MONDAY, 18 JULY. AFTERNOON

SECOND SESSION FOR GENERAL LINGUISTICS AND PHONOLOGY

Chairman : Prof. N. VAN WIJK.

7. Prof. C. M. WISE (Bâton Rouge) : *Militarism and Pacifism Among Phonemes in American English.*

Phonemes in American English are surprisingly like the nations of the earth : some are militaristic, some are pacific ; some are satisfied with what they have, some insist on having colonies ; some complain of over-population and invade other phonemic territory, the occupants of which either fight back, or flee into the territory of still other phonemes, where they in turn become invaders ; some, usually separated from neighbors, if not by mountains or oceans, at least by considerable phonemic space, remain quietly at home — the Switzerlands and the Scandinavian countries of the phonemic family of nations.

Now this analogical way of regarding the migration of phonemes and the escaping of sounds from one phoneme to another is admittedly fanciful, even though convenient. One of its drawbacks is the difficulty of saying, when, for instance, *ten* tɛn, becomes pronounced *tin* tɪn, whether ɪ has invaded ɛ or whether ɛ has invaded ɪ . Probably any decision is arbitrary. For this discussion it will be considered that ɛ has invaded ɪ, on the ground that, whereas *ten* retains a spelling usually associated with ɛ, it has appropriated a pronunciation from the ɪ phoneme, and has thus encroached on ɪ territory. This way of looking at the matter has the further advantage of agreeing with the usual formula of sound change, e. g., ɛ > ɪ.

Considered thus arbitrarily, ɛ may be thought of as a very aggressive phoneme, its characteristic spellings having attacked its neighbors on every side, and appropriated pronunciations from ɪ, æ, and e (which in accented syllables in American English is almost invariably diphthongized to eɪ).

ɛ > ɪ

In sub-standard southern American English, the tendency of ɛ-spellings to appropriate the ɪ pronunciation is stronger than even in Anglo-Irish. Any ɛ-sound before m, n or ŋ is with great frequency pronounced ɪ. Thus *men* mɛn > mɪn, *sent* or *cent* or *scent* sɛnt > sɪnt, *many* mɛnɪ > mɪnɪ, *any* ɛnɪ > nɪ, *engine* ɛndʒən > ndʒən, *bend* bɛnd > bɪnd, *contempt* kəntɛmpt > kəntɪmpt, *Jenks* dzɛŋks > dzɪŋks, and so on through a very long list. *Get* gɛt > gɪt also ; but since it does not contain a nasal, and since it is, moreover, an isolated example, it must be considered in a category of its own. Further, it is not limited to southern American English, but is found in all English sub-standard dialects, American, British and colonial.

ɛ > eɪ

The question is sometimes raised as to why, in a shift like *them* ðɛm > ðɪm, the leap is from ɛ to ɪ rather than from ɛ to eɪ, since e is the nearest vowel above ɛ. The usual answer is that e is a tense vowel, while ɛ and ɪ are both lax vowels. In a sense, then, e is not the nearest vowel above, for ɪ is the nearest in the front lax series. Apparently, the likelihood of phonemic movement from lax to lax is greater than from lax to tense.

Nevertheless, there is a limited commerce between ɛ and eɪ. Sub-standard American dialects, particularly southern, show *edge* ɛdʒ > eɪdʒ, *leg* lɛg > leɪg, *keg* kɛg > keɪg, *beg* bɛg > beɪg, *egg* ɛg > eɪg, *head* hɛd > heɪd, *bed* bɛd > beɪd, *red* rɛd > reɪd, etc. There are not many of these words, and there seems no convenient way of identifying them by context, except, perhaps, to note that each is a monosyllable, containing the vowel ɛ followed by a voiced plosive or affricate.

ɛ > æ

The ɛ-spellings have thus far been observed to attack only higher phonemic areas. For the most part, they seem obsessed only by a *Drang nach oben.* However, sub-standard general American and mountain English furnish a few examples where ɛ > æ. Thus *keg* kɛg > kæg, *beg* bɛg > (in rare instances) bæg, etc. It will be noticed that in *keg* and *beg* the vowel shift may be either to eɪ or æ. In any of the regions of America, general American, southern or eastern, the single word yellow shows a sub-standard shift ; thus, jɛlo > jælər--jælə.

æ > ɛ

If ɛ-spellings are belligerent, attacking neighboring phonemes on all sides, there is no lack of counter attack upon ɛ itself ; every one of the tendencies previously recorded here seems to be accompanied by a compensatory reverse tendency. Over against the last one discussed, ɛ > æ, there is æ > ɛ. This shift shows in sub-standard pronunciations of various forms of *to have* in all the American English dialects. Thus, *have* hæv > hɛv, *has* hæz > hɛz, *had* hæd > hɛd. There is also *catch* kætʃ > kɛtʃ. The shift in these words is probably of the same origin as that

by which ɛ > ɪ in *hen* hɛn > hɪn. For in hɛn > hɪn, the vowel is doubtless raised because the tongue anticipates the necessity of rising to the n-position and moves too soon, while ɛ is still in the process of being pronounced. In hæd > hɛd, on the other hand, while there is the possibility that d may induce an anticipatory rise of the tongue, the change is probably complicated by, if not entirely caused by, conditions of unstressing and restressing, since the forms of *to have* are incessantly used as auxilliary verbs and are hence with great frequency placed in unstressed positions.

