BROADCASTING AND TELEVISION SINCE 1900

by

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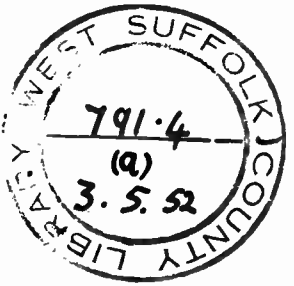

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To my friend
JOHN GRENFELL WILLIAMS
Head of Colonial Services
in the BBC, and the most
far-sighted of radio men

AUTHOR'S INTRODUCTION

THE HISTORY of broadcasting is short but tremendous. At the end of the first World War broadcasting did not even exist; by the beginning of the second it had covered the world. A new medium, a new habit, a new profession, and a new industry had sprung up, all based on the new power to transmit sounds of every kind over distances to people in their own homes. And already this new power of radio was being challenged by the newer power of television, which could appeal to the eye as well as to the ear.

Broadcasting made great strides during the war of 1939-1945, and television has made great strides since. Their power has ramified and it is still unfolding, affecting social habits, moral and æsthetic values, and the way people think about each other in every part of the world.

The whole story of broadcasting and television is too manifold for any one history, for it involves the fortunes of all the arts (notably music), education, politics, religion, social relations, and even economics, in all the many countries that have been exposed to the new force in the last thirty years. Books have been written on many of these aspects of radio and there are more yet to be written, but few have attempted to treat of the subject as a whole.

This book is mainly concerned with British broadcasting, which has had a profound influence on its home audience and has reached and affected listeners in many other parts of the world; and with British television, which is already foreshadowing the future although its direct effects are still confined to one portion of England. And Britain has chosen to entrust its broadcasting and television to one authority, so their history is largely that of the BBC.

So much has British broadcasting become identified with the British Broadcasting Corporation that the Corporation is often praised or blamed for all that broadcasting has done, much of which it would have done whoever had been in

charge. Still, it is true that the most distinctive thing about British broadcasting is the way it is organised, and the difference between its achievements and those of radio in countless other countries derives mainly from the fact that it is conducted by a chartered corporation, not directly under Government nor directly responsible to Parliament, but with no competitors, no shareholders, and no commercial interests to serve.

Everybody has his own opinion of the BBC, and I do not wish to disguise mine. I think the original Company achieved remarkable results during its four years of pioneering between 1922 and 1926, and the chartered Corporation that succeeded it rose to great heights in its testing-time between 1939 and 1945. Otherwise I think its record has been mixed, and its high claims have not always been borne out by results.

Many of my opinions, admittedly, were formed in the heat of actual work in broadcasting and television rather than in the calm atmosphere of historical research, but I do not think they will be found to be inconsistent with the facts.

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One point that may need explaining is my use of the word "propaganda" in connection with the overseas broadcasts of the BBC. It is often claimed that whereas Germans and Russians broadcast propaganda, Britain broadcasts only the truth, but this seems to me an over-simplification. In my view even the most truthful broadcasting becomes propaganda as soon as it sets out to influence listeners' thinking, attitudes, and actions, as well as merely to inform or entertain. It does not matter whether you call it "morale" broadcasting or "counter-propaganda"; it is still propaganda, even though it may be propaganda on the right side.

I know that those of us who worked in overseas broadcasting during the war were highly conscious of the propaganda effects of our work and the constant danger of making bad propaganda by broadcasting the wrong things, or the right things in the wrong way; and these considerations would not have arisen in ordinary peace-time broadcasting to a

home audience. If this applied to our broadcasts to Commonwealth countries and the United States, it applied even more strongly to broadcasts to Europe, where the enemy was in power.

So I have used the word "propaganda" to describe all radio activities designed mainly to propagate ideas or causes, whether the ideas and causes were right or wrong.

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With regard to the sources from which this history has been compiled, some of them are to be found in my own records of my time in the BBC. There is a great mass of published material, ranging from Government reports to books on how to write radio plays, from personal reminiscences by radio men to Unesco surveys of the international field. So far as Britain is concerned, the basic documents are the Charters and Licences of 1926, 1936, and 1946; the annual Report and Accounts of the BBC; and the reports of various Committees of Enquiry from the Sykes Committee of 1923 to the Beveridge Committee of 1949-1951.

Apart from these, the chief information is to be found in the BBC's own publications; the weekly *Radio Times* (from 1923), the annual Year Books or Hand Books (from 1928), and the *BBC Quarterly* (from 1946), as well as occasional publications devoted to such enterprises as broadcasts to schools, overseas broadcasting, and television. But of course these are apt to give a view of the BBC's achievement which is rather less than objective, as it comes from the BBC.

Of the many books on British broadcasting and television, those on which I have drawn are mostly mentioned in the text. In order of date they are as follows:

Broadcast over Britain, by J.C.W. Reith. Hodder and Stoughton, 1924. Essays on the possibilities and problems that faced the original British Broadcasting Company, by its Managing Director.

Televiewing, by Ernest H. Robinson. Selwyn and Blount, 1935. A comprehensive account of the pioneering work in many countries that led to the opening of the first high-definition television service in Britain in 1936.

Ariel and All His Quality, by R.S. Lambert, Gollancz, 1940.
A personal story of work in the BBC from 1927 to 1939, by the Editor of *The Listener*, including the story of the Lambert-Levita case.

The Power behind the Microphone, by P.P. Eckersley. Jonathan Cape, 1941.
The first Chief Engineer of the BBC describes pioneering days at Writtle, his work in planning the BBC's national coverage, Regional scheme, and other technical developments between 1923 and 1929, and the case for wire broadcasting.

Calling All Nations, by T.O. Beachcroft. BBC, 1942.
A vivid account of British overseas broadcasts before the war and in the early war years.

Sound and Fury, by Maurice Gorham. Percival Marshall, 1948.
Personal recollections of work in the BBC from 1926 to 1947, including the first two years of post-war television.

Into the Wind, by J.C.W. Reith. Hodder and Stoughton, 1949.
Lord Reith's autobiography, containing his account of the BBC's development under his direction from 1922 to 1938.

British Broadcasting : a Study in Monopoly, by R.H. Coase. London School of Economics and Longmans Green, 1950.
A detailed and documented account of the British system of broadcasting, also commercial broadcasts to Britain and wire broadcasting.

Adventure in Vision, by John Swift. Lehmann, 1950.
A comprehensive history of television, by a member of the BBC staff.

This—is London..., by Stuart Hibberd. Macdonald and Evans, 1950.
Extracts from the diary of the BBC's senior announcer covering most of the important broadcasts from 1924 to 1949.

(Acknowledgments are due to the authors and publishers for permission to quote from *Into the Wind* and *British Broadcasting: a Study in Monopoly*.)

Finally, I should like to thank the officers of the British Broadcasting Corporation, the Post Office, and the radio industry who have checked my facts without necessarily endorsing my conclusions; and the friends inside and outside the BBC who have helped me by pointing out errors and omissions and contributing from their special knowledge. Most of all, perhaps, Mr. R.H. Coase, who has given me the benefit of his detailed knowledge of the institutional history of British broadcasting, coupled with a scientific detachment and freedom from passionate advocacy which have often been absent from other writings on the subject, and may be somewhat lacking in this book too.

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CHAPTER ONE

THE BEGINNINGS

IN THE year 1900 there was no such thing as radio broadcasting. The idea that people then living would be able to sit at home and listen to speech and music from all parts of the world, brought to them through the air with no tangible link, was not even present in the minds of scientists. Nobody had any reason to think that the quarter-century would see the childhood, and the half-century the maturity, of a new medium of communication that would cover the inhabited world and become in many countries more powerful, exerting more pressure on the public mind and methods of thought, than pulpit or platform, the theatre or the printed word.

The rise of the cinema is spectacular enough, but it is a pedestrian story compared with the rise of radio. In 1900 the movies were already five years old, though I doubt whether any far-sighted thinkers saw the position they would achieve in the next fifty years. But broadcasting did not exist in even the most rudimentary form. The materials for it had not been invented. There was no possible clue to what was to come.

True, there was the germ of home entertainment. In some houses in London people subscribed to the theatrophone or the electrophone, and could listen over telephone wires to the proceedings in selected West End theatres so far as crude microphones could pick them up. But this involved the linking of the subscriber's home by line to a central exchange, and every new subscriber meant another line. There was no pointer here to the unique quality of radio broadcasting, which flows out into the air and can be received without any material link.

It is true too that "wireless" was already known in 1900. In the previous year the young Italian inventor Marconi had

spanned the English Channel with wireless telegraphy, and as early as 1901 he was to span the Atlantic from Poldhu in Cornwall to St. John's, Newfoundland. But wireless telegraphy was just what its name implied. It could transmit signals but not sounds, Morse code but not speech or music. It gave birth to a new system of communications, useful particularly for sending messages between ships at sea, or between ship and shore, where the electric cable could not be used, but there was nothing in it of interest to the ordinary home.

It is necessary to underline this distinction between "wireless" in its earliest forms and the idea of "broadcasting" that was so slow to emerge from it. In ordinary usage, "wireless" or "radio" covers any method of conveying electrical impulses over a distance through the air, instead of along wires, whatever its purpose. "Broadcasting" implies that one or other of these methods is used for bringing the public information, or entertainment, or both. This is no hard-and-fast distinction in technical terms, for broadcasting can make much use of wires and can select its public by choice of wavelength or direction, and after half a century of radio development the two activities frequently overlap. But it is important to remember that Marconi's exploits in the early years of the century brought no suggestion of broadcasting as we know it, though they formed one of the stages through which it came about.

These stages were three. Marconi's achievements in wireless telegraphy showed that electric signals could be conveyed over vast distances without the use of wires. Then wireless telephony showed that smaller distances could be covered not merely by signals but by speech and music. Finally it was realised that wireless telephony, travelling out in all directions from the transmitter, could be used not merely to convey messages to known receiving stations but to entertain the public in their own homes.

There were further developments, of course. By using the short waves and reflecting them from the ionosphere, wireless telephony increased its range until it could span the world. By concentrating its beam instead of scattering it, it turned its back on the original conception of "broadcasting"

and succeeded in conveying a particular message to a particular place. In some respects, as with the relay and redifusion systems, "wireless" reverted to the use of wires. Finally futher inventions gave sight to radio and struck at the foundations of the whole art and technique that had been built up on sound alone. Already by 1950 the pattern of world radio had become immensely complicated, and no doubt further complications are to come.

But looking back on the early stages, the pattern appears clearly, and Marconi's wireless telegraphy, essential as it was, is no more than a stepping-stone to what we knew as broadcasting in 1922.

Whereas the telephone wires of fifty years ago could transmit speech, though only for short distances, Marconi's long-distance wireless could transmit only Morse. No normal person would want to sit at home deciphering Morse except for business reasons. So although Marconi's signals radiated in all directions from his transmitter and anybody with the apparatus and the knowledge *could* have picked them up, he himself was concerned only with a specific receiving point, just as though he had been at one end of a telegraph wire. When he sent his messages from Poldhu, his only object was to get them to his own staff waiting at the receiving station at St. John's. This was the achievement that the business world wanted, and it was the only effective use to make of the Morse that was all he could transmit.

The new invention soon proved its commercial possibilities, and the growth of the Marconi companies is one of the financial romances of the period. Wireless was of course invaluable for communicating with ships at sea, and one of its most publicised achievements was the arrest of Crippen in 1910. After murdering his wife in London Crippen fled with his ex-secretary, Ethel Le Neve, who was disguised in boy's clothes, and took passage on the *Montrose* bound from Antwerp to Montreal. Before the days of wireless they would have had a clear start. But Scotland Yard sent out their descriptions by wireless and the captain of the *Montrose* reported that he had recognised the two. Chief Inspector Dew of Scotland Yard sailed on the faster *Laurentic*, and when the *Montrose* picked up her pilot in the St. Lawrence

River Dew came aboard and made his arrests. Newspaper readers thrilled to picture the two ships racing across the Atlantic, with the two fugitives all unaware of the fate in store for them, brought by the clicking of a telegraph key in the wireless cabin high over their heads.

