reproduction, the chief one being that the sound track can be reproduced immediately after recording, without requiring any previous developping.

The majority of the inconveniences encountered in photographic recording are avoided, for the film strip can be handled throughout in ordinary daylight. The sound track has very sharp definition, since there is no diffusion of light in the emulsion. Background noise is small, as the coating of the film is free of grain; and the recording of high frequencies is improved since the finite width of the light-slit required in photographic recording is absent. The transparency of the trace is greater since no photographic fogging is produced and the density of the coating has an optimal value from the outset.

On the other hand, many of the advantages of the sound film are retained since these are not associated with the method of recording but with the method of optical reproduction adopted. A few of these are: long playing time, very slight wear of the record and avoidance of the needle-changing required with the gramophone, absence of mechanical reaction upon the motordrive, a feature facilitating the maintenance of constant speed.

I hope to have succeded in giving you an impression of the Philips-Miller system of sound recording and that it may contribute to the further development of the phonetic science.

TUESDAY, 19 JULY. AFTERNOON

SESSION "PHONETICS AND BROADCASTING"

Chairman: Prof. MARCEL COHEN.

22. Prof. A. LLOYD JAMES (London): Phonetics and Broadcasting in Britain.

Broadcasting in Britain continues to present interesting problems in many fields of linguistic study, some of which fall outside the scope of a purely phonetic investigation if one restricts the term "phonetics" to the study of speech sounds. I claim, however, the right to interpret the term in my own way and to present to you what appear to me to be some of the most interesting problems in that branch of linguistic study which deals with the relation between written and spoken language. It has become abundantly clear in my mind that ordinary written English, which may satisfy all the accepted canons in grammar, syntax, vocabulary, sentence structure and style generally, is very often unsuitable for the purpose of reading

aloud at sight, or indeed for broadcasting at all. It looks as though our literary language is suffering from the effects of silent reading and is designed more with that end in view than with a view to being read aloud.

A news bulletin, written according to the traditions of newswriting, is given to an Announcer to read, perhaps without any time for rehearsal on his part. It may contain such a sentence as this:

"Another suggestion from the Magistrates' Association was that every road junction should have a sign to show which of the roads was the major one, and thus make clear to motorists who had to give way to the other."

The handling of a sentence of this kind is a difficult matter, and the editing of written material for reading offers a scope for typographical development. Consideration must be given to the particular need for a theory of punctuation based on sense groups.

Another point of interest, not strictly phonetic, lies in the differing nature of "context" in the two forms of language, written and spoken. Visual language is rich in its ability to provide context. The eye has before it a constant mass of print; it can range around, can anticipate, can recapitulate; it enables the brain to gather a whole background for the matter in hand. Now, it has been pointed out that in language, knowledge of context is a great factor in intelligibility. To know what a man is talking about, or going to talk about, is to go half way to understanding him. In ordinary conversation with people we can see, the eye again does much to establish context, and contributes to intelligibility. We see gestures, expressions and environment. But when the speaker is invisible, all context has to be established by audible means; and herein lies the danger. A man reading a script knows his context; he has written his script possibly; the very possession of a script gives him an immeasurable advantage over his listeners, and inevitably he reads as though his listeners have his script before their eyes. There are many differences between what is known as the good broadcaster and the bad one; having studied the matter from every angle over a period of fourteen years, I believe that the main difference is fundamentally linguistic. The good broadcaster writes — if he writes at all — a language that will stand reading aloud; and he carries his listeners with him, establishing his contexts — and there are all sorts of contexts, emotional as well as verbal — as he goes.

It is in this respect that I feel our linguistic education to be lacking; we have become a race of caterpillars devouring newsprint, wherever we see it, and we have left our language

too much in the hands of the printer. Technically he has fulfilled his task remarkably well; he has presented us with a visual broadcast language which attains a remarkably high degree of legibility combined with artistry; he has called to his aid science and art from psychology to metallurgy; he has studied the limitations of the sense organ upon which the success of his form of language depends — the eye. I could wish that those of us who are engaged in the study of spoken language would do likewise, for the English-speaking countries are sadly in need of a good spoken version of their language suitable for broadcasting.