The single word marshmallow mɑ(r)ʃmælo > mɑ(r)ʃmɛlo in casual, informal speech in most parts of America, but this change is likely one of analogy, arising in the resemblance of *mallow* to *mellow*.

The change from ɑ to ɛ shows also in most of the standard forms of standard English, particularly that branch of the general American called Western Reserve speech (Ohio, Indiana, Michigan), in words where the vowel is followed by r: thus, *fair* fær > fɛr, *care* kær > kɛr, *air* ær > ɛr, etc. If we may assume that the r has something to do with the shift, producing an anticipatory rise of the tongue so early in the word as to affect the vowel, we must believe that the southern British vowel in this class of words must have been raised before the post-vocalic r was lost in southern British, since we find there *fare* fɛə, *air* ɛə, etc.

However, it is interesting to note that in southern British the æ-phoneme lies much higher than in American English, and hence much closer to ɛ. Consequently the æ > ɛ shift is much more common in southern England, and affects many words in which the vowel has never been followed by *r*. Thus, *man* mæn > mɛn, *thank* θæŋk > θɛŋk, *majesty* mædʒəstɪ > mɛdʒəstɪ, etc.

ɪ > ɛ

In sub-standard American English, particularly southern, the shift of *fen* fɛn > fɪn recorded *ante* has a vigorous compensatory accompaniment in the form of an opposite movement. The context is ɪ + nasal. Thus, *since* sɪnts > sɛnts, *interest* ɪntərəst > ɛntərəst, *principal* prɪnsəpəl > prɛnsəpəl, *been* bɪn > bɛn, and the Louisiana town of *Minden* mɪndən > mɛndən. In this case there is a strong possibility that many individuals use a sound approximately midway between ɪ and ɛ for both vowels, and that when it is used for ɛ as in *Ben* bɛn, it is so much too high that the word is heard as bɪn, whereas when it is used for ɪ in *bin* bɪn, it is so much too low that the word is heard as bɛn.

eɪ > ɛ

The e-phoneme makes a compensatory foray on the ɛ-territory, as if to retaliate for the *leg* lɛg > leɪg shift. Thus, *make* meɪk > mɛk, *take* teɪk > tɛk, *naked* neɪkɪd-əd > nɛkɪd-əd in sub-standard southern speech, and *afraid* əfreɪd > əfrɛd in all of the regional speech forms in America.

i > ɪ

American English is generally lax, as compared with the more crisp British English. Probably modern British English is more lax than earlier English. In both American and British, but particularly in American, standard or sub-standard, the tense i > the lax ɪ in context i + *r*. Thus *beer*, which, judging by various evidence such as the cognate German *Bier* bir, must have once been bir, is now bɪə-bɪr. Likewise, we now have *here* or *hear* hɪə-hɪr, *appear* əpɪə-əpɪr, *Lear* lɪə-lɪr, etc. In sub-standard American dialects, the principal vowel of *here* and of perhaps a few other words has undertaken a second marauding expedition after invading ɪ, and has descended into the territory of the next lax vowel, ɛ; thus, *here* hiə-hir > hɪə-hɪr > hɛə-hɛr — really, çɛə-çɛr. It is noteworthy that the American words keep the accent on the first element of the diphthong-like combination ɪə, whereas in southern British the accent has shifted instead to the second diphthongal element, producing *hear* hjə:, *years* jə:z, etc.

ɪ > æ, æ > ɪ, æ > eɪ

Occasionally a shift is accomplished by an unaccountably long leap. The Appalachian and Ozark Mountain dialects, for example, furnish a limited number of examples of ɪ + nasal going as far as æ. Thus, *thing* θɪŋ > θæŋ; conversely, æ leaps over the long distance to ɪ in the single word *can* kæn, which becomes kɪn in all sub-standard American speech. This again is probably largely an unstressing-restressing phenomenon. In sub-standard southern American, the single word *can't* kænt > kɪnt.

ɑ > ɔ, ɑ > a > æ

One of the most frequent and striking shifts occurs in the „deep South". Here words and accented syllables containing the spelling *ar* final or plus a consonant and not preceded by phonetic w, develop ɔ instead of the normal ɑ; thus, *car* kɑ: > kɔ:, *bard* bɑ:d > bɔ:d, *argue* ɑ:gju > ɔ:gju, *are* ɑ: > ɔ:, etc.,

through a long list. In New England, the same spelling shifts pronunciation, but instead of invading the phoneme above, it attacks the ones in front, viz., a and æ ; thus, *tart* tɑ:t becomes standard eastern tɑ:t and sub-standard tæ.t, *Harvard* hɑ:vəd > hɑ:vəd--hæ.vəd, *park* pɑ:k > pɑ:k--pæ:k, etc.

ɔ > ɔo, ɔ > ou

The ɔ-phoneme, assailed from below by ɑ in sub-standard southern, flees into the territory of o next above ; i. e., its spellings, perhaps crowded by the unwelcome *ar*-words, and uncomfortable in the presence of resulting homonyms like *card* kɔ:d—*cord* kɔ:d, *farm* fɔ:m—*form* fɔ:m, make a gesture of migration toward o, and develop ɔo instead of the normal ɔ. This shift occurs in words spelled with *au*, *aw*, and *al* ; thus *Maud* mɔd > mɔod, *hawk* hɔk > hɔok, *talk* tɔk > tɔok, *walk* wɔk > wɔok. This shift is observably not so complete as in London, where *all* ɔl > very nearly oul, *Salisbury Square* sɔlzbərɪ skwɛə > soulzbərɪ skwɛə, etc. But North Louisiana and some other southern areas produce a sub-standard pronunciation in a very limited number of words with the shift as complete as in England; thus, *on* ɔn > oun, *gone* gɔn > goun, *want* wɔnt > wount.

ʌ > ɛ, ʌ > ɪ

Another deep South sub-standard shift, representing a partial invasion of the ɪ-phoneme by spellings of the ɜ-phoneme, is the diphonization of ɜ: to ɜɪ in all accented syllables containing the same phonetic vowel as *bird*. The spellings may be *ear*, *er*, *ir*, *or*, or *ur* ; thus, *heard* hɜ:d > hɜɪd, *fern* fɜ:n > fɜm, *bird* bɜ:d > bɜɪd, *work* wɜ:k > wɜɪk, *burn* bɜ:n > bɜm. Sub-standard New York City speech (lower east side and Brooklyn) makes the same shift, sometimes increasing the change by using ɔɪ instead of ɜɪ ; thus, *bird* bɜ:d may become bɔɪd. New Orleans goes to the same extreme on rare occasions, so that *burn* bɜ:n > bɔm. Both cities have a bizarre compensatory sub-standard pronunciation affecting words which normally have ɔɪ ; thus, *boil* bɔɪl > bɜɪl, *joint* dʒɔmt > dʒɜɪnt, etc.

The low back-central ʌ-phoneme is very stable in American English. That is, its spellings remain in ʌ-territory, with little inclination to wander elsewhere. In this regard, the American ʌ is quite in contrast to the British ʌ, which is so much lower and farther back that it is easily confused with ɑ — as it is indeed so pronounced by many foreigners who learn English in England or from British teachers. The American ʌ is only a little lower and farther back than ə, which, except in respect to its greater

duration, it resembles considerably. In the limited number of words where ʌ-spellings wander into other phonemic areas, the American shift is to ɛ or ɪ. Thus, *such* sʌtʃ > sɛtʃ-sɪtʃ, *just* dʒʌst > dʒɛst-dʒɪst. These are probably the only words representative of this sound change.

There are many more such phonemic encroachments in American English. Some represent confused shuttling back and forth between sounds, as in the uncertain words spelled with *oo*, like *hoof*, *room*, *coop*, where either u or ʊ may prevail for a time, disregarding the probably historical u.

And *en passant*, consonant shifts abound too : *vide* the case of American dark l, which, as in the London Cockney change from *milk* mɪlk to mɪok, is confused with o, and produces, e. g., baby-talk pəteɪdəl for *potato* poteɪto, even as Latin *falcone* faĭkonɛ gave rise to French *faúcon* fokõ ; or note that t > d ; thus, *notice* noutəs-ɪs > noudəs-ɪs.

Attention has been called to the difficulty of saying which is the aggressor in the battle of phonemes. Perhaps, after all, there is no aggressor and no battle. Perhaps we have, instead, only fugitives—fugitive spellings like *tender* and *wench* concealing themselves in the company of *tinder* and *winch*, or fugitive sounds like ɔ escaping from the customary *a*-, *aw*-, and *o*-spellings and hiding among *ar*-spellings. Obviously, any such manner of viewing the problem is only a figurative one, but it has appreciable values in vividness and clarity.

8. Prof. Viggo Brøndal (Copenhagen) : *The variable Nature of Umlaut.*

Mr. Chairmain, Ladies and Gentlemen,

In view of this Congress I have written some pages on Umlaut-problems considered from the stand-point of phonology. In the short time at my disposel I shall however not be able to insist on more than a few points, and I must renounce on most of the details.

It is a well-known fact that in German the plural of *Kuh*, „a cow" is *Kühe*, of *Fuss* „a foot", *Füsse*, and that the comparative and superlative forms of *alt* „old" are *älter* and *ältest*. Just in the same way the adjective *höflich* is derived from *Hof*, the „abstract" substantive *Glätte* from *glatt* and the verb *kälbern* — a dialect-form of *kalbern* — from *Kalb*.

This change of the principal or stem-vowel — evidently due to a prepalatal element in the following part of the word — has been called Umlaut by German Grammarians since the days of Klopstock and Grimm. Analogous phenomena are found