The use of wireless telegraphy that came nearest to the idea of broadcasting was also one of its most spectacular — for sending SOS messages from ships at sea. A ship in distress was not aiming at any one known receiving station; it sent out its signals in all directions in the hope that the nearest ship would pick them up. The wireless SOS was brought into prominence by the *Titanic* disaster in 1912. Everybody in the civilised world knew that the great liner, sinking in mid-Atlantic, had sent out its desperate appeal by wireless, and that because the *Carpathia* picked it up 705 out of its cargo of more than 2,000 souls had been saved. Again "the wireless" had shown its power in a matter of life and death.

But of course the message that doomed Crippen and the message that brought help to the *Titanic* were still in Morse. The operators who received them read them from the wag of a needle or the click of a magnet. Wireless could communicate but it could not speak or sing. There was still no hint of the power of radio to bring news, music, entertainment of all kinds into the ordinary home. One more invention was needed for that.

That invention was ready to hand. The thermionic valve had in fact been invented some years earlier (1), but it was in 1912, the very year of the *Titanic* disaster, that it became available for practical use.

The thermionic valve plays a very large part in the technical history of radio; amongst other things it was ultimately to make television possible. But so far as this history is concerned its first and most striking effect was to give wireless its voice. From now on it was possible to transmit by radio speech, music, and all other sounds, provided the apparatus was good enough at both ends.

(1) Leading claimants for priority in its invention are Sir Ambrose Fleming in England and Lee de Forest in America, and their partisans are still arguing their claims, but as with most inventions, more than one scientist had a hand.

With wireless transmission stepping over the gulf between Morse and music, the stage was all set for broadcasting as we know it. But strange as it now seems, nobody thought of it. The new resource of wireless telephony was still viewed, as wireless telegraphy had been, as a way of communicating instantaneously between two points that could not be linked by wire. The 1914-1918 war resulted in a tremendous development of wireless telephony, but it did not enlarge this view. When the radio-telephone succeeded in making it possible for a man on the ground to speak to a man in an aeroplane, it had done all that anybody wanted it to do (1).

Whilst wireless telephony was still being used only for point-to-point communication, there was just one example of the use of wireless telegraphy for what must rank as the first genuine news broadcast, and this happened in Ireland during the Easter Rising of 1916. The Republicans had seized the General Post Office and numerous other buildings in Dublin, and one of their first actions was to establish a wireless station and a military post to protect it. The station was at the corner of O'Connell Street and Lower Abbey Street, and the transmitter was a 1½ kilowatt ship's set taken from a disused school of wireless telegraphy. (According to "War by the Irish", by John McCann, the commander of the post, Captain Tom Weafer, was killed by a sniper's bullet during the first attempt to erect an aerial on the roof.) Knowing that British war-time censorship would clamp down on any news of the rising, the Republicans used the shipping wavelength to announce that the Irish Republic had been proclaimed in Dublin. The broadcast was in fact picked up by ships at sea and relayed to America, where the papers printed it. So far as I can trace, this was the first time wire-

(1) P.P. Eckersley has described how he stood beside C.E. Prince in the Royal Flying Corps wireless training school at Brooklands and saw Prince speak into a microphone and an aeroplane overhead dip its wing in reply. This was about 1915, and it was believed to be the first time speech had ever been communicated to an aeroplane in flight. It is interesting to be reminded that in those days experimenters used to warm their valves with lighted matches to make them work. (*The Power Behind the Microphone.*)

less had been used not to reach a known receiving station nor to call help, but simply to convey news (1).

But this was still wireless telegraphy, sending its signals in Morse. True broadcasting, sending speech and music direct into people's homes, was still to come, and few people seem to have seen its possibilities lurking behind the new fact of wireless telephony. Some did. It was in 1916 that David Sarnoff in America advocated the idea of a broadcasting service under his own imaginative title of a Music Box in the home. Sarnoff was then on the commercial side of the American Marconi Company, and his memorandum to his Managing Director explaining his great idea bore no immediate fruit.

Even after 1918 broadcasting was slow to emerge from its chrysalis; unaccountably slow, as it seems to us now. The fact of broadcasting was there; wireless stations were radiating their signals in all directions for anybody with a wireless set to receive. But the idea that radio was a tool of commercial communications was firmly ingrained, and the conception of broadcasting as a means of entertainment, information, and culture was totally obscured.

That it emerged at all was probably due mainly to a technical limitation. Except for SOS messages from ships, the wireless operators did not want to "broadcast"; their messages were meant to get to one receiving station and the fact that they also went out in all directions from the transmitting station was a drawback rather than an advantage. Apart from the loss of efficiency, it robbed wireless telephony of any element of privacy that might have enabled it to compete with the telephone that carried its conversations over a wire.

Still, the fact that radio signals naturally radiated in all directions from the transmitting station had its commercial advantages, and from them broadcasting sprang.

It really began in England in 1920, when the Marconi

(1) When the post at the corner of Lower Abbey Street had to be abandoned the transmitter was taken to the Republican Headquarters in the General Post Office, and vanished when the building was burnt. The rebuilt Post Office is now the headquarters of Ireland's broadcasting organisation, Radio Eireann.

Company built an experimental station at Chelmsford, designed and run by Captain Round: his has claims to be considered the first name in the history of British broadcasting. Round wanted to know how great a distance his signals would cover, and how well they were received in different places and with different types of receiving set. For this purpose he welcomed reports from all directions, in Britain and beyond, instead of concentrating on one known receiving station as previous wireless operators had done. So from February 23, 1920, he began transmitting speech and music twice daily; the first broadcasting service of any kind, though its intentions were still far removed from anything that we call broadcasting now.

Of course he knew that there was an audience ready to listen and report. By 1920 "wireless" was a hobby, and plenty of young men had built themselves wireless sets on which they listened assiduously to anything they could pick out of the air. Their interest was technical—they enjoyed getting new stations rather than hearing what the stations said; and this attitude, it may be noted, survived amongst a large proportion of listeners long after broadcasting had become, in the minds of its custodians, a highly planned and conscious affair.

The first broadcasts were made to obtain technical data and heard only by the technically-minded, but reports of them aroused a good deal of interest among the non-technical, and this interest was notably exploited by the *Daily Mail*. True to the Northcliffe tradition of following up novelties and encouraging technical progress, the newspaper sponsored a broadcast from Chelmsford by Dame Nellie Melba, which was given on June 15, 1920. This must probably rank as the first real broadcast ever given in Europe; the first occasion, that is to say, on which the interest of what was heard outweighed the interest of hearing it by wireless.

But even at this stage there was no general belief in the possibilities of broadcasting. Neither the wireless manufacturers nor the Post Office, who controlled all wireless communications in the United Kingdom (1), saw radio as

(1) Under the Wireless Telegraphy Act of 1904, which was taken to include wireless telephony.

anything but a method of communicating between customers.

This new stunt of using radio to transmit concerts incurred official displeasure as being likely to interfere with other stations that were doing what the Post Office called "genuine work". So before the end of 1920 the broadcasts from Chelmsford were closed down, and wireless in Britain was brought back to its practical task of sending messages from A to B.

Broadcasting owed its resuscitation not to Press, Parliament, public, or the wireless industry, but to the amateurs; that ridiculed minority of "hams" who spent all their leisure hours operating their home-made sets. They talked and listened to each other, played gramophone records to each other (all in the name of technical experiment), and when they could they listened to the concerts broadcast from the Hague and the Eiffel Tower. (They were not yet able to listen to America, where broadcasting was growing fast, though that was to come surprisingly soon.) The amateurs missed the broadcasts from Chelmsford and loudly demanded some other professional transmissions with which to compare their own results. There were not many of them—some 4,000 by the beginning of 1921, of whom only 150 had transmitting as well as receiving licences—but they were endlessly enthusiastic, and they were nearly all organised in one or other of the wireless societies. They gave the Post Office no peace. The Post Office offered them special transmissions of wireless telegraphy but they demanded telephony : in other words music and speech.

At the end of 1921 the Post Office received a petition from 63 societies representing 3,300 amateurs demanding wireless telephony transmissions, "primarily to serve the scientific purpose of improving the receiving arrangements", but the spokesmen of the societies referred also to weather reports, news, and music, which were already being received from foreign wireless stations, in a way that showed clearly that what they wanted went beyond purely scientific tests. This time the Post Office yielded and authorised the Marconi Company to broadcast speech and music for the amateurs, to the extent of one programme of fifteen minutes' duration each week.

So, grudgingly, was broadcasting allowed to start in Britain. The first authorised broadcast was made from Writtle on February 14, 1922, and with Writtle the name of P.P. Eckersley enters the history of broadcasting, of which he was to be one of the most effective pioneers.

Eckersley was an engineer, but he did not confine his ideas about broadcasting to the technical side. Also he was a bit of a performer himself and took kindly to the microphone. Instead of "station identification" messages alternating with gramophone records, Eckersley broadcast songs, parodies, even a scene from a play. The programmes from Writtle were largely amateur fooling, which was much to the taste of the amateur radio fans, but they were the first transmissions in Britain that could fairly be called programmes at all.

Whilst the amateurs at Writtle diverted the amateurs with their home-made wireless sets, Big Business was discovering broadcasting. It had already discovered it in the United States. Broadcasting had begun there in the spring of 1920, much as it began here. Dr. Frank Conrad, of the Westinghouse Company, transmitted records and baseball scores from a barn in Pittsburgh, and a surprising number of amateurs were found to be listening. On November 2 the Westinghouse Company started America's first broadcasting station, KDKA Pittsburgh, which was to become famous throughout the world.

In America as here, serious users of radio complained of this invasion of the ether by anything so irrelevant as entertainment and news, but their protests had no effect. By July 1921 there were eighty stations to broadcast a ringside commentary on the Dempsey-Carpentier fight, although so few people had radio in their homes that crowds still gathered in public halls to listen on loudspeakers to the burial of the Unknown Soldier at Arlington in November the same year.

But American radio was forging ahead. It was already able to achieve stunts, in which it was always to excel; the first broadcast from an aeroplane was made in April 1922. In that year sales of radio sets and components totalled 60 million dollars—merely a fraction of what was to come, but a clear indication that here was a new market to be exploited. The radio industry was entering a boom period rather com-

parable to the television boom that was to follow a quarter of a century later, when the market for stations and sets rose to enormous proportions even before television had proved itself as a medium for selling goods and the big sponsors had begun to put big money into it.

The British radio manufacturers, more than one of whom had American affiliations, naturally wanted to create such a market here, and there could be no wide sale of radio sets until there were radio programmes to hear. So they began suggesting schemes for a broadcast service or applying for leave to start one themselves. Applications were made also by at least one newspaper, the *Daily Mail*, and by some of the large department stores. In the United States, which had set the example, the air was open to everybody, and although the immediate result was congestion of the wavelengths and something approaching chaos in the ether, the outcome was the system of radio that exists there today. Anybody can own a station; that is to say, anybody can apply to the Federal Communications Commission for a licence to operate one on a specified wavelength, site, and power. Stations are still owned by individuals, business firms, newspapers, universities, and municipalities, as well as radio manufacturers, and although the majority are affiliated to one of the four national networks, the number of stations that a network can own is restricted. There are smaller local and regional networks, and stations that run entirely on their own. The same system has been extended to television, with the same restriction on the number of stations that any one organisation can own.

The idea of a single broadcasting company with a monopoly of transmission was not the original basis of the negotiations for establishing a broadcasting service in Britain; at first the tendency was all the other way. But as the discussions went on it became clear that the Post Office hankered after a single company, chiefly in order to avoid the invidious task of deciding between the different claimants to station sites and wavelengths. What they wanted was for the manufacturers to get together and merge themselves in one body to which the Postmaster General could give a licence to broadcast. In the end they did, and the result was the BBC.

It is necessary to interpose a word here about the technical

factors that make it impossible to license an indefinite number of independent operators to run stations on any sites and any wavelengths they like. From the point of view of broadcasting, the air is not illimitable. Broadcasting shares it with other services—army and navy signals, commercial radio telephones, meteorological offices, and so on—and each country shares it with its neighbours within radio range.

