MONDAY, 18 JULY. AFTERNOON
SECOND SESSION FOR GENERAL LINGUISTICS AND PHONOLOGY

Chairman : Prof. N. van Wijk.


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 Switzerland 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 ten, becomes pronounced tin tim, whether has invaded e or whether e has invaded i. Probably any decision is arbitrary. For this discussion it will be considered that e has invaded i, on the ground that, whereas ten retains a spelling usually associated with s, it has appropriated a pronunciation from the i phoneme, and has thus encroached on i territory. This way of looking at the matter has the further advantage of agreeing with the usual formula of sound change, e.g., e > i.

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

\[ e \rightarrow i \]

In sub-standard southern American English, the tendency of s-spellings to appropriate the i pronunciation is stronger than even in Anglo-Irish. Any s-sound before m, n or j is with great frequency pronounced i. Thus men *men > min*, sent or cent or scent *sent > sent*, many men *men > min*, any en *en > in*, engine *endge > endgen, bend *bend > bend*, contempt *kempt > kempt*, Jenks *dezks > dezks*, and so on through a very long list. Get *get > gi 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.

\[ \varepsilon \rightarrow \text{er} \]

The question is sometimes raised as to why, in a shift like them *dem > dim*, the leap is from e to i rather than from e to er, since e is the nearest vowel above e. The usual answer is that e is a tense vowel, while r and i are both lax vowels. In a sense, then, e is not the nearest vowel above, for i 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 e and er. Sub-standard American dialects, particularly southern, show edge *edge > endge*, leg *leg > leg*, keg *keg > kerg*, beg *beg > beg*, egg *egg > egg*, head *head > head*, bed *bed > bed*, red *red > red*, 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 e followed by a voiced plosive or affricate.

\[ \varepsilon \rightarrow \varnothing \]

The e-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 e > er. Thus keg *keg > kerg*, beg *beg > beg* (in rare instances) bagg etc. It will be noticed that in kerg and beg the vowel shift may be either to er or to a. In any of the regions of America, general American, southern or eastern, the single word yellow shows a sub-standard shift; thus jelo *jelo > jælo–jælo*.

\[ \varnothing \rightarrow \varepsilon \]

If e-spellings are belligerent, attacking neighboring phonemes on all sides, there is no lack of counter attack upon e itself; every one of the tendencies previously recorded here seems to be accompanied by a compensatory reverse tendency. Over against the last one discussed, e > a, there is a > a. This shift shows in sub-standard pronunciations of various forms of to have in all the American English dialects. Thus, hav *how > how*, has *has > hæz*, had *hæd > hæd*. There is also catch *kætʃ > kætʃ*. The shift in these words is probably of the same origin as that
by which $i > r$ in *hen* $\rightarrow$ *hm*. For in *hen* $\rightarrow$ *hm*, the vowel is doubtless raised because the tongue anticipates the necessity of rising to the $n$-position and moves too soon, while $i$ is still in the process of being pronounced. In *haed* $\rightarrow$ *had*, 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 auxiliary verbs and are hence with great frequency placed in unstressed positions.

The single word *marshmallow* ma(r)jalao $\rightarrow$ ma(r)j'malo 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 $a$ to $e$ 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 $\rightarrow$ far, *care* kær $\rightarrow$ ksr, *air* aer $\rightarrow$ Er, 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* fær, *air* aer, etc.

However, it is interesting to note that in southern British the $\alpha$-phoneme lies much higher than in American English, and hence much closer to $e$. Consequently the $\alpha > e$ 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 $\rightarrow$ *men*, *thank* tænk $\rightarrow$ tæk, *majesty* mædʒɔsti $\rightarrow$ madʒɔsti, etc.

1 $> r$

In sub-standard American English, particularly southern, the shift of *fen* $\rightarrow$ *fm* recorded ante has a vigorous compensatory accompaniment in the form of an opposite movement. The context is $r$ $+$ nasal. Thus, *since* sents $\rightarrow$ *sentz*, *interest* $\rightarrow$ *entərz*, *principal* prənəsəpəl $\rightarrow$ prənəsəpəl, *been* bɛn $\rightarrow$ *ben*, and the Louisiana town of *Minden* mɪndən $\rightarrow$ *meɪdn*. In this case there is a strong possibility that many individuals use a sound approximately midway between $r$ and $e$ for both vowels, and that when it is used for $e$ as in *Ben* *ben*, it is so much too high that the word is heard as *bm*, whereas when it is used for $r$ in *bin* *bm*, it is so much too low that the word is heard as *bm*.

