

The films on sale may be compared to clocks on sale before the introduction of astronomical clocks, scrutinized for the investigation of longitude variations.

CONTINUATION OF GENERAL SESSION

Chairman: Mr J. R. FIRTH.

29. Dr GUY S. LOWMAN (Providence, U.S.A.): *The treatment of au in Virginia.*

Virginia is a South Atlantic State with an area of 42,000 square miles, situated between 36° 30' and 39° 30' North latitude and 75° 15' and 83° 40' West longitude. The southern boundary extends for 440 miles, and the maximum length from north to south is 200 miles. There are three chief geographical areas, a coastal plain or tidewater region, about 75 miles in width, a vast Piedmont plateau, and the section west of the Blue Ridge mountains, which extend from north-east to south-west.

The population is 2,500,000, of which 67.6 per cent. is rural. One-fourth are Negroes.

The first permanent English settlement in America was made at Jamestown in 1607. Within sixty years, practically all the readily accessible lands of the Tidewater had been occupied by settlers pushing north-westward up the four great estuaries, the James, the York, the Rappahannock, and the Potomac. The Piedmont was settled almost entirely, except in the south-west, by later expansion from Tidewater.

Tidewater Virginia never had a frontier in the same sense that later sections did. Gentlemen (in the seventeenth-century meaning of the word) and their servants sailed directly to their homes, bringing the necessary comforts of life with them. Until about 1690 labour was chiefly done by white bondservants, of the farm labourer class in England, who were sold for four to seven years' labour, before gaining their freedom. After 1690 Negro slaves were the chief labourers.

A well-marked class system, English in origin, survives in Tidewater Virginia. The distinction is between those who owned slaves prior to the Civil War, and the poor whites who had to do their own work.

I shall disregard Negro speech, because I have not studied it thoroughly. Negro speech in Virginia differs in stress, intonation and rhythm, but not markedly in phonetic characteristics, with the exception of a few elderly or isolated individuals.

In 1727, a few years before the Virginians had reached the mountains, northern settlers, chiefly from Pennsylvania, began pushing into the section west of the Blue Ridge.

The intrusive settlers were of German, Scotch-Irish and English Quaker stock for the most part. In the course of two centuries, they have been partially Virginianized.

In recording Virginian speech for the Linguistic Atlas of the United States and Canada, it became evident that the observation of the treatment of *au* is one of the most important means of distinguishing the Virginia dialects, one from another, and from the dialects of neighbouring states.

Seven different types of treatment of the *au* diphthong have been discovered. The boundary lines between the areas in which they occur can be surprisingly well defined. It should be remembered, however, that there really are no distinct speech boundaries, and that their apparent presence is due to the fact that the communities investigated were at least fifteen or twenty miles apart.

Type I. The most widespread, and generally considered the Virginian type. It is characteristic of the entire Piedmont section north of the James, and runs in a narrow strip south through Buckingham to Halifax County. In Tidewater it is characteristic of the Northern Neck peninsula, between the Rappahannock and the Potomac, of the section between the upper Rappahannock and the upper James, of the Norfolk-Newport News area in the extreme south-east, and of the eastern shore of the Chesapeake Bay.

There are two principal members of the phoneme. The diphthong *ʰəu* stands before voiceless sounds as in *house—hʰəus*, *out—ʰəut*, *south—sʰəuθ*. The diphthong *æu* or *æ·u* stands before voiced sounds and finally, as in *houses—hæuziz*, *crowd—kræud*, *cow—kæu*.

The symbol *ə* is employed in the diphthong *ʰəu* to indicate a very short sound. A fronting arrow is used to indicate a sound slightly further forward than central. In rapid speech the fronting would not be heard.

Type II. The Petersburg type is found in all that territory south of the James, which is east of Farmville and Clarksville, except in the Norfolk area. It is found in the old counties, James City and Charles City, and in the Peninsula between the York and the Rappahannock, around and below Tappahannock.

ʰəu is the principal member of the phoneme in all positions, as in *house—hʰəus*, *houses—hʰəuziz*, *crowd—krʰəud*, *cow—kʰəu*.

A subsidiary member *ʰæu* stands before *n* and *l* as in *down—dʰæun*, *owl—ʰæul*.

In the Rappahannock area the first element of the principal member is not fronted but is somewhat lowered, and the second element is practically cardinal. The principal member stands before *l* as in *ʰəu·l*, and the subsidiary member stands after as well as before *n* as in *now—næuʰ*, *down—dæuʰn*.