In this respect radio differs from all previous methods of communication. The limitations were there and were known at the start. Imagine how different the development of railways would have been, a century earlier, if all possible railway lines had already been mapped at the time Stephenson built the first locomotive engine, and no more could be added without fear of collision. That may serve as a very rough parallel to the position in which broadcasting found itself when the boom started in 1922.

The air was limited. For effective broadcasting there was only a limited number of channels, and two stations working on the same channel within radio range of each other could make it impossible for anybody to listen satisfactorily to either. They had to be separated by so many kilocycles in the frequency band or else by so many miles in space, and the number of miles depended on the power of each station. It is worth noticing that one of the complications of radio is that the "interference range" of a station is much greater than its "service area". In other words, a station too far away for you to listen to it can still wreck your reception of your local station, and this happens most easily after nightfall, the time when most people want to listen to the radio.

The situation in 1922 was therefore that the Post Office could not license anybody to operate anywhere without parcelling out the wavelengths, and this might involve telling one applicant that he had been refused in favour of a rival. Hence its determination to get the most formidable applicants to form a single company and license that. But the general impression that limitation of wavelengths enforced monopoly is mistaken; it would have been quite possible to allot different wavelengths to different firms, if that had been desired. And the idea that a monopoly was desirable for the sake of programme standards was a later importation.

There is no evidence that it occurred to anybody during the tangled negotiations of 1922 (1).

But the result of the negotiations was a monopoly, which in different forms has endured and grown ever since. The original company entrusted with the monopoly of broadcasting was called the British Broadcasting Company, and it had a short but important career. It lasted for no more than four years, but that time saw the covering of the country with radio, the launching of almost every category of radio programme, the first skirmishes in many a battle with outside interests, the sudden rise of broadcasting to a position of national importance with the General Strike of 1926, and in short the growth of broadcasting from a hobby to a habit, from an enterprise to an institution, from a manufacturers' sideline to a national industry, The original Company saw Britain through the birth-pangs of the radio age.

The British Broadcasting Company started with the sole right to broadcast under licence from the Postmaster General, on condition that it established eight stations within a specified time and provided a regular service to the reasonable satisfaction of the PMG. British radio manufacturers alone could be members of the Company. Its authorised capital was £100,000, of which the bulk was subscribed initially by six big firms: British Thomson Houston, General Electric, Marconi, Metropolitan Vickers, Radio Communication, and Western Electric, each of which put up £10,000. But the remaining £40,000 was available in £1 shares for any other manufacturers, and the number of shareholders ultimately rose to 1,700, with the issued capital increased by over £11,000. Dividends were limited to 7½%.

The radio industry thus had the sole right to participate in the business of broadcasting; no more was heard of the applications from newspapers and stores. The interest of the industry in broadcasting was to sell receiving sets. There would be some contracts for building stations, of course, but several of the stations had already been built, and in any case

(1) These negotiations have been best summarised by R.H. Coase in his book *British Broadcasting : a Study in Monopoly*, which has been freely drawn upon in this chapter and elsewhere.

the radio station of the early '20's, with its power of 1,500 watts, or 1½ kilowatts, was not a very elaborate affair; quite unlike the great high-power stations of the later BBC, or the complex television stations of the present day. But the market for receiving sets was new and virtually untapped, and even the humble crystal set proved to be a very paying line.

The British Broadcasting Company began with a working capital of £60,000. For revenue it looked to two sources. Every listener had to pay 10s. a year for a receiving licence, issued by the Postmaster General, and half of this was to go to the BBC. In addition, only British-made sets would be licensed, sets had to bear a stamp testifying that they were "BBC type approved by Postmaster General", and the manufacturers paid royalties on an agreed scale on all sets and some components sold, and paid them direct to the BBC. It may be remarked here that with these financial resources the Company during its four years of life not only conducted the broadcasting service but acquired permanent assets at a cost of £334,778, and sufficient liquid assets to pay off the issued share capital.

So confused was the situation at the time that the British Broadcasting Company did not even have one definite starting date. Its Articles of Association were drafted in August 1922, were subsequently agreed by the Postmaster General, ratified by representatives of 200 manufacturing firms on October 18, and the Company was registered on December 15, but its licence to broadcast was not issued by the Postmaster General until January 18, 1923.

The country did not have to wait until then for broadcasting to begin. There were numerous "experimental" broadcasts going on from stations built by the radio manufacturers, and there was one incursion into the field by a newspaper. The *Daily Mail*, which had not forgotten the success of its Melba concert in 1920, had been refused a licence by the Postmaster General, so it rented an amateur station at The Hague in the hope of running a regular broadcasting service. Tom Clarke recalls in *My Northcliffe Diary* how its first broadcast was carried out on July 27, 1922, with all the characteristic "boosting" (as he puts it), and big crowds listened-in at wireless shops, big stores, and hotels.

But he adds that "it was not as big a success as we had hoped for", and it was not until the later era of commercial radio that broadcasts from foreign stations became a serious factor for British listeners.

The stations built by the radio manufacturers were giving regular broadcasts under "experimental" licences, and the new Company was allowed to take them over even before it was registered or licensed. The BBC's records are not altogether clear as to whether its official starting date was November 14 or November 15, 1922, but by the latter at least it was operating from three stations. The London station at Marconi House (2LO) had been run by the Marconi Company, the Birmingham station at Witton (5IT) by International Western Electric, and the Manchester Station, at Trafford Park (2ZY) by Metropolitan-Vickers. The first BBC printed programme on record is that for November 16. On Christmas Eve the first new station was opened: Newcastle, 5NO. But before that date J.C.W. Reith had become General Manager of the Company, and what may be called the official history of British broadcasting had begun.

That history has now run for twenty-eight years, but it has not since thrown up any figure rivalling in importance this Mr. Reith (1). It is in fact hard to find any other individual who has exercised so great an influence on broadcasting in any part of the world. Reith did not invent the radio monopoly that has become characteristic of this country; it was established before he came. But he rationalised it and perpetuated it. He was the chief architect of the concept of public-service, monopoly broadcasting, involving single control of all that goes on the air and all the means of getting it there; and he established his view that this control should be exercised by a body independent of shareholders, unconcerned with profits and untroubled by competition, drawing its money from the proceeds of taxation but under no direct Government control, which is Britain's contribution to the world's stock of ideas on broadcasting, and has been widely studied though less widely copied elsewhere.

(1) He became Sir John Reith in 1927, when the BBC received its first Charter, and Lord Reith in 1940, after he had left the BBC.

To say that Reith is the most important figure in the history of broadcasting is not to say that he was the greatest man, nor even that his ideas were necessarily the best. It is to judge him by results. Nobody else has achieved a memorial so lasting as the BBC. Other people worked in broadcasting before Reith had ever heard of it, notably P.P. Eckersley and the band of engineers who later followed him from Writtle to the BBC; some of these pioneers are still with the BBC, and their work has greatly influenced the development of British broadcasting. On the programme side too there are people whose career in positions of importance has been far longer than Reith's, and whose influence has been exerted in times when new problems arose that Reith never encountered; for instance the exceptional stresses of the second World War. In America, David Sarnoff saw the possibilities of broadcasting long before Reith did, and he has remained actively and powerfully concerned with it, constantly expanding its field of activity, long after Reith turned his back on broadcasting as a career.

But Sarnoff saw broadcasting as a service to the public to be developed by open competition on the American plan. He did not hope to be the only person to run broadcasting though no doubt he hoped to be the best. In many countries Governments saw the new medium as a new tool in their own bag, something to be used to promote the ends of government as well as the happiness of the people. Reith saw it as a public service to be administered by a conscientious custodian as free as possible from all outside control, and it is his doing that this theory was adopted in Britain in 1927, re-affirmed in 1937, and is still in force in the altered circumstances of today.

He himself was in charge of British broadcasting before and after the system was established; he saw it through the formative years and the years of consolidation during which it was made certain that new developments such as television and overseas broadcasting should fall into the scope of the monopoly; for sixteen years he stood in the public eye as a synonym of broadcasting, in a way that nobody could have done under any other system, competitive or Governmental. Broadcasting in this country has changed greatly since he

left it twelve years ago, partly through conscious policy on the part of his successors and partly through the pressure of events, but the changes are small compared with the continuity of the main plan. British broadcasting in all its aspects, domestic and foreign, aural and visual, is still run by a monopoly independent of shareholders, independent of profits, free from direct Government control, and that system was built by Reith more than by any other man.

CHAPTER TWO

BROADCASTING COMES TO BRITAIN

BETWEEN the end of 1922 and the end of 1926 broadcasting established itself in Britain. As more and more stations covered more parts of the country the listening habit spread, and as listening grew easier and programmes more ambitious, it widened its appeal. Those first years are studded with landmarks: new stations, greater coverage, higher power; new and better receiving sets, ever-mounting numbers of licence-holders; new ventures in programmes, new notabilities coming to the microphone. Broadcasting, growing fast in stature throughout those years, shot up again enormously when the General Strike left the country without newspapers and only the wireless could bring the news. The Royal Charter that ushered in a new regime at the end of 1926 recognised that broadcasting had turned into something totally dissimilar from the experiment of 1922.

It is amazing to look back at the progress made in the first four years. Scanning the list of achievements, it seems that the early Company opened up practically all the lines on which British broadcasting was to run. Neither "overseas" broadcasting nor television was yet practicable, though neither was very far away (1); but so far as sound broadcasting to the home audience is concerned, the main pattern of developments for the next twenty-five years was almost entirely sketched out by the end of 1926.

(1) Short-wave broadcasts began experimentally from Chelmsford in 1927, and occasional events like the Thanksgiving Service for the recovery of King George V were broadcast to the Empire, though the regular Empire Service from Daventry did not begin until 1932. John L. Baird's first demonstration of television took place in January 1926, and by 1928 transmitting equipment and home receivers were being made, and Baird himself had progressed to transatlantic television and colour television. The first television transmissions by the BBC were in September 1929.

This is all the more remarkable considering that the company was financed and supported by the manufacturers of wireless apparatus, not out of public-spirited enthusiasm nor an ideal of public service but in order to promote the sale of receiving sets. The Directors of the British Broadcasting Company might have insisted that every broadcast from every station should be of the widest possible appeal, so as to popularise listening without loss of time; they could have fostered the sale of expensive sets instead of making it easy for people everywhere to listen on the very simplest types, as the Company did; they could certainly have fought hard against being paid off at the end of the four years, when the experiment that they had financed had been proved a roaring success. They did wonderful business as it was, but in handling their fortuitous monopoly they certainly did not allow their business interests to militate against the interests of the service as seen by Mr. Reith.

The greatest factor in the spread of listening in the early days was the humble crystal set. The listeners whose numbers rose from thousands to millions in those four years did not have to buy the superhets and radiograms that came into fashion later. The crystal set was a very simple piece of apparatus, consisting of little more than the crystal itself, the "cat's-whisker" with which you tickled it to tune it in, and the headphones on which you listened, but it was good as well as being cheap. Long after the valve set became almost universal, there were some listeners who still clung to their crystal sets, and many more who lamented that the horn loudspeakers of the day did not rival their old crystal sets for purity of tone.

Listening on a crystal set was a different habit from listening as we were to know it later. The listener sat tethered by his headphones, noiseless himself and shut off from the noises of ordinary life. Unless you too had headphones you could not guess what he was listening to. If you spoke to him, he might hug his headphones tighter and wave you away, he might take them off with an air of resignation, saying "What do you want *now*?", or he might keep them on and tell you to speak louder, quite unconscious that he himself was speaking in a toneless roar. With a crystal

set you took your listening seriously and you could not impose it on anybody else. The later habit of "background listening", the practice of leaving the radio on like a dripping tap, the nuisance of the neighbour's loudspeaker braying distortedly through the window, the walls, and the floor —none of these existed in the crystal age.

The factor of cost had a great influence on the growth of the wireless habit. In the early years radio was emphatically not a rich man's toy. The licence cost ten shillings a year (and it was notorious that many people did not pay it); crystal sets and headphones could be bought for a few shillings. The manufacturers' advertisements of 1923-1924 announced crystal sets complete for 7/6d., headphones for 2/-, aerials for 1/8d. These were the cheapest possible, but for three or four pounds you could get an outfit good enough to make listening a pleasure in more and more parts of the country as the wireless stations spread.

The crystal set had no undisputed reign. From the earliest days schoolboys and wireless enthusiasts were buying endless components—valves, batteries, coils, loudspeaker units—and building them into wonderful assemblies plentifully festooned with wire. You could buy everything from a complete set to an amplifier guaranteed to work a loudspeaker from your crystal set. Advertised prices for valve sets in 1923 and 1924 ranged from about £10 to £50, plus in each case the BBC royalty, which was listed separately, as purchase tax is often listed now.

As has been remarked before, the British Broadcasting Company acted throughout on the principle of putting the interests of listeners with cheap sets (who of course paid the same licence fee as everybody else) before the direct interest of the manufacturers, whose profits came largely from the sale of expensive sets. As late as November 1926, when valve sets had come into general use, the BBC still reckoned its coverage in terms of crystal sets. An article by Mr. Reith in the *Radio Times* of November 5, 1926, records an increase of licences since December 1923 from 595,311 to 2,105,100, and the proportion of the population of Great Britain within crystal-set range of a station from 40.48 to 79.74.

Even the valve set did not always imply a loudspeaker;

many of the early sets were sold with headphones, though the enthusiast, once bitten, would usually progress to a primitive horn loudspeaker. The valve set with headphones seemed a quiet enough affair, unable to worry anybody who did not put the headphones on, but even these sets could make listening impossible for others. The bugbear of "oscillation" looms large in the radio picture of the twenties. By overworking what was called the "reaction" of his set in an endeavour to get better reception himself, a listener could set up hideous electrical whoops that wrecked his neighbours' listening. Amongst the wireless community a confirmed oscillator was as much of a menace as a neighbour who habitually let his chimney catch fire, with the added drawback that he was harder to trace.

Another radio menace, "loudspeaker nuisance", made its appearance as soon as there were loudspeakers to be misused. In its early days it was mostly confined to the home. Having bought or more often built their sets, the fanatics used them with no discretion but any amount of zeal. They combed the ether for noises of all descriptions. Crackles, crashes, whoops, and the wildest distortions would give place for an instant to pure music or arresting speech, but the enthusiast was unrelenting and the needle on his tuning-dial would creep on through them all. The real wireless fanatic wanted to hear everything and listen to nothing. His pride was in the number of stations he could get at loudspeaker strength; quantity and volume came before quality of sound or content. These enthusiasts, with their so-inappropriately-named "wireless" and their anxiety to demonstrate it to anybody who came within range, were a stock subject for jokes at the time, but their licence money and the royalties on their apparatus were steadily building up the income of the new BBC.

Schoolboys, technicians, old people who could not go out for their amusements, the hard-of-hearing who found they could listen better through the headphones than to a voice talking from across the room; such minorities formed the first nucleus of the listening audience, in the days when listening was invariably and more suitably called "listening-in". But very early on the radio became worthy of the

attention of a wider audience. Programme hours were short compared with those that people expect today, and a great many of the programmes were technically limited and artistically naive, but there was a constant breaking of boundaries, a determination to do things that had not yet been done, and often to do them long before the public demanded them, that testified to the energy and enthusiasm of the pioneers of the young BBC.

To begin with, they lost no time in spreading radio round the country. The three pre-BBC stations, London, Birmingham, and Manchester, were soon joined by Newcastle (opened on Christmas Eve 1922), and by October 1923 there were stations operating at Cardiff, Glasgow, Aberdeen, and Bournemouth. It is worth remembering that these stations were not merely giving wider range to the programmes from London. When they were opened it was still not possible to transmit radio programmes over the telephone lines without seriously impairing the quality, as anybody will understand who can remember how distorted even speech became in a long-distance trunk telephone call. The BBC had no right to build its own communications; to this day it has to hire from the Post Office all the lines linking its studios with the transmitting stations, and the lines it uses to bring broadcasts from outside the studio. Before long the Post Office had improved some of their lines to the point where the different stations could be coupled together to take one programme from any source, but in the first days even the news, which was received in London, had to be telephoned through to the provincial stations and taken down to be read by the announcer there.

In these earliest days the new stations depended for their programmes on the places they served. They used local talent and appealed to local interest and local pride. Even after the "simultaneous broadcast" system enabled first, news and then other programmes to be relayed from London the local stations kept their local character. It was only the later introduction of the Regional scheme that finally removed the single-town basis on which the goodwill of British broadcasting was largely built.

Rapid improvement in communications made it possible

not merely to "S.B." individual programme items but to set up relay stations which were mere distributors of programmes sent from elsewhere. The first of these was Sheffield, opened in November 1923, and during 1924 nine more of these low-power relay stations were opened in populous districts like Liverpool and Leeds where the main stations could not be well heard.

The last of the main stations was opened at Belfast in September 1924, and with nine main and ten relay stations, people in most parts of Great Britain and Northern Ireland were able to hear the BBC. So far the plan was only to provide each district with one programme, but the idea of "alternative programmes" had already taken shape. This was first made possible by the use of long-wave broadcasting, with which one station can cover far wider areas than it can with the medium waves on which broadcasting began. The first alternative programmes came from the long-wave station at Chelmsford, opened in July 1924, and the next year saw the birth of Daventry 5XX, which remained for nine years almost synonymous with the voice of Britain for many listeners in Europe as well as at home (1).

Also on the technical side, 1925 saw the first international conference to allocate wavelengths and power of stations, resulting in the Geneva Plan which came into effect during 1926. This first conference foreshadowed a long history of international negotiations in which the countries of Europe, and later of the world, bargained keenly for their share of the finite air. And 1926 brought the beginning of "programme recording", that useful device by which radio programmes can be saved from vanishing into thin air, and broadcast again as easily as the ordinary gramophone records

(1) Daventry had a power of 25 kilowatts, which was very ambitious for 1925 though it was soon to be exceeded. The twin stations at Brookmans Park that launched the Regional Scheme were of about 50 kw., and the power used in medium-wave broadcasting went steadily up. Station WLW in Cincinati, U.S.A., was the first in the world to use 100 kw. (or 100,000 watts, as they would say in America), but by 1938 the BBC was using 100 and 150 kw. for its medium-wave stations. During the war the station that the BBC built at Ottringham, in Yorkshire, had four transmitters each of 200 kw., which could be used in conjunction to give a power of 800 kw., the greatest yet known.

that have been such a boon to broadcasters since the very earliest days. At first occasional outstanding programmes were recorded by arrangement with the gramophone companies, but later the BBC began to acquire its own recording gear, and at the present day its Recorded Programmes Library can produce almost any important broadcast given since 1932.

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So by the end of 1926 Britain had at least 70% of its population within range of a local station on the cheapest and simplest sort of wireless set, and nearly 50% able to listen to Daventry as well, with programmes on the air for ten or eleven hours a day. By this time the wireless set had become an ordinary feature of the home. It was no longer exiled to an attic workshop or kept under a cloth on a work-bench in the living-room, to be used only when the man of the house or his schoolboy son came home. Instead of being proud of the tangle of wires, the projecting coils, the lofty horn of the loudspeaker, the multiplicity of controls, people began to want a set that was self-contained and could even be passed off as something else, like an emergency bed.

Sometimes these devices took a fantastic form. The Rose-Bowl Model Hornless Loud Speaker of 1926, which looked just like an ordinary rose-bowl and was guaranteed to perform equally well whether empty or filled with water and flowers, was an extreme instance. But the wireless was becoming a piece of household furniture rather than a collection of electronic equipment, and the manufacturers were turning out the first of the long line of handsomely finished consoles, Jacobean cabinets, oak chests, and converted spinets, which have served for twenty years to enable people to enjoy radio, and later television, without having any "unsightly machinery" around the house.

As for the programmes that issued from headphones and loudspeakers, the four years between the end of 1922 and the end of 1926 brought practically everything that could be conveyed by the ear alone. They were limited by technical resources and by the bans and restrictions of which more

will be said later, but they were ambitious and enterprising. People who had thought that broadcasting might be a good way of bringing music and news into the home were surprised by the number of other things that it contrived to bring, and at the conviction carried by sounds whose source could not be seen.

To list briefly some of the landmarks that flashed past like telegraph poles seen from an express train: before the end of 1922 came the first regular news bulletins, Children's Hour, orchestral concert, talk, and religious address (this last was given from London by the Rev. J.A. Mayo, Rector of Whitechapel). January 1923 brought the first broadcast from outside the studio—Act I of "The Magic Flute", performed by the British National Opera Company at Covent Garden, first of a long list of "outside broadcasts" that were finally to link the world by radio. The first outside broadcast from a theatre followed quickly, and the first broadcast of drama from a studio (except for Peter Eckersley's daring production of the balcony scene from "Cyrano de Bergerac" at Writtle early in 1922).

There were concerts of chamber music, military band concerts (in spite of the difficulty of cramming a military band with its instruments into the small studios of the time), and variety; the first variety programme was broadcast on January 30, 1923. February brought the first broadcast appeal, the first complete dance band programme (given by Marius B. Winter and his band), and the first wireless debate. This was on the subject "That Communism would be a danger to the good of the people", a subject apparently less sinister then than it is now, when the BBC has been criticised for allowing a broadcast by a Communist spokesman in the General Election of 1950.

Daily weather forecasts began in March, and in May Princess Alice, Duchess of Athlone, inaugurated a series of afternoon talks for women, which grew into a regular Women's Hour. By the beginning of 1924 every main station had its daily Woman's Hour or Woman's Corner, though unlike the Children's Hour these did not survive into the heyday of the BBC. It must have been thought impolitic to class women with children as a class apart, and there was a

long gap before a daily Woman's Hour was introduced as a novelty into the Light Programme in 1946, to become a tremendous success.

So it went on, every month bringing something new. The first symphony concert was broadcast in June 1923, the first Request Programme in July, the first Time Signal in August (though it was not until 1924 that the Greenwich pips were introduced, and they were not given official recognition by the Admiralty until 1925). The first SOS message, forerunner of thousands that brought the vicarious thrill of the Agony Column into listening homes, was broadcast in September, and in October there was the first relay of late dance music from the Savoy Hotel. This was to lead to the famous broadcasts by the Savoy Bands (the Savoy Orpheans and the Savoy Havana Band) which became practically synonymous with British broadcasting during the dancing craze of the late twenties, when young people all over the country rolled back the carpet and fox-trotted to the wireless, happy in the knowledge that they were sharing the music with the favoured few in London who could afford to put on evening dress and dance at the Savoy.

Before the end of 1923 there had been broadcasts of a complete opera from the studio ("Il Trovatore" from Birmingham), of the Armistice Day ceremony at the Cenotaph, of election results, and of Big Ben, whose strokes were to become the most familiar sound ever broadcast from Britain. The first continental relay came from Paris on December 30, giving early evidence of one of radio's greatest attributes —the power to bring its listeners whatever was best worth hearing, from any country in any part of the world.

1924 brought new landmarks. Broadcasts to schools, which were to become one of the most serious and constructive works of the BBC, began in April. Another and very different aspect of broadcasting was foreshadowed in the first broadcast by film stars in the same month. King George V was first heard by listeners when his speech at the opening of the Wembley Exhibition was broadcast on April 23. In May the song of the nightingale was first broadcast from a wood in Surrey, and for years this elusive vocalist, tempted to perform by Miss Beatrice Harrison and her cello, was one

of the regular attractions of the listening year. In October the Prime Minister, Ramsay MacDonald, broadcast the first election address; in November a "running commentary" was broadcast on the Lord Mayor's Show, presaging an endless series of commentaries that succeeded beyond belief in giving in sound a picture of what is meant for the eye.

Bernard Shaw read his short play "O'Flaherty V.C.", and most listeners heard America for the first time when a programme was picked up from KDKA Pittsburgh (on 100 metres) and rebroadcast by the BBC, after experiments that had been going on since the beginning of the year. The relay from Paris was followed by one from Brussels. The microphone went down a coal-mine to transmit a concert from 1,500 feet below ground—broadcasters were still rather inclined to believe that the best thing to broadcast was a concert wherever you happened to find yourself. The one million people who paid for their licences at the end of 1924, with their shadow army of unlicensed camp-followers, were always encountering new experiences when they sat down for an evening with the wireless.

The radio medium was new and unexplored; the people entrusted with it in Britain had every opportunity to try something new every day. Only one organisation was doing it, there was no standard of comparison, things were admired not so much because they were done well as because they were done at all. Listeners who sat clamped to headphones or operated nine controls to work a primitive loudspeaker were not likely to be particular about style and finish in production, and most of them put up with such bad quality in listening to their local station that they would not quarrel with a few extra crackles and whoops if that station was bringing them America or Paris, a broadcast from a coal-mine or a broadcast by the King. But the very fact that there was no competition—that if the BBC did not do anything, British radio could not do it—makes it all the more creditable to the pioneers that so much was done so soon.

Some very brilliant people worked under Mr. Reith and his second-in-command, Admiral Carpendale, in the small offices in Savoy Hill to which the BBC had moved from Magnet House in March 1923. On the technical side the inspiring force

was P. P. Eckersley, who came to the Company as Chief Engineer in February 1923, and was subsequently joined by several of his fellow-pioneers from Writtle. (Among them was Noel Ashbridge, who succeeded Eckersley as technical chief of the BBC and is still there in 1950. He became Sir Noel Ashbridge in 1935.) It would be hard to over-estimate Eckersley's contribution to the science of broadcasting as it is practised in Britain. Before he left the BBC in 1929 he had laid down the lines of development in domestic broadcasting for the next twenty years, started overseas broadcasting, and even shaped the BBC's attitude towards the new device of television. A passionate enthusiast for broadcasting, like so many radio engineers, he differed from the majority in having a natural liking for the microphone and strong ideas about the purposes for which stations and wavelengths should be used. His energy and enthusiasm undoubtedly supplied a great deal of the driving force in the formative years.

On the programme side the dominant figure was Cecil Lewis, a dynamic young man who joined the Company on its formation and remained the chief influence on its programmes until he left in 1926. Apart from the engineers, who were skilled men, the early staff of the BBC was recruited almost haphazard. Broadcasting was an unknown quantity and anybody might turn out to have the qualifications for it, but it semed to most people to offer a dubious career, quite untinged with that atmosphere of security and respectability that was later to mark the BBC. So the early staff was made up of a mixture of enthusiasts who believed in the possibilities of radio, pioneers who loved any new enterprise, ready-made specialists like musicians, actors and journalists, and a proportion of people who just wanted a job and found it hard to get one in the conditions that followed the first World War. Some of them were geniuses, some were unable to grow with their jobs, some were sheer misfits. Except for the engineers, few of them survived into the settled middle-age of the BBC, and it was not only the incompetent who left.

Bad mistakes were made, scandals were narrowly avoided. But mistakes were not so serious, and scandals not so blatant, in the days when broadcasting was new and small; and with

all their errors, the people who actually ran broadcasting in its first stage achieved great things.

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Through the last two years of the Company radio continued to break new ground. The first special broadcast to America was in March 1925, and the great new high-power station at Daventry began regular weekly broadcasts to the Continent in October. The first British broadcast from an aeroplane was made in May 1925, when listeners heard Sir Alan Cobham teaching Miss Heather Thatcher to fly. In November 1925 the great singer Chaliapine came to the microphone—a victory for the BBC in its struggle against the reluctance of serious musicians to embark on the new trick of broadcasting. But 1926 brought the greatest landmark in the early history of British radio, when a labour dispute in the coal-mines led to the calling of the General Strike.

For ten days in May all organised labour stopped work, and just when there was most news there were virtually no newspapers. After the first three days the Government published a *British Gazette*, the Trades Union Congress published a *British Worker*, and various newspapers came out in broadsheet form, but distribution was very bad, and for most people in the country the wireless was the only way of getting the news. People with sets of their own were sources of information, and many people who had never had sets before installed them hastily. Crowds gathered outside the wireless shops to listen to the loudspeakers, and enterprising hawkers took down the bulletins, often with a good deal of imagination, and sold copies in the streets.

Before the strike the BBC's earliest news broadcasts of the day had been at 7 p.m., a restriction imposed by the newspapers, which feared that earlier broadcast news would interfere with their sales. This restriction was waived during the crisis, and news was broadcast at 10 in the morning and again at 1, 4, 7, and 9.30 p.m. Besides news these broadcasts contained a great number of Government announcements and lists of train times, and if these were not always entirely reliable they at least acted as a counter to the flood of alarm-

ing rumours that overran the country as soon as the papers ceased to appear (1).

The BBC undoubtedly did a great deal to help the Government and nothing to help the strike, but it was not a pure propagandist organ like the *British Gazette*. Lord Reith has recorded in his autobiography how Mr. Churchill (who was closely concerned with the production of the *Gazette*) urged strongly in the Cabinet that the Government should take over the BBC completely and make broadcasting a far more active weapon, but he was overruled. The Government did in fact exercise control over the BBC through its Chief Civil Commissioner, but the actual conduct of broadcasting was left to the staff, and the Government had no reason to complain of the result.

This demonstration of the power of broadcasting in an emergency was certainly noted by politicians of all parties and affected their future attitude to the question of its organisation and control. The effect on the public was more immediate. Overnight "the wireless" had grown up. Millions of people who had regarded it as a technical novelty or a schoolboy's hobby realised that it had real importance and that there was nothing ridiculous about having a wireless set in the house. Even so, it was to be many years yet before radio won general acceptance in upper-class and intellectual homes. People who worked in broadcasting in the twenties and early thirties will remember many patronising remarks from friends to the effect that they never listened-in themselves but they had a "machine" in the kitchen for the maids. The last line of defence against the listening habit began to yield only when it was realised that radio could at last equal the gramophone for reproduction of serious music, besides

(1) The BBC itself had given a fine though inadvertent example of rumour-starting on April 16, just before the strike, when Fr. Ronald Knox broadcast a burlesque account of a riot of unemployed in London, led by the Secretary of the National Movement for Abolishing Theatre Queues. It was clearly intended as a parody, not as a hoax, but it was circumstantially done with all the jargon typical of BBC news, and it alarmed people all over the country who really thought Big Ben had been shot down with trench mortars and a famous philanthropist was being roasted alive in Trafalgar Square.

having a far wider repertoire than the most enthusiastic collector of records could own.

By the end of 1926, however, broadcasting in Britain had made a strong though partial impact on the national life. Two and a quarter million homes had radio, programmes occupied from ten to eleven hours a day, and the novelty interest of hearing anything on the air was yielding to interest in what was to be heard. Programmes were as varied then as they are now: there were news, talks, discussions, religious services, concerts of all kinds, plays, opera, outside broadcasts of diverse events, though not yet of sport (Press interests were still averse to letting the result of the Derby be heard instantaneously on the air). Listeners had heard countless celebrities from the King and the Prime Minister to Sir Harry Lauder and Phil Scott, the heavyweight champion, who was one of a long series of personalities who presented "My Programme" showing just what he thought radio could best do. But there was also a growing army of regular broadcasters with an enthusiastic following, headed by the announcers of the various stations (not yet anonymous), the Uncles and Aunties of the Children's Hours, and in particular "Aunt Sophie", who as Cecil Dixon also supplied piano interludes in the many gaps between programme items in those happy-go-lucky days.

Amongst the earliest of these radio favourites was the famous scientist Sir Oliver Lodge, who broadcast for the first time in February 1923, and remained until his death a most welcome visitor to the microphone. A little later came "Dick" Sheppard and the monthly broadcasts from St. Martin-in-the-Fields that made it the best-known church in Britain; a work continued by his successor, "Pat" McCormick, when Sheppard resigned in October 1926. For years a large proportion of listeners would have parted with almost any item in their programmes rather than the broadcasts from the church in Trafalgar Square.

There were regular critics of the arts. Percy Scholes gave his first music talk in February 1923, and long continued his work to widen the music-loving public by means of radio, which he saw as the greatest boon to music since Jubal struck his lyre. G.A. Atkinson broadcast weekly criticisms of films, Archibald Haddon of drama, John Strachey of literature. A

unique personality came on the air in January 1924 when A. J. Alan broadcast his first story, *An Adventure in Jermyn Street*. A.J. Alan surrounded himself in mystery; his real name, which was Leslie Lambert, was kept secret even inside the BBC. His stories, each carefully written and rehearsed to give the impression of an entirely spontaneous anecdote, were a masterly combination of the matter-of-fact with the unexpected, the ordinary with the bizarre. But his great success was in giving the impression that however strange or however ordinary they might be, all these experiences had really happened to him; and it was his mastery of the microphone that enabled him to do that.

Amongst regular talkers with regular followings were E.M. Stéphan, who made his French lessons as entertaining as they were instructive; Dr. C.W. Saleeby, who talked on health, and Mrs. Marion Cran, who talked on gardens and was as popular as the lugubrious Mr. Middleton and the homespun Mr. Streeter were later to become. The most popular of all was probably Sir Walford Davies, the distinguished organist and composer, whose talks at the piano gave many listeners their first real understanding of the music they heard on the air.

There was of course a corps of regular singers on the radio, headed by Dale Smith and containing not a few of the BBC's own staff; both Rex Palmer, the original Golden Voice, and Stuart Hibberd, who became the best-known of all announcers, were among those who figured as singers also in the early days. There were entertainers like Wish Wynne and Norman Long—"A Song, a Smile and a Piano"—who first broadcast on November 24, 1922, and died in January 1951. Amongst comedians John Henry, the Yorkshire comedian, was the first big name in radio, but there were others like Stainless Stephen, Leonard Henry, Clapham and Dwyer, and Tommy Handley, who was already well known by 1926 although his rise to unexampled pre-eminence was not to come until after the outbreak of war in 1939.

There were many more radio favourites whose names will still be remembered by older listeners, such as the Roosters under Percy Merriman, the Army concert-party of the 1914 war, in whose ranks Tommy Handley once used to broadcast.

Reginald Foort was already becoming the most popular of the cinema organists, Albert Sandler was the king of popular violonists, and J.H. Squire with his Celeste Octet broadcast nearly as much as the ubiquitous Gershom Parkington Quintet.

This was the age of personalities in radio. People had not yet got hardened to the idea of hearing an unknown, unseen stranger address them familiarly in their own homes, and those who passed the test and became welcome though disembodied visitors attained a greater glory in their limited field than the greatest favourites do now that all-day radio is a matter of course. Personalities were more important than programmes. Landmarks had already been set up, such as the regular news broadcasts and weather forecasts, time signals, market prices for farmers, broadcasts to schools (inaugurated by Sir Walford Davies in April 1924), Sunday appeals for the Week's Good Cause (started in January 1926); and the first series of National Concerts at the Albert Hall had been planned for the winter season of 1926-1927 before the British Broadcasting Company was dissolved. But it is probably true that to most listeners at that time "the wireless" was still an affair of personalities and the BBC was not yet regarded as an institution existing apart from and above the handful of favourite broadcasters, which might include the local station announcers, the Savoy Bands, Dick Sheppard, Reginald Foort, some Aunties and Uncles from the Children's Hour, and Christopher Stone, whose rise to nation-wide celebrity through his easy manner of announcing gramophone records was the most striking demonstration of the power of the microphone on the personality side.

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In promoting the National Concerts at the Albert Hall the BBC was giving an early example of its constant tendency to embark on enterprises outside the obvious scope of a broadcasting organisation as it had been originally conceived; a tendency that was fostered by the short-sighted policy of bans on broadcasting by established interests. The National Concerts led ultimately to a situation in which the BBC was

not only the greatest single patron of music in Britain but also one of the leading promoters of public musical events. Even more striking in its results was its invasion of the publishing field, and this also was due to a short-sighted boycott, in this case by the newspaper world.

In the early days of broadcasting the newspapers had been willing enough to publish the scanty wireless programmes as a matter of interest to their readers, but as broadcasting became established they decided that this information ought to be paid for at advertising rates, like theatre and concert announcements, and the BBC refused to pay. Things came to a deadlock in February 1923, when the newspapers refused to publish the programmes until the boycott was broken by Gordon Selfridge, who published them in his own advertising space and proved conclusively the extent of the public demand. The newspapers again began to publish them in their news columns, as they do to this day.

But they had given Reith his opening, and in this matter their short-sightedness was matched by his foresight. To guard against any recurrence of the boycott he planned a weekly magazine devoted primarily to the radio programmes, and after various refusals from publishing firms his scheme was accepted by George Newnes. The *Radio Times* began in September 1923 and was a success from the start. It was the only publication that gave a week's programmes in detail and in advance, for the BBC refused to issue more than a daily summary to the Press, and to this it owed the bulk of its sales. But from the first it printed a good deal more than the programmes, and before long it was acting as a valuable mouthpiece for the BBC's own point of view.

Financially it was a gold-mine. By 1927 its sales were nearing the million mark, and with its appeal to the whole household and its seven-day life it became one of the most valuable advertising media in the country. By degrees the BBC took over the tasks of publishing, selling advertisements, and finally virtually of production, and apart from its propaganda value the paper ultimately came to represent a profit of more than a million pounds a year. And this supplementary income was all the more welcome because, unlike any other part of the BBC's revenue, it was entirely

independent of negotiations with the Post Office and the Treasury and of Parliamentary votes.

Apart from its financial value to the BBC, the success of the *Radio Times* contributed to forming the listening habits of the British people. Its slogan was "plan your listening in advance" and planned listening became more common in Britain than in most other countries, in none of which has a radio programme journal commanded so wide a public. Listening with a week's programmes at hand, all fully itemised and described, was a very different matter from listening with no guidance but the daily summaries in the newspapers. The *Radio Times* was passed round the family, each noted beforehand the broadcasts he wanted to hear during the week, and often other activities were not arranged until the week's listening had been planned.

This planning was more important in the early days, when regular scheduling was rare, than in the war and postwar years, when more and more items came at the same time on a regular day each week. But the habit of advance planning continued and the *Radio Times* steadily increased its sales. In 1950 it was going into three-quarters of British homes, and many listeners felt quite lost without it when disputes in the printing trade prevented its coming out.

The Company made another incursion into the publishing field during its short life. As sets improved and listeners discovered the pleasure of listening to foreign stations they wanted to know beforehand what there was to listen to, and there was also a large technical interest in the details of set construction that was not catered for in the *Radio Times*. So in July 1925 appeared a new BBC weekly called *World-Radio*, which contained foreign programmes, technical articles, and advice on building sets. Without ever rivalling the fabulous success of the *Radio Times* this newcomer also became a valuable property, but it lost its appeal as the thrills of set-construction and foreign listening palled, and when war broke out in 1939 it was absorbed by the *Radio Times* and it has never been revived. And there were to be other developments of the BBC's publishing activities, which will be referred to later in this book.

The Company had an impressive list of achievements to its

credit before it ceased to exist at the end of 1926. It had covered the country with radio and acquired a roll of more than two million licence-holders, each of them probably representing one complete family (for "experimental" listening was fast dwindling by this time whilst the habit of having two or three sets in one home had not yet come in). It had also accumulated property in studios and transmitters, built up a publishing business, negotiated for copyrights and performing rights, acquired permanent and temporary telephone lines for broadcasting purposes, established co-operative relations with its opposite numbers in other countries and played its part in the first international agreement on wavelengths ever reached. It had earned enormous goodwill, launched some very popular programmes, and made the reputations of a number of broadcasters, a considerable proportion of whom were on its own staff. As broadcasting and listening grew up, so the British Broadcasting Company had grown out of all likeness to its humble beginnings of 1922.

By the end of the first four years it was clear that this broadcasting was no short-term novelty to be exploited by the electrical manufacturers with the aid of a group of enterprising young men. Listening was a habit that had spread rapidly and was still spreading amongst average citizens, not merely enthusiasts or cranks. Broadcasting was a powerful instrument, as had been shown during the strike, and the broadcasting authority had taken its place as a new though still junior partner in the complex of great institutions that control the nation's affairs. The experiment of 1922 had been proved a success. The question now was to decide how it should be carried on.

CHAPTER THREE

THE CHARTER

THE DECISION to entrust British radio to the British Broadcasting Company had been taken quickly by the Post Office. The decision to establish the British Broadcasting Corporation was the result of prolonged study, departmental enquiry, and due consideration by the Government of the day. What had been an experiment of little consequence to any but the radio industry had turned into a new force in the national life.

Politicians and publicists had taken an interest in broadcasting from the start, but whilst it was still an unknown force this interest was not widespread enough to have weight. As early as July 1922, there had been speeches in the House of Commons and a suggestion that a Select Committee should enquire into the scheme that the Post Office had prepared, but the Government saw no need to comply.

The original Licence given to the British Broadcasting Company extended only to the end of 1924. Once the terms of the agreement were published (which was not until March 1923) there was a certain amount of criticism, and the *Daily Express* attacked the scheme as being a monopoly. But the first Committee of Enquiry in the BBC's history was evoked not by the approaching end of the initial Licence nor by misgivings about monopoly, but by anomalies in the working of the system of licences and royalties by which the Company was financed.

This committee, under the chairmanship of Sir Frederick Sykes, M.P., was set up by the Postmaster General on April 24, 1923, and its report was signed in August and published in October. It went into the detailed questions of licences and royalties, the membership of the Company, and the practicability of protecting British radio manufacturers against the import of foreign-made components, which paid no royalty and were being used extensively by people who built their

own sets. But it also ranged over a much wider field, and its recommendations first gave public approval to the idea that British broadcasting should be financed by listeners through the licence fee they paid to the Postmaster General for the right to use a radio set.

The Sykes Committee considered and rejected other sources of finance: royalties from manufacturers, a customs and excise duty, and payments from advertisers for time on the air. It did not rule out the acceptance of "sponsored programmes" (which will be dealt with more fully later in this section) nor the curious device of broadcasting commercial information in code to subscribers, which has never in fact been done by the BBC.

It recommended that there should be a uniform ten-shilling licence, of which the BBC should receive 7s.6d. instead of 5s. It recommended that broadcasting should be subject to public control but not run directly by the State. Most important, perhaps, in its immediate results was its recommendation that the Company's licence to operate should be extended by two years, to the end of 1926 instead of the end o 1924.

The Sykes report was the first authoritative study of the problems and opportunities raised by the success of broadcasting, and it paved the way for the establishment of the chartered monopoly that was to follow in 1927. But the report did not itself recommend either monopoly or a chartered corporation. It did not attempt to decide between the various possible methods of organising broadcasting, but in its review of the alternatives it considered the possibility that local stations might be operated by "local Companies, Municipalities, Wireless Societies, or other bodies that may wish to undertake the work".

The report was in reality a triumph for the BBC, though the Company was unable to agree to it, simply because as the representative of the big radio manufacturers it could not accept the abandonment of any restriction on the use of foreign-made components which the report considered to be inevitable. Honour was satisfied on this point when the Postmaster General agreed to retain the royalty system until the end of the original agreement in 1924. In practice

the system was abolished in July 1924, when the uniform 10s. licence was also introduced (1).

The Sykes Report and the subsequent action by the Postmaster General left the BBC in possession as the broadcasting authority for the country, financed by licence fees and independent of manufacturers' royalties, with four years instead of two in which to complete its work. The membership of the Company was thrown open to dealers as well as manufacturers, and an Advisory Board was set up to assist the Postmaster General. The broadcasting monopoly was first mentioned in the new agreement between the Postmaster General and the BBC. Until the end of the original term (December 31, 1924) the PMG undertook not to license any other person to carry on broadcasting in Great Britain. For the next two years, however, he reserved the right to license any other person to provide stations in towns or areas "not in his opinion adequately served by the Company's stations", in which case the "other person" would receive the broadcaster's share of the licences bought in those areas instead of the BBC. For this purpose the areas served would be calculated on crystal-set range.

In addition, the PMG reserved the right during those two years (1924-1926) to license any other person to broadcast without withholding any of the licence money from the BBC. Neither provision was ever put into effect but the fact is that the monopoly had not yet been accepted as a permanent feature of British broadcasting, either in 1923 or in 1924.

As Mr. R.H. Coase puts its in his authoritative study of the BBC as an institution :

> To the Sykes Committee, the question of how broadcasting should be organised in Great Britain was an open one. It was something to be examined further. Yet only two and a half years later, in the report of the Crawford Committee on Broadcasting, we find that a monopolistic form of organisation is accepted as being the desirable one for broadcasting in Great Britain. There can be little doubt

(1) Before this there had been an ordinary licence of 10s., an experimenter's licence, and a constructor's licence, the latter both 15s. An interim licence of 15s. for those who built their sets with foreign parts, and were not therefore covered by the previous licence system, was issued in October 1923, and 200,000 licences were taken out in a fortnight.

that this crystallisation of view was largely due to the influence of one man, Mr. J.C.W. Reith (1).

It is true that the good work of the Company, which had so soon covered Britain with a broadcasting service and given so much better value than most listeners would probably have expected in those early days, made a strong case for its continuance. But in the end the Company was not continued. The radio manufacturers who had provided its capital, appointed its chief, and left him virtually a free hand to run it, were paid off at par, and the company was replaced by a public-service Corporation, independent and monopolistic, which can fairly be called the creation of Mr. Reith.

Reith knew nothing whatever about broadcasting when he joined the BBC; he himself has recorded how he applied for and was appointed to the job of General Manager without knowing what broadcasting was. But he soon formed his convictions about it, and his force of personality and negotiating ability ensured that his convictions won the day.

His view did not admit of the continuance of the Company. As he says in his autobiography, the four fundamentals to him were "the combination of public service motive, sense of moral obligation, assured finance, and the brute force of monopoly, which enabled the BBC to make of broadcasting what no other country in the world has made of it" (2).

The section of his book in which this passage occurs is entitled "Brute force of monopoly", and there is no doubt that to his mind the monopoly was the thing best worth preserving in the successor to the original BBC. Writing on the subject as early as September 1924, soon after the closing of the Sykes enquiry, he defended monopoly, or unity of control, on many grounds, in which efficiency and economy took precedence of the "necessity for maintaining the general policy and high standards" (3).

But in his autobiography, written in 1947, he gives what is probably far closer to his personal view:

(1) *British Broadcasting: A Study in Monopoly*, by R.H. Coase.
(2) *Into the Wind*, by Lord Reith.
(3) *Broadcast over Britain*,, by J.C.W. Reith.

> But without monopoly many things might not have been so easily done that were done. The Christian religion and the Sabbath might not have had the place and protection they had; the place and protection which it was right to give them; the giving of which seemed to be approved. The Christian religion, not just as a sectional activity among many others but as a fundamental. And as to the Sabbath, one day in the week clear of jazz and variety and such like; an effort to preserve the inestimable benefit of a day different from other days. Less persistent transmission of good music; of good things in every line. School broadcasting—initiated, urged, developed, financed by the BBC, with rather negative and timid approval from authority—might not have been essayed. Almost everything might have been different. The BBC might have had to play for safety; prosecute the obviously popular lines; count its clients; study and meet their reactions; curry favour, subordinate itself to the vote. *Might* have had to; it probably would not; but its road would have been far harder (1).

Not all the benefits that he sought to secure by way of the monopoly have been preserved; the Sabbath has long ceased to be protected from jazz and variety and such like, and the BBC has been counting its clients and meeting their reactions for more than ten years. But the monopoly itself remains.

As we have seen, the monopoly was already there when Reith discovered broadcasting, but he gave it its moral sanction. If it had been left to depend on the technical and administrative advantages that originally recommended it to the Postmaster General it would probably not have survived. As broadcasting demonstrated its power to convey information and entertainment to the masses, the traditional British distrust of monopolies would very likely have taken effective shape. Reith's contribution was the claim that only by remaining a monopoly could broadcasting effectively and responsibly wield this power. He identified unified control with high programme standards and a consciously moral, Christian outlook.

And his claim was far-reaching. It included not only the right to control broadcasting in Britain but the right to control listening. When first the relay exchanges began to operate, bringing listeners their programmes by wire, the BBC lost no time in protesting that to give the relay operators

(1) *Into the Wind*, by Lord Reith.

a free hand to provide their own programmes or to supply programmes picked up from foreign stations would impair the BBC's programme monopoly. The same argument was used later, when foreign stations began to broadcast programmes aimed at the British audience and often supplied by British advertisers, and the BBC induced the Government to impede their operation by every means in its power. In Reith's view, standards could be maintained only if the BBC had the sole power to decide what listeners heard.

Reith's idea of broadcasting included independence as well as monopoly. As General Manager and then Managing Director of the British Broadcasting Company he was technically the servant of the big six, the radio manufacturers who had put up the money and started the Company. His control of broadcasting was further limited by the authority of the Postmaster General. The manufacturers had never used their power to the detriment of broadcasting or of the listener, but they were to lose it. The Postmaster General, whom Reith seems to have found more irksome, was to retain his.

Between his appointment in December 1922 and the sittings of the Crawford Committee in 1925, Reith had worked out a case in which public service and monopoly were interlocked. His view was diametrically opposed to the system of broadcasting then flourishing in the United States, which has been briefly referred to in an earlier chapter. There, private enterprise and profit motive continued to rule the air. It was not until 1927 that the Government took into its hands the allocation of wavelengths to stations, but even then there was no thought of any further move towards "unified control". The idea that any one body should decide what listeners should and should not hear was still as foreign to Americans as it would have been to the British a few years before.

Instead, hundreds of stations under diverse ownership provided listeners with their radio programmes free of licence fees, and made their own profits by selling time to advertisers who wished to boost their goods on the air. This system settled down into a coherent national coverage, with "networks" of associated stations from coast to coast sharing specified programmes, but with independent stations

still prominent. All these stations, whether owned by a network or independent, were "commercial stations"; they devoted their best listening times to programmes financed by advertisers, though they themselves continued to provide a proportion of "sustaining programmes", at their own expense, in unsold time.

British stations have never sold time. A distinction is necessary here between sale of time and acceptance of sponsored programmes, which was permitted by the Sykes Report. In British usage, a "sponsored" programme is one of which the production costs are paid by the advertiser in exchange for the mention of his name on the air. A "commercial" programme is one where the advertiser has bought the right to broadcast for a specified time and fills it in any way he likes, though in practice all stations reserve some right of censorship on the programmes they accept. The situation is complicated by the fact that in the United States and other countries with commercial radio, "sponsor" is used for the advertiser who buys the time and provides the programme, and the distinction between "sponsored" and "commercial" programmes does not exist.

A few "sponsored programmes", in the sense of the Sykes Report, were in fact broadcast by the BBC in its early years. But there has been a continuing habit of broadcasting programmes that were in effect sponsored, to the extent that the BBC obtained a programme at far less than its true cost in exchange for mentioning the name of the promoter, and the BBC's programme budget has been considerably subsidised by this means. Very often the items broadcast are of public interest and deserve to be broadcast whoever pays for them, but American and other observers of our system have often expressed astonishment that so many "credits" to commercial firms, from newspapers to film companies, are heard on our consciously non-commercial air.

However, there remains a clear distinction between taking a programme at less than its cost and selling time on the air. The BBC has never sold its time for money, and commercial radio has never gained an outlet in this country, though British manufacturers have bought time on foreign stations that could be heard here.

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The Crawford Committee came into existence in the summer of 1925. Its function was "To advise as to the proper scope of the Broadcasting service and as to the managements, control, and finance thereof after the expiry of the existing licence on December 31, 1926". It was also to indicate what changes in the law, if any, were desirable in the interests of the Broadcasting service.

The Post Office recommended continuance of the monopoly in the interests of efficiency and maximum coverage, but thought that the Company formed by radio manufacturers should be abolished, and suggested a public Corporation in preference to direct State operation, which the Post Office did not want.

The committee heard a great deal of evidence (it did not produce its report until March 1926), but there can be no doubt that the dominant influence on its decisions was exercised by Mr. Reith. He was Managing Director of the Company and a member of its board; he had been a member of the Sykes Committee and of the Advisory Board that was set up as a result of its recommendation. He alone was in close and intimate touch with the work of broadcasting, and he alone had worked out a complete scheme for its future. He has said that he put forward the idea of a public corporation to the Sykes Committee in 1923, and he certainly put it forward to the Crawford Committee in 1925. His memorandum, which they considered immediately after that of the Post Office, made the case for monopoly by a public corporation with a fervour which he himself appears to ridicule in his autobiography, but it had its effect. Further, he saw the evidence of all the other witnesses and gave the committee a memorandum of comment on it before he appeared before them a second time. The Crawford Report that led to the establishment of the British Broadcasting Corporation was, practically speaking, all his own work.

The report confirmed the broadcasting monopoly, confining its consideration of alternatives to a curious phrase: "It is agreed that the United States system of uncontrolled

transmission and reception is unsuited to this country and that Broadcasting must accordingly remain a monopoly. . . ." It recommended that the Company should be replaced by a public corporation with a governing body of "persons of judgment and independence", with the Postmaster General as its Parliamentary spokesman on broad questions of policy, but as free as possible from departmental control. It recognised that experience might show need for modifications —broadcasting might have to become a direct State activity or on the other hand the monopoly might have to be broken up—so the Government should retain power to alter the arrangements it proposed. But the licence to the new Corporation should be for a period of not less than ten years. The report was, as Lord Reith says, altogether satisfactory to the BBC.

On July 14, 1926, the Postmaster General announced the Government's acceptance of the report and a Royal Charter was accordingly issued to the British Broadcasting Corporation, to run for ten years from the beginning of 1927, after which it could be renewed. A separate Licence from the Postmaster General reserved his own powers as the Minister responsible for broadcasting. His responsibility was itself somewhat anomalous, since it depended on the medium through which broadcasting was carried on rather than on its purpose or possibilites: it was almost as though the Minister for Agriculture and Fisheries were to be responsible for the Press because it used paper. But his powers over the Corporation were considerable, whether or not they were ever used.

In general, he had to be satisfied that the Corporation "sent efficiently programmes of broadcast matter". He had to approve the location, wavelength, and power of the stations. In case of emergency he could take them over. He could prohibit the broadcasting of anything . . . "any broadcast matter (either particular or general)". Any Government Department could also request the Corporation to transmit anything and it was bound to comply. The Post Office continued to collect the licence fees and retained 12½%, or 1s.3d. out of each 10s., for its trouble. Of the remainder the Corporation was to receive 90% on the first

million, 80% on the second, 70% on the third, and 60% subsequently. The number of licences issued at the end of 1926 was in fact slightly over 2,000,000, but the rise had been so rapid during the last four years that both the BBC and the Treasury were looking ahead. Before the ten years of the Charter expired, the annual licence figure had indeed risen to very nearly 8,000,000.

Relations between the BBC and the Post Office have always been difficult, and there have been periods of acute strain varying with the leadership that each has had at the time. Lord Reith in his autobiography speaks of the Post Office at some junctures with undisguised aversion, and no doubt some Postmaster Generals and permanent officials found much to dislike in the BBC. The relationship has however lasted, though it was modified on the outbreak of was in 1939 to the extent that on questions of major policy the Minister of Information and not the Postmaster General was to answer in Parliament for the BBC.

Two clauses in the new Charter must have given particular satisfaction to the rulers of the BBC. One was the freedom given to them to broadcast news at any time and to collect news and information for themselves instead of depending entirely on the four London Press agencies; this also made possible the broadcasting of sporting events, which had hitherto been impeded by the newspapers' opposition to the broadcasting of the result (1). The other was the continued ban on broadcasting of advertisements, though "sponsored programmes", in the sense mentioned above, were still allowed.

But the most striking feature of the new Charter was the fact that it contained no conditions and no threats. The original Company had received its licence on condition that it set up eight broadcasting stations, and within two years it had set up nine. The supplementary agreement of 1923, after the Sykes report, had indicated that if the Company

(1) The absurdity of this situation was deliberately exposed by a broadcast from the Derby course in 1926. Listeners were able to hear the thudding of hoofs on turf and the roar of the crowd, but there was no commentary, and they had to wait until the first news broadcast at 7 p. m. to hear what had won.

failed to bring any part of the country within crystal-set range of its stations, somebody else might be allowed to do it, and the Company's relay stations had brought the bulk of the population within crystal-set range. Right up to 1926 the Postmaster General had the explicit right to license any other person to broadcast. This possibility was not mentioned anywhere in the new Charter and Licence; the Corporation's only obligation was "to send efficiently programmes of broadcast matter". For ten years British broadcasting was committed into its hands (1).

The Charter of 1926 was a triumph for the staff of the original Company (now risen to number 630) and an especial vote of confidence in Mr. Reith, who was of course to remain in charge. His appointment as Director-General was included in the terms of the Charter, with those of the Chairman, the Vice-Chairman, and the three other Governors and he was to have a seat on the Board. He was knighted, and for the next eleven years Sir John Reith was to be synonymous with the BBC, one of the best-known personalities in the country and the spearhead as well as the figurehead of British broadcasting on its institutional side. Governments changed, Chairmen and Governors came and went, but the chief executive was the man who really controlled broadcasting, with all its enormous and impalpable power.

Naturally, his real importance to the BBC declined as the institution itself grew, and apart from certain special interests of his, such as Sunday programmes, it is doubtful how much effect his leadership had on what was actually broadcast. But in the external relations of the BBC he remained the active force, devoted constantly to independence and freedom from any sort of control.

This ideal of freedom for the broadcasting authority was one that he had early formed and done much to establish in the Charter of 1926. Henceforward there were no directors,

(1) It is worth noting that conditions similar to those of the original licence have never been imposed on the BBC since 1926. When new developments occurred such as overseas broadcasting, television, and very-high-frequency broadcasting, they were covered automatically by the BBC's monopoly and it was left free to handle them as it thought fit.

no shareholders to whom the chief executive would be responsible in the ordinary way of company operation. Nor was their potential control replaced by any more direct interference by the Post Office. Even Parliament was kept at arm's length. The Minister who acted as spokesman for the BBC could always refuse to answer questions dealing with its detailed affairs, which he could explain were the responsibility of the Board of Governors. The BBC was by definition an independent Corporation, and it enjoyed as much independence as any State-supported institution can do. In this respect it has served as a pattern not only for monopoly but for the chartered corporation system, as applied to an activity that might have seemed quite outside its scope.

It is true that Reith as chief executive found his first Chairman and one member of his first Board more troublesome than his commercial directors had been. In his autobiography he has freely voiced his dissatisfaction with Lord Clarendon, the Chairman, and with Mrs. Philip Snowden, one of the Governors, which was no secret at the time (1). It was probably a source of strength to him that he had been appointed not, like his successors, by the Board, but directly by the Crown. The difficult situation lasted only for three years. In 1930 J.H. Whitley, the ex-Speaker, replaced Lord Clarendon as Chairman, and in Lord Reith's own words, "all were happy till the end".

Still, the early troubles emphasised one of the difficulties of the new constitution. Theoretically, the Chairman and Board constituted the BBC; they were responsible for all it did. But in practice a strong executive, speaking with the authority of superior knowledge because he was in close touch with the work, left the Chairman with little more than nominal authority. The Board took constitutional responsibility, the Director-General enjoyed the knowledge and the power.

(1) The other Governors appointed in 1926 were Lord Gainford, Vice-Chairman (he had been Chairman of the old British Broadcasting Company), Sir Gordon Nairne, formerly Comptroller of the Bank of England, and Dr. Montague Rendall, formerly headmaster of Winchester.

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The idea of entrusting broadcasting to a monopolistic corporation was native to this country and the BBC remains to this day a distinctively British institution. Other countries have made broadcasting a monopoly and others have formed broadcasting corporations, but the two have not usually been combined.

Diverse ownership of stations, combined with commercial programmes and entire absence of licence fees, has found its chief exemplar in the United States. At the other extreme is the system of direct Government operation found in many countries in Europe and the East. Very often the radio agency is described as a corporation, but it seldom has the degree of independence that has been granted to the BBC. There are countries in which licences to broadcast are given both to public corporations, or government agencies, and to private station-owners, so that public-service and commercial radio exist side by side and the listener's licence-fee entitles him to listen to either, though the money goes to the public-service stations and the commercial stations live entirely on their advertisement revenue. Some public-service stations are allowed to take a certain proportion of advertising programmes, and some countries pay for their domestic broadcasting by selling time for broadcasts aimed at countries abroad. So many different solutions have been found for the problem that was settled for this country by the Crawford Committee in 1926 (1).