The $e$-phoneme makes a compensatory foray on the $e$-territory, as if to retaliate for the *leg* *leg* $\rightarrow$ *leg* shift. Thus, *make* meik $\rightarrow$ mek, *take* tæk $\rightarrow$ tek, *naked* nɛkd-ae $\rightarrow$ nɛkd-ae in sub-standard southern speech, and *afraid* æfrend $\rightarrow$ afrend in all of the regional speech forms in America.

i $> i$

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 $> \text{the lax } i$ in context $i + r$. Thus *beay*, which, judging by various evidence such as the cognate German *Bier* *bir*, must have once been *bir*, is now *bra*-*bir*. Likewise, we now have *here* or *hear* hɪə-*hr* $\rightarrow$ *heər* hɪə-*hr* $\rightarrow$ hɪə-*hr* $\rightarrow$ *heər* hɪə-*hr* $\rightarrow$ *heər* hɪə-*hr* $\rightarrow$ *heər* hɪə-*hr*. It is noteworthy that the American words keep the accent on the first element of the diphthong-like combination $\alpha$, whereas in southern British the accent has shifted instead to the second diphthongal element, producing *hear* hɪə-*hr*, *years* jə-*r* $\rightarrow$ jə-*r* $\rightarrow$ jə-*r*.

1 $> \alpha$, $\alpha > i$, $\alpha > \alpha$

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 $r$ nasal going as far as $\alpha$. Thus, *thing* *θɪŋ* $\rightarrow$ *θeŋ*; conversely, $e$ leaps over the long distance to $i$ in the single word *can* *kɛn*, which becomes *km* 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* *kɛnt* $\rightarrow$ *κɛnt*.

$a > o$, $a > a > \alpha$

One of the most frequent and striking shifts occurs in the "deep South." Here words and accented syllables containing the spelling ar $\alpha r$ final or plus a consonant and not preceded by phonetic $w$, develop $a$ instead of the normal $a$; thus, *car* kər $\rightarrow$ *kɔr*, *bard* bɑrd $\rightarrow$ *bɔrd*, *argue* ærɔgju $\rightarrow$ ærgju, *are* æ $\rightarrow$ æ, 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 e; thus, tart tart becomes standard eastern tart and sub-standard te:t, Harvard harved > harved—harved, park park > pair—pair, etc.

\[ \text{\( a > o, e > o u \)} \]

The o-phoneme, assailed from below by a in sub-standard southern, flees into the territory of \( \text{o} \) next above; i.e., its spellings, perhaps crowded by the unwelcome ar-words, and uncomfortable in the presence of resulting homonyms like card koxd—cord koxd, farm form—farm form, make a gesture of migration toward \( \text{o} \), and develop \( \text{o} \) instead of the normal \( \text{a} \). This shift occurs in words spelled with aw, aw, and al; thus, Mod mod > mood, hawk hak > hook, talk tok > took, walk wak > wook.

This shift is observably not so complete as in London, where all \( \text{o} \) very nearly oul, Salisbury Square solzban skwse > soulzben skwse, 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 on > 01m, gone gon > goun, want wont > wornt.

\[ \text{\( A > e, A > i \)} \]

Another deep South sub-standard shift, representing a partial invasion of the i-phoneme by spellings of the e-phoneme, is the diphonization of \( \text{i} \) to \( \text{ii} \) in all accented syllables containing the same phonetic vowel as bird. The spellings may be ear, er, ir, or, or ur; thus, heard hear > hear, fern fern > fern, bird bed > bed, work wak > wak, burn bwm > bsm. Sub-standard New York City speech (lower east side and Brooklyn) makes the same shift, sometimes increasing the change by using \( \text{i} \) instead of \( \text{e} \); thus, bird bed may become boat. New Orleans goes to the same extreme on rare occasions, so that burn bwm > bsm. Both cities have a bizarre compensatory sub-standard pronunciation affecting words which normally have \( \text{i} \); thus, boil boil > boat, joint dgram > dgram, etc.

The low back-central a-phoneme is very stable in American English. That is, its spellings remain in a-territory, with little inclination to wander elsewhere. In this regard, the American a is quite in contrast to the British a, which is so much lower and farther back that it is easily confused with a — as it is indeed so pronounced by many foreigners who learn English in England or from British teachers. The American a is only a little lower and farther back than \( \text{a} \), which, except in respect to its greater duration, it resembles considerably. In the limited number of words where a-spellings wander into other phonemic areas, the American shift is to \( \text{e} \) or \( \text{i} \). Thus, such satf > satf-satf, just djust > djust-djust. 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 \( \text{o} \), like howf, room, coop, where either \( \text{u} \) or \( \text{v} \) may prevail for a time, disregarding the probably historical \( \text{u} \).

And en passant, consonant shifts abound too: vide the case of American dark \( \text{d} \), which, as in the London Cockney change from milk milk to mook, is confused with \( \text{u} \), and produces, e.g., baby-talk petendal for potato potato, even as Latin falcone fajkone gave rise to French faicorne fokö; or note that t > \( \text{d} \); thus, notice noutes—rs > noudes—rs.

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 \( \text{a} \) 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.

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

Mr. Chairman, Ladies and Gentlemen,

In view of this Congress I have written some pages on Umlaut-problems considered from the standpoint of phonology. In the short time at my disposal 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 Kuh, of Fuss, "a foot", Fuss, and that the comparative and superlative forms of alt, "old" are älter and ältest. Just in the same way the adjective hülflich is derived from Hof, the "abstract" substantive Glatte from glatt and the verb kalbern — a dialect-form of kalbern — from Knab.

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 Klopfstock and Grimm. Analogous phenomena are found