Type III has been found only in the speech of a single individual in western Prince Edward County not far from the boundary line of types I and II. It appears not to be characteristic of the region. The informant's speech appears at first to be type I. She says *thousand—θæuzn* and *cows—kæuz*, but in addition to saying *house—hʰəus* she regularly says *houses—hʰəuziz*. Although in the speech of her neighbours, *ʰəu* and *æu* 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.

Type IV is limited to the extreme northern tip of Loudoun County, a German settlement having close relations with similar people adjoining them in the State of Maryland.

^ʔa·u^v is used in all positions, a type of speech quite foreign to Virginia.

Type V is found in three distinct areas: (1) among the Quakers of Western Loudoun County and in the two northernmost counties west of the Blue Ridge; (2) in the Scotch-Irish settlement of Augusta, Rockbridge, Bath and Alleghany; (3) in the south-west Piedmont counties, Bedford, Campbell, Pittsylvania and Henry.

This type is like type I, except that the first principal member has lower tongue position əu, rather than ʔəu.

Type VI is found in the German settlements of Warren, Page, Shenandoah, Rockingham and north-west Highland counties. This area lies between the two northernmost counties west of the Blue Ridge and the Scotch-Irish counties, previously mentioned. This type is also found south of the Scotch-Irish communities in Botetourt, Roanoke and Floyd, and east of the Blue Ridge in the extreme south-west Piedmont counties, Franklin, Patrick.

The first principal member əu^ʔ stands before voiceless sounds. The second principal member ə·u stands before voiced sounds and in final position.

Type VII is found in the entire south-west mountain area of the State, lying west of the counties last mentioned.

ə·u stands in all positions.

It should be noted in connexion with types V, VI and VII that old-fashioned speakers west of the Blue Ridge frequently tend to substitute for əu a sound closer to əu.

The comparative uniformity of speech within a given area seems to indicate that the approximate boundaries between different areas have been established for generations. Type V appears to be the result of the mingling in early days of types IV, VI and VII on the one hand with type I on the other. Aristocratic influences and settlers spread from Eastern Virginia into the two northernmost counties west of the Blue Ridge. Whether the Scotch-Irish communities preserve original speech conditions, or were simply more open to Virginian influences than the Germans, it is difficult to say. The south-west Piedmont was settled both by people from west of the Blue Ridge and by people from the east.

Type VI survives in areas more resistant to or more remote from Virginian influences.

Type IV remains thoroughly un-Virginian.

Type VII also appears to be a survival of original northern speech, remote from Virginian influences. There were, however, many later North Carolina settlers in this region.

It is interesting that the political boundary between Virginia and

North Carolina on the south is not a speech boundary. North Carolinians, in general, employ type VII, except in the extreme east where type VI is found. However, the Virginian type of speech penetrates a very few miles south of the political boundary. People born in this section of North Carolina always say that they were born "on the line". Their speech, likewise, bears evidence that their cultural associations have been with Virginia.

An explanation of the difference between type I and type II, where practically all settlers are of seventeenth-century English stock, is a more difficult matter. One can assume that they result from the mixture of the dialects of various parts of seventeenth-century England.

Although the older counties, James City and Charles City, have been classified as belonging to type II, in reality they have certain special characteristics which make them appear ancestral to both. In slow or careful or emphatic speech a form ʔəu is likely to be substituted for the more rapid ʔəu. This variation does not exist in the section of type II on the Rappahannock which was settled about the middle of the seventeenth century or in the section south-west of the James which was occupied by gradual expansion from older settlements until about 1740 without many newcomers.

The portions of Tidewater which employ type I appear to be those which are rather remote from the early settlements on the James, and those which had many new settlers from England after 1660. These new settlers may have come from somewhat different parts of England, or the speech of England may have changed in two generations. These late seventeenth-century settlers were chiefly bondservants who were sold for four to seven years' labour, and thereafter given small holdings of their own. Although type I may have originated from people of a lower class, it is interesting to note that type I at the present time, perhaps on account of the growth of cities within its area, seems to be the most approved type of Virginia speech.

30. Dr A. N. TUCKER (London): *The function of voice quality in the Nilotic languages.*

The languages I wish to discuss here are the Nilotic languages in the sudd area of the Southern Sudan—Shilluk, Dinka and Nuer. These tribes live for the most part in the swamps south and east of the junction of the White Nile and Sobat rivers, and to the west along the Bahr el Ghazal and adjoining rivers.

The Nilotic languages have a very complicated vowel and diphthong system, and it has so far been impossible to determine the principal vowel phonemes, as other factors, like length, intonation and voice quality, contribute to confuse the issue and are difficult to eliminate. I have recorded the following vowels, which I shall illustrate with examples from Bor Dinka: