

STATISTICAL AND SOCIAL INQUIRY SOCIETY OF IRELAND.

THE DEVELOPING POWER OF BROADCASTING.

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(Read on Thursday, 19th December, 1935)

Before the invention of printing, in the 15th century, the instruments by which minds were influenced and social changes made were teaching and talking. Print may not have lessened talk but, after its first halting century, it lessened the influence of the spoken word. The age of the pamphlet led to the age of the news sheet and so to the newspaper in the 19th century. Within our generation, the newspaper, influenced no doubt by the popularity of films, changed its appeal and the press-photographer became a necessary worker in every modern news office.

Broadcasting, the first method of one-way mass communication between mankind, attained a rapid popularity, far more rapid than printing, and after ten years it has become an important public influence, which no nation has ignored. Mr J M Keynes broadcast a talk from London on the importance of spending, rather than saving, in a period of economic depression. So great an effect was produced in the fall in Savings Certificates that Sir Josiah Stamp was called some days afterwards to broadcast a talk on the advisability of saving—even during a depression. The result in increased Savings Certificates was immediate. It is doubtful if such clear and quick results would have followed articles in any newspaper by these economists.

The Basis of its Appeal—This is not altogether due to the fact that only one broadcasting organisation exists in Great Britain, for in the United States of America, radio has a powerful influence on millions of minds. The existence of an unique organisation must give that organisation a more authoritative voice than that of other social influences which have *inter se* competitors.

Since one reads alone, but listens often to broadcasts in a family group, conversation and discussion follow from a lively, well-presented talk or discussion on a subject of wide public interest, and this helps also to increase the social influence of the wireless. Radio discussion groups are developing in many countries, and so we have two forces at work, the authoritative power of the broadcaster, and the family or group appeal.

There may be stated a third advantage of the broadcast over the written word. The ear is less critical to the mind than the eye. The ear is trained to the loose argument of talkers, the eye is restrained to the thought of thinkers. So the radio, reaching only the ear, finds a weak spot in man. For centuries we have had printed sentences before our eyes and we have developed a faculty of criticising what we read. There has been no similar development in aural criticism of thought as distinct from aural criticism of sound.

May I give yet another contributing factor to the influence of broadcasting—an advantage indeed, but not one to boast about? It is that the winged words do not give sufficient time to the listener to be thoughtfully critical. The thought about to be expressed cannot be heard in advance; as one's eye may scan in advance the sequence of print. Then, the thought expressed vanishes and another follows hot-foot, so that the mind is distracted from criticism. The serious thinker might be justified by this in still regarding radio as a toy or, at best, a new means of entertainment. The fault he could find with it is that it is the enemy of concentration.

There is a social compensation in the individual loss. Broadcasting may abolish University professors but it will not make scholars. It may teach, and by repetition, and variety of teachers, teach well, but it is no friend of thought. It is doubtful if it can even stimulate thought. It can stimulate discussion. It can cause inquiry. It can train the ear to musical appreciation. Above all and most dangerous, it can have, highly exaggerated, the power which a demagogue has. It can rouse; and scare, and quieten. Mr. Keynes and Sir Josiah Stamp could not make British listeners think about economics, but they could rouse them, scare them, reassure them.

The International Aspect—The United States of America was the first nation to perceive the force of broadcasting. In 1924 there were 2,400 broadcasting stations in the U.S.A. The American mind is the quickest and most short-sighted in the world. It "cottoned-on" to radio as a tremendous power in high salesmanship. In time it was followed by European states which decided to use radio to sell national ideas, sometimes in the guise of ideals, rather than commodities.

