatical criteria in phonemic analysis might wish to derive the diphthongs as subphonemic variants conditioned by their grammatical environments, but one can profitably reverse this and regard the distinct diphthongs as the overt

[2]"Contrary to the general rule of the distribution of the slow and fast allophones of /aʊ/, the fast variants [ɐʊ ~ əʊ] appear also in word-final position in parts of tidewater Virginia, as in *cow, plow;* furthermore, they are extended to the plural forms of these nouns, so that the positional distribution of the slow and fast allophones is no longer strictly complementary" (Kurath and McDavid 1961:21; cf. pp. 109ff.).

[3]Lowman describes an informant who normally has [əʊ] before voiceless sounds and [ɐʊ] otherwise, but who pronounces *houses* with the [ɐʊ] of *house;* he concludes (1936:123–24): "Although in the speech of her neighbors, əʊ and ɐʊ presumably are simply widely divergent members of the same phoneme, now in her speech the two sounds may either one of them stand before z in the capacity of distinguishing words, and hence the two sounds must be classified as two separate phonemes. It is an interesting example of how semantic associations can bring about the emergence of a new phoneme once sufficiently divergent members already exist." Lowman clearly is talking about POTENTIAL rather than actual minimal pairs.

phonemic signals of the morpheme boundaries. In the latter case these examples, like those of §1.3, are seen as the concern of morphophonemics as well as phonemics. Note that forms like *hire* and *higher* do in fact provide minimal pairs if one disregards grammatical environment.

2.5. The examples in §§1.5 and 1.6 demonstrate that the four diphthongs must be considered phonemically distinct in some sense unless one is prepared to accept a kind of "phonology" in which the same "phoneme" can be pronounced differently in the same phonetic—and even grammatical—environment, depending solely on the particular lexical item in which the phoneme occurs. Adherents of generative phonology would presumably resort to diacritic features after exhausting grammatical devices in order to avoid enlarging the basic stock of underlying phonological units. On a smaller scale Labov does essentially the same thing, however, when he speaks of nondistinctive centralization in an individual lexical item.[4]

3. The arrangement of data in §1 does not arise directly from any single understanding of phonemics but rather reflects progressively stronger grounds for assuming a phonemic distinction and reveals patterns that emerge from the analysis of subsets of the data at various levels. An argument evoking Sapir's psychological conception of the phoneme is presented in §1.7.

The discussion in §2 shows that some linguists may speak in terms of a phonemic difference in a marginal sense already on the basis of relatively weak evidence, while others deny phonemic status even in the face of much stronger arguments. My own view is that it is appropriate to consider the diphthongs phonemically distinct in my speech. Other analyses demonstrate such widely differing uses of the term "phonemic," however, that its communicative value is rather limited.

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[4]Labov (1963:§6) observes: "A few special words are given greater centralization than their phonetic form or prosodic position would usually account for. An example is *sliding*, meaning coasting on a small sled. It may be that confusion with an alternant form *sledding* is responsible, or that words which originate in childhood, and are seldom spelled, are more prone to centralization." He further notes (1972:109) that the diphthong of *sliding* "shows an extremely centralized form of [əⁱ], even for speakers who do not usually show this PHONETIC VARIANT" [my emphasis].

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24. The Mechanisms Underlying Rule Insertion

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When two consecutive phonological stages of a language, described in the standard generative framework, are compared, if a rule which newly appears at the later stage must apply before another rule which is older (i.e. already occurs in the earlier stage), the rule change involved is called rule insertion. In order to qualify for rule insertion, such rule change cannot, of course, involve an intermediate stage when the new rule actually applied after the older rule. Thus, when $X \rightarrow Y / Z\_$ is chronically followed by $W \rightarrow Z$ in environments including $\_X$, we have a case of rule insertion if, in the context of the latter change, the sequence WX changes into ZY without the intermediate stage ZX. The principal aim of the present paper is to demonstrate that the traditional mechanisms of language change such as sound change, leveling, and borrowing can account for the plausible instances of rule insertion. Certain problems relating to King's (1973) claims on the status of rule insertion will also be pointed out.