What passes muster as Standard, Received, or Public School English can be, is, and has been, an effective implement in the mouths of those who know how to use it, how to exploit to the full all its abundant phonetic resources. But it can be, if I may change my metaphor, one of the most desolate, dreary and depressed areas in the whole realm of human speech, the shabby refuge of unemployed vowels and consonants, of ill-nourished rhythms and deformed intonations. That is what it is in danger of becoming unless relief is urgently provided. But whereas the early broadcasters of visual language — the printers — could look to the scholars and the Universities for guidance, those responsible for broadcasting aural language turn in vain to the hills, whence cometh no help.

The modern version of so-called Standard English as spoken by our young does not enjoy considerable prestige in the world; its phonetic changes are far in advance of those that have taken place in other dialects; it is, for that reason, particularly unsuited for broadcasting. I do my best to ensure that it shall not be used officially, but even the modified version that I can persuade the younger men to adopt is by no means acceptable everywhere. Britain is getting used to it, but the inhabitants of our Dominions are not of one mind; those in the outlying parts with a fondness for tradition, and an affection for what they call the "Old Country", rejoice in the sound of it. Those, on the other hand, who think differently, are very outspoken in their denunciation of a language that seems to them to be the reflection of a tired generation, out of touch with the stern realities of the world. These people will accept Scottish English, Irish English, Welsh English, Northern English, South Western English or American English; but they hold South Eastern English in scorn. The inferior social brands of South Eastern they call Cockney; the superior grades they condemn as effeminate, tired and effete. I could not possibly repeat in public some of the adjectives that have been applied to it. But I leave it to those whose province is the study of speech behaviour, whether from the individual or national point of view, to tell me why it is that a man who pays lip service to the -r sound in all positions should be regarded as more virile than one who does not. The "peace of the world" is one thing; when it is called the peace of the "warld" it becomes a grimmer proposition. I sometimes suspect that the national reputation for tenacity of purpose, and seriousness of outlook, enjoyed by Scotland is in no small measure due to their pronunciation of the -r sound — which is probably why Scotland clings to it.

But however much some of the Dominions resent British English, the reaction of Great Britain to certain overseas versions is no less marked; there is need for study and conference, and I hope soon to arrange for something on these lines. Since I last addressed the Congress there has been a development in the U. S. A. During my visit in 1936, under the auspices of the Rockefeller Foundation, I discussed with the principal American Broadcasting Corporations, the desirability of their seeking competent advice on linguistic matters; it is gratifying to report that Dr. Cabell Greet, of Barnard College, Columbia University, has recently been asked to act as linguistic adviser for the Columbia Broadcasting System.

Another point of interest to phoneticians concerns intonation in broadcast speech. In my last paper to the Congress I showed how, in public worship, the normal intonations of language are suppressed, mainly, as it appeared to me, in order that the approach of the worshipper to the deity should be impersonal and ceremonious. The results in Britain are not popular.

Now the problem facing those responsible for the broadcasting of speech for general purposes seems to me to be this: what is broadcast, i. e. official matter, news, etc., must be presented either as a sober account of the events under review, or it will be presented as an account of the emotional reaction of such events upon the personality of the speaker. The linguistic behaviour suited to the one is obviously different from that of the other. Of particular interest is vocabulary, of which there is no time to speak now. But above all there is intonation, and this I find to be the most difficult of all details to teach, or indeed to analyse.

To produce a type of speech suitable for the impartial, objective narration of events, that will at the same time convey a sound and scholarly appreciation of the significance of these events, varying in mood according to the varying nature of the matter under review, but never dull, never pompous, never preaching, never exhibiting for one second the narrator's own personal view of the situation, requires a more delicate under-

standing of intonation patterns and their emotional functions than we now possess in our phonetic literature. I commend this problem to the younger generation of phoneticians, who must be to the broadcasters of speech of their generation what the scholars and the University presses were to the broadcasters of print — guides, philosophers and friends, rather than unsympathetic and superior critics.

I have finally to report to the Congress that since our last meeting we have published a booklet on the Pronunciation of Foreign Place Names (1). In the introduction to this booklet members will find discussed in detail the phonetic aspect of an interesting language problem. We have two booklets in preparation, one on foreign names (authors, musicians, etc.) and one on English family names, both containing the results of entirely fresh researches. A typical example of the British attitude to pronunciation of foreign names is contained in a review of the first of these booklets which appeared in the Manchester Guardian — "If the Announcer must talk French, gentleman".

## 23. Dr. J. A. W. Bennett (Oxford): Broadcasting in the

It is impossible to generalize about the position of broadcasting in the British Dominions. What is true, say, of Canada, where we have to reckon with the influence of American stations, is not true of South Africa, with its comparatively small English-speaking community in which controlled broadcasting has been established for little more than a year. And it is too early to speak dogmatically about what are only tendencies. None the less, certain generalizations can be made, and deserve a place, if only as a footnote, in the history of English as a world language.

In the Dominions, as elsewhere, one obvious, though indirect, result of the development of the radio has been to stimulate speech-consciousness. Criticism of broadcast speech, in particular of announcers' speech, is often misguided; it is not so widespread as in England; but, in the Dominions at least, it must be taken as a stage in the growth of culture. The broadcasting services are a focus, as well as a target, for criticism. The widespread demand made by local educational authorities in Canada for the improvement of broadcast speech suggests that this growth

of speech-consciousness may have positive results. An incidental outcome is the publication of lists of recommended pronunciations. These may provide valuable records both of the varieties of pronunciation of English within the Dominions - a subject which has hitherto received little or no attention - and of the current pronunciation of local place-names, which often cause doubt and confusion. In the matter of native place-names especially, much good work can be done by the broadcasting authorities. Some of these names have already been mangled hopelessly by Europeans, but there is a chance of saving most of them in an approximate pronunciation. A list of Canadian place-names is in preparation. A few Maori place-names are included in the New Zealand list of authorized pronunciations, but I note that in at least two cases the pronunciations recorded there are different from those given in the B. B. C. Handlist of Foreign Place-names; and pronunciations of names of places outside New Zealand often differ in the English and New Zealand lists. This is a case in which uniformity seems desirable and could be attained without undue controversy. This might be borne in mind when the other Dominions reach the stage of compiling such lists.

Criticism of broadcast speech in the Dominions takes two forms:

(1) There are criticisms of announcers' pronunciations of particular words. This type of criticism varies in quality: in Canada it is usually better informed than in New Zealand. Australians seem more apathetic, though centenary and centennial recently caused some heartburning. The evidence suggests that uninformed criticism does slowly decrease, and with it, we may hope, false ideas of "right" and "wrong" pronunciations.

(2) There are more general criticisms of the "accent" of the announcers. In all the Dominions these criticisms tend to be based on the assumption that any speech which does not conform to that used by the listener is wrong or affected. Educated English speech often falls, on this view, into the latter category. The best way of damning an Englishman in the Dominions is to say that he has an "Oxford accent". This unfortunate phrase is used even more vaguely abroad than at home : the speech-habits that colonials mean to censure when they use it are more often those of the public schools, and of "Brighter London", to use Professor Lloyd James's phrase, than those found within the University. Occasionally an English visitor to the Dominions may "talk fine" self-consciously, or an announcer may attempt to copy his B. B. C. prototype, with ludicrous results. But I suspect that protests against English speech are often really a sympton of colonial prejudice: having

<sup>(1)</sup> Broadcast English VI. B. B. C. Broadcasting House London W. 1.