In Germany, a popular set was devised and subsidised, to enable German citizens to hear German, and only German, programmes. The licence fee was halved under the present Administration. The law was made that a wireless set, like a workman's tools, is above distraint. In Italy, Radio Rurale has provided listening sets for villages, schools and municipalities, and Fascist groups, and there is a fund of money to provide sets for poor villages. In Portugal, half of whose population is illiterate, where schools are scarce, 40,000 radio-teaching centres have been established, each under the direction of an overseer who is paid £6 a year; prizes are given for progress made; and the cost of the scheme is provided by a tax of 2½d a month on those who cannot read. It is as if we in Ireland were to tax those who cannot read the Irish language in order to subsidise the instrumentation of Irish music, or the writing of original Irish *belles lettres* and drama. I am not making a suggestion; but simply suggesting an analogy. In Great Britain, discussion groups are fostered, and broadcasts to schools are developed on distinctly national lines. From

Russia, there is what amounts to propaganda both for citizens and those outside the Soviet Republican Union.

As between one country and another, national expression in broadcasting is unobjectionable and quite natural, but there has been and is a competition in high-power stations, and more recently in short-wave stations, and in early days in the capture by wealthy countries of wave lengths on the band to the exclusion of the poorer nations. There is a race for radio power comparable to the armaments race. Behind this, there is a noticeable tendency to use the radio, openly or subtly according to national characteristics, to colonise vast masses of human minds. There is, I should add, a Broadcasting League of Nations, at Geneva, called the Union Internationale de Radio Diffusion. Its problems are only a little more difficult than those of its political counterpart.

Broadcasting can no longer be kept within the boundaries of a nation. Listeners recognise no boundaries. Gentlemen's agreements may minimise but cannot prevent the use of the new invention as a medium of propaganda.

Turning from this difficult aspect of broadcasting—but perhaps you will expect me to give my own view before turning away? It is that the proper function of national broadcasting authorities is to give national programmes to their listeners, to offer international broadcasts of such of their programmes as have special importance, particularly national significance, and to preserve, behind the construction of their programmes, an ideal of truth.

Selling propaganda is not the work of a broadcasting authority. Other countries are doing it. The wealthy countries and the colonising countries are leading the way. The so-called Great Powers are pressing their broadcasts on the smaller nations. The small nations, by recognising this evil, and co-operating *inter se* and exchanging programmes, can at least disassociate themselves from a competition in which they start as losers. The broadcaster is more free of international commitments than the statesman; and an alignment of broadcasting mechanical power on the basis of national wealth can be broken only by an alignment of the smaller nations through the cultural medium suggested.

I was about to turn to the problems of the people who are concerned with broadcasting. I shall, naturally, illustrate what I have to say by discussing Irish programmes.

The Domestic Position—Broadcasting policy in Saorstát Éireann is completely unfettered. The profit element is absent. There is no competition with privately-owned stations. There is one serious drawback, and the evidence is given in Table I.

TABLE I—NUMBER OF WIRELESS LICENCES IN EACH COUNTY IN SAORSTAT EIREANN ON 31ST JULY, 1935, AND PROPORTION FOR EACH COUNTY PER HEAD OF POPULATION

COUNTY	No. of Licences on July 31, 1935	Population 1926	Ratio
Dublin*	29,182	505,654	1 in 17
Carlow	901	34,476	1 in 38
Kildare	963	58,028	1 in 60
Kilkenny	808	70,990	1 in 88
Leix	960	51,540	1 in 53
Longford	610	39,847	1 in 65
Louth	2,029	62,739	1 in 31
Meath	1,213	62,969	1 in 52
Offaly	757	52,592	1 in 70
Westmeath	1,902	56,818	1 in 30
Wexford	1,690	95,848	1 in 57
Wicklow	1,410	57,591	1 in 41
LEINSTER	42,425	1,149,092	1 in 27
Cork†	8,110	365,747	1 in 45
Clare	736	95,064	1 in 129
Kerry	1,430	149,171	1 in 105
Limerick†	3,213	140,343	1 in 43
Tipperary	2,592	141,015	1 in 54
Waterford†	2,336	78,562	1 in 33
MUNSTER	18,417	969,902	1 in 52
Sligo	1,063	71,388	1 in 67
Galway	2,079	169,366	1 in 81
Leitrim	309	55,907	1 in 180
Mayo	1,457	172,690	1 in 118
Roscommon	906	83,556	1 in 92
CONNACHT	5,810	552,907	1 in 95
Cavan	612	82,452	1 in 134
Donegal	1,724	152,508	1 in 88
Monaghan	662	65,131	1 in 98
ULSTER	2,998	300,091	1 in 100
SAORSTAT EIREANN	69,650	2,971,992	1 in 43

* Including Co. Boro' and Dun Laoghaire Boro' † Including Co. Boro'

I have been tempted to make this a statistical paper and to compare wireless licences with counties in relation to the sizes of farms; and again in relation to electricity supply, but this is a paper designed for the Social rather than the Statistical section of the Statistical and Social Inquiry Society of Ireland.

As there is only one programme broadcast in Saorstát Eireann, it must be designed to please the numerous listeners in the cities and the smaller number in rural Ireland. "Designed to please" is, however, not the full aim, as if one were a costumier making a lady's frock. There is always, behind the intelligent construction of broadcast programmes, the sense of social responsibility. Does this mean, to please as people ought to be pleased, or as they want to be pleased? Who can take the responsibility of "ought"? It must be "want", with

a certain aim to make the want a want on what roughly might be called the side of the angels

Music.—Music occupies the largest part of all broadcast programmes.—

TABLE II—(FROM RETURNS SUPPLIED TO UNION INTERNATIONALE DE RADIODIFFUSION)

Great Britain	71 %	Austria	61 %	Czecho-Slovakia	56 %
Belgium	70 %	Germany	60 %	Italy	55 %
Holland	68 %	Hungary	60 %	Denmark	53 %
Yugo-Slavia	66 %	Poland	58 %	Norway	50 %
France	63 %	Switzerland	58 %	Sweden	45 %

The question, what kind of music should be played, has been answered differently in each country. France and Italy specialise in opera and operette. The greatest proportion of serious music is given by Germany and Austria. Denmark, Great Britain, Holland and Hungary give a greater proportion of light music than other European countries. Dance music, statistics show, is a small proportion of all programmes.

As there is a tendency in many countries to object to the amount of time given to dance music, it may be well to set out the figures—

TABLE III—PERCENTAGE OF PROGRAMME TIME GIVEN TO DANCE MUSIC (FROM RETURNS FURNISHED TO UNION INTERNATIONAL DE RADIODIFFUSION)

Great Britain	10 %	Poland	8 %	Austria	4 %
Denmark	10 %	Sweden	7 %	Hungary	4 %
Norway	9 %	France	7 %	Switzerland	4 %
Yugo-Slavia	9 %	Belgium	5 %	Italy	3 %
Germany	8 %	Czecho-Slovakia	5 %	Holland	3 %

In passing, it is worth mentioning that Holland's 3 per cent. of the year's broadcast programme is played in the months January to April and there is no dance music during the remainder of the year. Norway plays dance music from September to April but very little between April and September. Great Britain plays an even amount of dance music all the year round.

There seems to be a fairly general notion that broadcasting organisations should deliberately teach listeners to appreciate good music. Here, without considering drama, literature, the sciences and thought, there is a wide field for meditation and study. Teaching creates a hunger; and somehow, because of the urge within man to justify his living to the soul within him, it is universally accepted that teaching is desirable although it is human experience that hunger is distasteful. Education does not make a satisfied man, but an inquirer; and an inquirer, considering the vast experience untasted by him in all branches of art and science, must be constantly dissatisfied. Hence, education creates dissatisfaction and mental unrest. I am speaking of education in music, plays, books in general, science and, above all, original thought.

I wander with this introduction because of the difficulty in clarifying the position regarding music. In certain European countries, music is elevated higher than thought. Because tones disappear in space, and architecture and sculpture and painting and stained glass and carpets and tapestry and musical compositions are lasting, musical expression has always had an undue advantage. The created thing is purchased by capital, the expression of the composition of music is more perishable than strawberries and is purchased from revenue. Since, then, the demand is compulsorily greater for the perishable than for the permanent commodity, the brilliant interpreter—singer or player—is in great demand and a market is created for a mass of reasonably talented singers and players, some struck by the Divine spark, others laboriously taught, and all unaware of the economic basis of their sheltered trade.

There are many functions which a broadcasting organisation can perform better than any other institution. The raising of musical appreciation is one; but only one. It is important to hold the balance in life; and balance in broadcast fare is a problem beyond the capacity of an individual. To look too long on the red grape means becoming a drunkard. Radio programmes should not cater for those who have become musical drunkards. If other nations drink excessively of heavy music, there is no logic in expecting us to fashion our minds exactly after theirs. They have their beverages, we ours.

I have already suggested three divisions of music—appreciation, which is open to all; expression, and composition.

The beginning of the third depends on the first; and the second is the link, depending also on the first. In other words, the market demand is the first requisite. The particular type of demand will bring forth the supply. As the standard of musical appreciation is raised, the standard of musical expression will be raised; but the problem is composition.

After what this generation has passed through, it is not easy to put the past in its proper perspective. It was such an important past that it is almost too much, for national health, present to us. A slight reaction against tradition, assuming as we may that the tradition is in our bones, may be no bad thing. Merely to be traditional is not to be national, certainly not constructively national. This means that not only jigs and reels and hornpipes, played on a bad instrument after a few years of untaught or badly taught desultory playing, but also the works of composers, fantasias on Irish airs, with the Londonderry Air *ad nauseam*, are just not good enough. The saying, if hard, is justified by the intolerance of many who believe that if a tune they play, a song they sing, or a work they compose is in the Irish tradition, it is a form of national sacrilege to question its artistic value. The old is good, but it is not good to live entirely on the old. Irish broadcasting has an important function in stimulating an interest in all kinds of music.

Omitting the sponsored programme, which is an hour for part of the year and half an hour for the remainder (paid for by the Irish Hospitals Trust), the following analysis of the current programmes gives a general notion of the balance between music, talk, drama and the Irish and English languages.

The Irish time devoted to News and Talks is 21·8 per cent.

TABLE VI —PERCENTAGE OF PROGRAMME TIME DEVOTED TO NEWS AND TALKS^S

Sweden	30%	Switzerland .	25%	France	19·5%
Poland	29%	Italy	24%	Belgium . . .	18%
Czecho-Slovakia .	29%	Yugoslavia	24%	Denmark .. .	18%
Norway	28%	Ireland .. .	21·8%	Great Britain	16%
Germany .. .	27%	Hungary . . .	21%	Holland . . .	11·5%
Austria . . .	26%				

Regional Development —The studios at Dublin and Cork provide facilities for the local residents to receive auditions and to broadcast. Those living at a distance are handicapped. In order to search for local talent, it has been the practice to relay from local concert halls. Recently, with the additional purpose of obtaining broadcasts with distinctively local colour, steps were taken to establish informal County Committees to offer suggestions for programmes. It is an experiment. Committees are working in Galway, Clare, Westmeath, Leitrim and West Cork. The clergy and teachers are the driving forces in these Committees and the Connacht Committees were initiated by Professor Liam O' Buachalla, University College, Galway. It is early yet to pronounce on the results of the experiment. In some counties, such as Clare and Cork, what might be called cultural characteristics differ within the areas and the county is perhaps not the ideal unit for regional broadcasts. The scheme is being allowed, very informally, to find its way, and devolution from the centre of broadcasting is complete. It may be that two parts of two counties will eventually produce characteristic programmes as a unit. The system has not been tried, so far as I am aware, in any other country and it commends itself partly because it is so informal and unofficial, partly because it is opposed to centralisation, and mainly because it associates with the broadcasting organisation voluntary helpers who can disabuse the public of the notion that the preparation of our broadcasting programmes is a cold official business disassociated from the views and wishes of our employers, the licensees.

Each regional programme is prepared carefully, the Committees try to discover talent; the broadcasting organisation arranges microphone rehearsals; and this is a considerably less expensive means of broadcasting from outside Dublin and Cork than by the construction and maintenance of additional stations. It means that the Dublin Station travels to the districts of Ireland instead of having the broadcasters travel to Dublin. The fees payable to broadcasters are not attractive if travelling and subsistence expenses must be paid from them; and under the present developing system there is no excuse for local talent to remain hidden, except of course through shyness, which hides perhaps the best talent.

Bilingual Programmes —The regional broadcasts enable traditional singers, storytellers, native speakers of Irish to be heard broadcasting. The merit of this was marked in an excellent Ballyvourney programme on the 11th December, 1935. In general, it is not easy to get good broadcasts in Irish. Plays are few and mostly translations; variety is hard to find. Talks tend to discuss the Irish revival rather than to take it for granted and make all we can of it. The Gaelic League of Ireland has produced the first publication in Ireland dealing with Broadcasting. It is a sixpenny booklet, covering our requirements in music of all kinds, drama, sketches and discussions. I commend the

publication "An Gaedheal agus An Radio" to those who are interested in the development of the Irish programmes.

Educational Broadcasting.—After ten years of educational broadcasting, the B.B.C. still finds unsolved the problem of obtaining good reception for schools. In its recent report for 1934/35, the Central Council for School Broadcasting stated: "The problem now before the Central Council and all those concerned with the future of broadcasting in the schools is how to ensure that no more time or money shall be wasted through the installation of unsuitable apparatus and through the failure to maintain in good order even such sets as were initially suitable. The evidence lately considered by the Council as to the present state of reception has led them to the conclusion that the provision of a list of suitable apparatus is not in itself enough to check the further installation of indifferent sets. It is thus becoming clear that, if the experiment of school broadcasting is to proceed, the duty of securing good reception in individual schools must fall on the Local Educational Authorities and not on individual teachers."

In our children's programmes at 5.30 p.m. on five weekdays there are illustrated talks of general educational value. The problem is not to find programmes, for they can with little difficulty be devised; it is perhaps not to find time in school hours, it is chiefly the supply of suitable sets for schools.

Finance.—To judge from occasional comments on the finance of broadcasting, it would appear that an impression is current that the financial details are hidden from the public. The published Estimates for 1935/36 give the following (and, of course, more detailed) information:—

Estimated expenditure on Broadcasting	£49,713.
" receipts from "	...	£45,000.

Of the receipts, £35,000 is from Licence Fees and £10,000 from advertisements, so that Licensees contribute 70 per cent of the cost of broadcasting.

The amount estimated to be spent on daily programmes is £17,300 of which £15,000 is for the engagement of artistes and copyright and performing-right fees. The cost of the Station Orchestra is not included, coming under the expenditure heading, "Salaries, etc." The cost is £4,888, which brings the direct programme expenditure to about £22,000. Other station and engineering salaries absorb about £9,500. Plant and equipment and light and power is the only other considerable item of expenditure, viz. about £8,000 a year.

It will be seen that the amount of programme funds available is £15,000. This includes copyright fees. The average sum payable per week for programmes (apart from the standing payments to the Station Orchestra) is about £200. Omitting the orchestral time, sponsored programmes, gramophone recitals and news, the average number of hours to be paid for per week is about 19 and this would give a trifle over £10 per hour or £2 10s. for 15 minutes.

The management of fees, if apportioned on a fair basis of relative value, is not easy, and it is necessary to be skilful, when preparing programmes, so that good contributors can be paid a reasonably attractive fee. The Saorstát licence revenue is 1 per cent. of the B.B.C.'s gross revenue, but the B.B.C. surrenders a proportion of its revenue to the Treasury and the Saorstát licence revenue plus subventions is about 1.5 per cent. of the net B.B.C. licence revenue. In

addition, the B.B.C. receives a considerable net revenue from its publications. The actual programme fees paid by the two stations cannot be compared because the choice of talent is so much greater in Great Britain; but in comparison with revenue the Saorstát devotes a greater proportion to artistes in the programmes than does the B.B.C., which devotes a higher proportion to development and equipment and staffs.

Features of Interest—Apart from the county broadcasts, the most recent features of special interest in Irish programmes are the Saturday evening radio interview of a visiting personality; the change from official talks on agricultural matters to a weekly series of practical expositions addressed by farmers to farmers, the institution of compact series of discussions which commenced with the debates on Painting in Ireland, followed by Architecture in Ireland. The next part of this section of the programmes will be devoted to economic problems and distinguished members of this Society have consented to co-operate with the Broadcasting Service by taking part in these discussions. The Newcomers' Hour has two uses—apart from its primary entertainment value. It is, in fact, discovering new talent; and it attracts listeners to a new kind of parlour game, adjudicating in competition with the expert adjudicators who are engaged at this hour. If children are encouraged to mark their comments on the newcomers it will educate their ear and critical ability. I can say this from personal experience because I am a child in adjudicating on music and have complimented myself on my occasional agreements with the broadcaster-adjudicator. Contacts have been made with European stations and tributes are paid, as was done recently on the Yugo-Slav National Day, to other countries. Irish writers have been introduced microphonically to their readers, or potential readers. The Abbey Theatre, the Gate Theatre, the No. 1 Army Band are brought into the houses of many listeners who could not otherwise enjoy their performances. An Irish News feature called Sgathán na nGaedheal is contributed to by correspondents in Boston, Chicago, New York, the cities of Great Britain, Northern Ireland and all parts of Saorstát Éireann, Germañy, France and Rome.

Growth of Licences.

TABLE VII.—NO. OF LICENCES AT 31ST OCTOBER AND ANNUAL INCREASES.

31 Oct.	No of Licences	Increase (Decrease—)	Percentage Increase or Decrease
1926 ..	8,566	—	—
1927 .	25,967	17,401	203.0
1928 ..	25,952	—15	—
1929 ..	25,383	—569	—2.2
1930 ..	25,651	268	1.0
1931 ..	27,207	1,556	6.1
1932 ..	30,552	3,345	12.3
1933 .	39,038	8,486	27.8
1934 ..	56,756	17,718	45.4
1935 ..	73,339	16,583	29.2

Improvements in transmission are reflected in increased licence revenue. It does not seem to be true that most listeners purchase sets to hear the programmes of other countries. The spectacular increase in licences between 1933 and 1934 was due to the opening of the high-power station at Athlone. Licences are at present increasing at the rate of between 16,000 and 17,000 per year. Saturation point is still a distance away. Our licences are 2.5 per cent of population; those of Scotland, 11.0 per cent; of Wales, 11.0 per cent., of Northern Ireland, 5.0 per cent, and of England, 16 per cent. For England, Wales, Scotland and Northern Ireland combined, the proportion is 15 per cent.

In relation to approximate average income per head of population, our licences should be nearly 300,000, *i.e.*, 15 per cent of 65 per cent of population, but the more even spread of income in the Saorstát reduces the expenditure on non-necessities; the tariff on sets makes them more expensive; and the greater proportion of rural residents is a third factor to account for our considerably lower percentage of licences to population corrected for the difference in average national income.

DISCUSSION.

Proposing a vote of thanks, **Mr. O Buachalla** said that Dr Kiernan's paper had been interesting and important. He questioned, however, the statement that the critical faculty of the ear was less sound than that of the eye. Profound scholars and thinkers had been trained in the aural tradition. This point brought to mind the criticism that there were too many talks on the radio. No such complaint would be made in the Gaeltacht, where there could hardly be too much in the way of talks—in Irish naturally. To cater fully for the Gaeltacht would require a separate station, of which, he took it, there was no hope.

Dr Kiernan had reminded them that there were no national boundaries to broadcasting. Yet it was noticeable that during the period when radio had been developing so had intense nationalism, and it would seem, therefore, that the propaganda carried on by some countries over the radio had had little or no effect.

Broadcasting might prove to be of enormous benefit by providing for a continuance of educational facilities after school days had ended. Here the broadcasting authorities might step in and provide regular and systematic economic and technical instruction. It was regrettable that the high cost of wireless receivers, together with the difficulties of handling battery receivers, had placed radio beyond the reach of so many rural dwellers, to whom—if from the point of view of weather forecasts and market reports alone—it would be a particular boon.

The question of programmes had been admirably discussed by Dr Kiernan, who seemed, however, a little impatient of those who were stressing the importance of tradition, and expressed the view that to be traditional was not to be national. Yet, tradition and nationalism could not be divorced, and in a country like Ireland, which had been restrained from following the natural course of her cultural and economic development, the fostering of tradition, and the making of it a real influence, called for concentrated effort. Dr Kiernan had also dealt with what was being done in the way of Regional programmes. This was a development that would take time, owing to the difficulty of getting good local talent to go before the microphone, but he believed the result would, in the long run, prove to have been worth waiting for. From his experience of the programme sent out from Galway, most listeners were only too glad to receive a distinctively Irish programme.

Mr. Hussey, seconding the vote of thanks, said that he agreed with Mr O Buachalla that Dr Kiernan had dealt with his subject in such a way that little constructive criticism could be offered. He would like to make a plea for the spoken word, and for the modification of the spate of music that came across the air in favour of the spoken voice. Dr Kiernan was, perhaps, too anxious not to be guilty of instructing the listener. Professionally, he came in contact with large numbers of young men from rural areas, and it was startling to notice the complete ignorance among them of many subjects of ordinary interest to the town dweller. He hoped Dr. Kiernan and his colleagues would go ahead in direction of talks, and perhaps make their appeal rather to the higher brows than the lower.

He believed it was a mistake to attempt regular school instruction by means of broadcasting. Such broadcasts must either interrupt school instruction or detain the children after school hours. Furthermore, the broadcasts might be with subjects with which the teacher did not happen to be dealing, or that the children had not yet reached; while there was the difficulty that the number of subjects that could effectively be taught by broadcast was strictly limited.

Mr. T. J. Monaghan thanked the Statistical Society for their kind invitation to him, and said that he would like to add his meed of thanks for the interesting and instructive address they had listened to. The first broadcast of which he had been able to find any record occurred as far back as 1906—a very special and experimental transmission in America. It was not till 1920 that broadcasting really began to develop, and it began to develop then

because not only were the technical appliances there, but radio telegraphy had attracted to itself a large body of amateur listeners. Actually the first broadcasts were started by newspapers in England and America. The next people who came to see the potentialities of broadcasting were the manufacturers of electrical equipment, who started to build stations and send out programmes and sell receivers to the public to listen to them. It was only after this that the governments of the world began to realise that here they had something that—altogether apart from entertainment and business revenue—could influence large masses of the population and be of the utmost importance for propaganda. The importance of radio from the business angle could be illustrated by saying that in the United States of America it was assumed that seven million pounds was the revenue that accrued from it to the electricity supply undertakings. There was one very important fact in connection with the use of radio for propaganda, and that was that the listener could switch off a programme the moment he had had enough. It was the policy of making programmes so attractive that the listener would continue to listen that was behind the advertising programmes of the United States, and behind some of the most subtle propaganda sent out to the world over the radio to-day. On this question of the listener's reaction, an interesting development was the setting up of a central receiving station distributing programmes by wire to the individual listener, provided with an indicator which told how many people were actually listening.

In conclusion, he would like to say that he was sure Dr Kiernan had the best wishes of all of them in the responsible task he had undertaken.

Colonel O'Brien said that he would like to associate himself particularly with what Mr Monaghan had said about the vital fact that the listener could switch off the programme. The only person who could not switch off was the child in school.

In Ireland there was the lowest proportion of listeners per 1,000 of any country in the world. The average person who got a wireless set had not very much money, and yet a Government which proclaimed its anxiety to see national culture and the national language extended by means of broadcasting had put a duty of thirty-three and one-third *per cent* on wireless parts, and stultified the attempt to spread this national culture. He hoped Dr Kiernan would use his influence to enable broadcasting to be made more accessible to the people. The task of the broadcasting authorities was to find out what people wanted, because what they did not want could not be forced on them by broadcasting it.

Mr. Blythe said he would like to make a remark or two about the finances of broadcasting. In 1927-28 licence fees were not bringing in nearly enough to support the broadcasting station. In order to make up the deficit, and perhaps provide a little surplus for the Exchequer, he was responsible for sponsoring the tax on sets. When the matter came before the Dáil there was a little storm, and he felt obliged to make a promise that the entire proceeds of the duty would be devoted to extending and improving the broadcasting services. In any case, the tax was not binding on his successor, and the Customs receipts were not being devoted to the extension of the services. These receipts for several years were £30,000 or £40,000, and must now be much higher, something like £70,000 or £80,000.

There were many directions in which he hoped to see new efforts. For instance, in the case of Irish music. He valued tradition—but as the roots of a living and growing tree, not of a dry stump. It was good to hear many of the old Irish airs again and again, but they ought to be interspersed with new Irish music written by Irish composers of to-day. The writers of Irish music and Irish songs ought to be encouraged and rewarded—possibly even by the offer of prizes by the broadcasting authorities.

Professor Hackett said that Dr. Kiernan's paper struck a note of originality in its treatment of broadcasting. Some of the speakers had made a plea for more of the spoken word in the form of talks, for his part he would like to see the Irish station pay more attention to the technique of speech. It was rare to hear from an Irish station speech as pleasant to listen to as German from a German station or Italian from a station in Italy.

He was not sure that there ought to be more talks broadcast, for no real development of talks could take place unless something were done in the development of leaders for discussion groups. The broadcasting station should have more connection with its listeners, one of the most effective features of the English broadcasting system was the publication of books and pamphlets in connection with their talks. He agreed that it was important that something should be done towards cheapening the cost of wireless sets.

Professor Busted agreed with those who suggested that talks were important—more important in the programmes of Ireland than those of other countries, because controversy and discussion were more practised in Ireland. He could speak from experience when he said that the discussion of serious subjects was very interesting at least to country audiences. That applied also to talks given through the medium of Irish.

He would have liked Dr Kiernan to have said something as to how far the discussions broadcast were really free and uncensored, and how much right of censorship and criticism the authorities arrogated to themselves.

He thought we should err on the side of liberty. Another interesting point not mentioned by the lecturer was that of the problem of the collection of the revenues that should be paid in the form of licences. With the advance of technical improvements it might be supposed that in time aërials and other external evidence of the presence of a radio set, would disappear, and while he would not accuse the Irish taxpayer of being dishonest, if there was no external evidence for the authorities to judge from, it was not enough for the taxpayer not to be dishonest—he must be actively honest.

Mr. J. C. M. Eason putting the vote of thanks to the meeting said it was a tribute to Dr Kiernan and his position as Director of Broadcasting that so many people had been interested in his paper, and had put forward suggestions and comments in such a practical way.

Dr. Kiernan acknowledging the vote of thanks said that Professor Busted had asked what he meant by saying that the broadcasting policy of Saorstát Éireann was unfettered. He had meant that the broadcasting authorities were unfettered in so far as interference from the Government and the Department of Posts and Telegraphs was concerned. So far as he himself was concerned, his difficulty had been that when he had suggested a really controversial subject for debate, and brought two people along to discuss it, they generally ended by saying that they could not find any point on which they disagreed. And if it was difficult to get people to disagree before the microphone in English, it was absolutely impossible in the Irish language.

He had been anxious to get people to do anything to put Irish on the air in a modern way—in any way except by teaching it—but it was very hard to achieve this end. The authorities had, of course, to censor anything that would offend against decency, morality or religious feeling, but nothing censorable had come his way.

He thought Mr. O Buachalla and he were on the same lines with regard to tradition, but were looking at it from different points of view. He was entirely in sympathy with the tradition of the Irish past, Irish archæology, folklore and the language. But the present generation had got to be a tradition for those who would come after; we could not afford to be entirely dependent upon the past and not to be doing anything for ourselves. Mr Blythe had suggested that it was necessary to offer a prize for new composers, but it was doubtful whether really good creative work was to be got by offering a reward. It was very difficult to do successfully what Colonel O'Brien said was the task of the broadcasting authorities—that is, to find out what the public wanted.

Professor Hackett had asked for more attention to the technique of speech. Unfortunately for the broadcasting authorities voice production did not seem to be taught in Ireland at all. If it were it might be possible to get announcers who could speak properly and pitch the voice properly.

The matter of licence collection was outside his sphere and he would prefer not to say anything about it.