It must however be added that foreign observers often refuse to believe that the BBC is in fact an independent concern, arguing that it is subject to the authority of the Government and depends on it for finance. In the view of most American radio men, for instance, the licence fee is

(1) The institution most resembling the BBC is the South African Broadcasting Corporation, which was set up in 1936 as a result of a visit and report by Sir John Reith in the previous year. The Malan Government has recently however introduced commercial broadcasting, which hitherto had only reached the Union from a station in Lourenço Marquez, utside its control.

an ordinary tax imposed by the Government, and the BBC is subsidised by taxation. Its broadcasts to other countries are known to be paid for by direct taxation through grant-in-aid. Outside this country the BBC's broadcasts have been erroneously believed to be broadcasts by the British Government, and this has no doubt contributed to the wide following that they have had.

CHAPTER FOUR

BROADCASTING SETTLES DOWN

So far as the British public was concerned, the change in the status of the broadcasting authority made little difference. The turning-point there had been the General Strike. Since then it had been recognised that a radio set could be uncommonly useful for information as well as amusement, and that lesson was to be rubbed in by the political crisis of 1931, the illness of King George V in 1928 and his death in 1936, the abdication crisis in the same year, and the international tension that culminated in the outbreak of war in 1939.

The change from Company to Corporation on January 1, 1927, had no immediate effect on what listeners heard (1). There was one great extension in the latitude allowed to broadcasting: the restrictions on news and "information in the nature of news" were removed. This did not make much difference to the "news bulletins", to use the unfortunate name that the BBC applied to broadcasts of straight news ; although the agreement made by the old Company not to broadcast news before 7 p.m. lapsed with the change, no news broadcasts were in fact given before 6 p.m. until wartime broadcasting began in 1939. But the new freedom was soon used to broadcast important speeches made during the day, and to broadcast " running commentaries " on sporting events, which did more than anything else to popularise listening in the next few years.

The Grand National was broadcast from Aintree in March 1927 and followed in the next month by the Oxford and Cambridge Boat Race and the F.A. Cup Final from Wembley Stadium. There were some early difficulties with the organisers of these events; sometimes they feared that people

(1) One change of importance to a limited section was however that blind persons could now have licences free.

would stay at home and listen instead of paying to go in, and often they differed from the BBC over the fees that should be paid. The Derby and the Cup Final were triumphantly broadcast in 1927, but after this success the Football Association demanded a higher fee than the BBC was willing to pay. In 1929 the BBC fought back. It announced that an "eye-witness account" of the match would be broadcast immediately after it, but the F. A. declined to provide a seat for the broadcaster. The BBC went on announcing that it would broadcast an account, and there were rumours of commentators going up in balloons over the ground. But what happened was that a string of BBC reporters went on to the terraces with the crowd, and every ten minutes one of them struggled out, hurried to a microphone installed in a neighbouring house, and told his story, so that listeners heard the match described continuously, if a few minutes late.

Gerald Cock, the first director of outside broadcasts for the BBC, spent his time in tough negotiations with sporting interests of all kinds. But in the end the BBC won all these battles. It became obvious that hearing events broadcast made people who had never thought of going decide to see for themselves what they had only heard described, and the publicity attaching to a broadcast became essential to the promoters. It was the hallmark of importance; without a broadcast only the experts would believe it was an important show.

And on the question of fees, the BBC stuck obstinately to its contention that it was not paying for the event, but only for permission to put a commentator and a microphone there. On this basis it went on paying "facilities fees" of five or ten guineas for the right to broadcast such events as the Cup Final, even when the number of people who listened to them was known to be many millions. Sporting commentaries soon became the cheapest popular programmes that the BBC could do.

They were immensely popular, and the experts who broadcast them became numbered among the most famous broadcasters. Listeners came to know their voices and mannerisms as well as those of their friends. There were Meyrick Good and Geoffrey Gilbey on racing, George

Allison on Association football, H.B.T. Wakelam on Rugby, Howard Marshall on boxing and cricket, Colonel Brand and Freddie Grisewood on lawn tennis, Lionel Seccombe on boxing (being an ex-heavyweight Blue of mountainous physique he could never believe anybody was really being hurt until the man was picked up from the floor).

Commentators in those days were experts in their sport rather than expert broadcasters, though of course some were both. The day of the professional commentator who could be turned on to any sporting or public event had not yet dawned. There were experts like Major J.B.S. Bourne-May and Colonel Faudel-Phillips, who were heard once or twice a year describing the ceremony of Trooping the Colour or the Royal Tournament, and Squadron-Leader Helmore, who used to have the tricky job of covering air races in the great days of the Schneider Cup. Many listeners must still remember the excitement of his staccato phrases as the streamlined sea-planes roared down to the pylons and screamed their way off up the course again.

Among them these commentators, whether regular broadcasters or rarely-heard experts, whether describing sport or public events, brought people a new pleasure : the pleasure of hearing an event described as it happened and feeling as though they had seen it themselves. Unlike the best printed description, these broadcast commentaries came from the scene of action whilst the action was still going on, when the issue was still open and nobody knew what would happen next. One of the most curious features of the radio age is the habit that grew up of saying "I *heard* the Derby", or the Cup Final, or the circus, or the Coronation procession; a habit that would have been meaningless to any other age (except amongst the blind) and is doomed to lose its meaning again as television spreads.

In the early days of "outside broadcasts", known in the BBC as "O.B.s", there were many mishaps and many difficulties. Commentators sweltered in a sound-proof box which was usually air-proof too, or shivered on top of a van holding up tarpaulins to protect the microphone from the wind. As experience grew and technical resources improved, it became possible to select and balance sounds more certainly,

so that the commentary could come backed with the roar of the crowd, the thud of hoofs on turf or the crack of bat and ball, without ever obscuring the commentator's speech, and nowadays a broadcaster can sit by the ringside talking into a lip-microphone without being heard by the boxers in the ring, or describe a race whilst, unheard by listeners, a race-reader talks fluently into his ear. But from the very start these commentaries were one of the greatest successes of broadcasting, and brought listeners a pleasure that they had never known. In 1927 and the years following they were probably the chief factor in selling licences and sets.

Otherwise, programmes in the first four years of the new regime showed more progress on the prestige than on the popular side. Good music was much to the fore. On the third day of the new Corporation the Foundations of Music series began, and this perennial feature (it lasted until June 1936) was joined in May 1928 by the Sunday-afternoon series of Bach Church Cantatas. British listeners have always been intolerant of each other's tastes, and these two series became a by-word with the majority, who used "Bach" as a generic term of abuse for the sort of serious item that was associated with the BBC.

During these years the BBC did a great work for serious music under its Music Directors, first Percy Pitt and then Adrian Boult, who succeeded Pitt in 1930. Thousands, later millions, heard music that they would never otherwise have heard, and found that they liked it better than they expected. There was no regularity in planning to guide listeners who switched on without looking up the programme first, and even the published timings were often overrun, so listeners were always hearing things they had not meant to hear. Many of them bitterly resented tuning in for a favourite programme and having to listen for five minutes or more to a symphony concert that had overrun its time. Others discovered by such accidents that there was pleasure to be had from "good" music as well as from "light" music and jazz, and from their ranks was built up much of the large audience that now listens to classical programmes and goes to hear great orchestras when they perform in the flesh.

The attitude towards music that most irritated the

lowbrows and did more harm than good was not so much this concentration on programmes of serious music as the extent to which musical lore pervaded the day's broadcasting. In its respect for musical culture the BBC was too far ahead of its audience. Its announcers and programme staff prided themselves on knowledge of music far more than on knowledge of literature, history, or affairs; the ability to talk assuredly about composers and their works was as much part of the equipment of a BBC gentleman as the ability to introduce a classical quotation was part of the equipment of an eighteenth-century politician. Announcers, anxious to show their understanding, gave full value to the jumble of languages in which music programmes are written, and resorted unfailingly to the classical repertoire when they had to put on records to fill gaps. The programmes that these interludes separated might be of the most broadly popular appeal, but when the announcer intervened it was most likely to be with a bit of Bach. In any broadcasting service it is the announcer who is the voice of the station *vis-à-vis* the public, and this preoccupation with music that the bulk of the public would certainly not have chosen for themselves, and the rigid avoidance of anything that they would, undoubtedly helped to spread the impression that the BBC itself was more highbrow than most of its performers, which in turn did a good deal to colour the public's opinion of it in its second phase.

But it was in its specifically musical activities that the BBC showed its chief vigour during those years. To begin with, it took over the Proms. This famous series of low-priced concerts at Queen's Hall had been conducted by Sir Henry Wood since 1895, and they had become a unique feature of London's musical life, but they were in danger of discontinuance. The BBC took them over in the summer of 1927, thus ensuring both the survival of the Proms and a constant supply of relayed concerts during the summer. In the event the Proms have survived both Sir Henry Wood and Queen's Hall, and they are still staged by the BBC and broadcast from the Albert Hall.

Before long the BBC had established itself as one of the biggest concert-giving agencies in the country as well as the biggest employer of orchestral musicians. The BBC

Symphony Orchestra of 114 players, conducted by Adrian Boult, gave its first broadcast in a public concert from the Albert Hall in October 1930, so starting a career which was to make it one of the leading British orchestras and one that won plaudits in many other countries that it visited. Boult, who had come from the Birmingham City Orchestra,, remained its conductor for twenty years. Originally he combined this task with that of Director of Music in the BBC, but in 1942 he relinquished this post to the composer, Arthur Bliss. He remained permanent conductor of the orchestra until 1950, when he was succeeded by Sir Malcolm Sargent. He was knighted in 1937.

The BBC Symphony Orchestra was formed for broadcasting but its most important concerts were given in public and some of them given abroad. The wisdom of spending licence money on public concerts, which frequently made a loss, has been constantly challenged by defenders of the interests of listeners, and the equity of competing with existing orchestras and concert-giving agencies has been angrily challenged by them. But it seems clear that once you have a symphony orchestra you have to let it play in public. The uninterrupted atmosphere of the studio finally proves lethal to good performance. Musicians need the applause of audiences and the appreciation of experts; and the music critics have been very slow to take notice of what they can hear only over the air.

The formation of the Symphony Orchestra was the leviathan among the BBC's orchestral projects, but a host of minnows wallowed in its wake. 1931 saw the launching of the BBC Studio Symphony Orchestra, Theatre Orchestra Light Orchestra, Bach Orchestra, Chamber Orchestra, and Wind Orchestra. The Regions had their own orchestras, and with more convincing radio reason as many of them had not the same pool of pick-up musicians to call upon as London had, and without permanent orchestras, small or large, would have had difficulty in getting even incidental music for their dramatic shows. In practice, of course, these Regional orchestras tended to grow larger, and in a musical centre like Manchester an orchestra grew up whose repertoire did not differ markedly from that of the BBC Symphony Orchestra itself.

On the other hand, the first BBC Orchestra to be formed was a dance orchestra. In 1928 Jack Payne was appointed to lead the BBC Dance Orchestra, the first jazz band ever dignified by the name "BBC". Dancing was still all the craze, and many households valued their wireless most for the dance music that it brought. Jack Payne's name became a household word, and after four years at the BBC he left it to top the bill in music-halls all over the country (1).

There were new developments in radio drama too. The first radio plays were usually adapted directly from stage plays, with the scene set for listeners by an initial announcement on the lines of "You are in a pleasant sitting-room in a house in Surrey. The French windows open on to a sunny garden. It is Sunday afternoon." This type of play is still popular in radio, and twenty years later it was to build up the enormous audience for "Saturday Night Theatre"; but new experiments were being made in the art of telling a story for the ear alone, with no thought of the conventions and limitations of the stage. Between 1927 and 1931 there were dramatic broadcasts that are still remembered by veteran listeners as veteran film-lovers remember the early masterpieces of the cinema. Tyrone Guthrie contributed "The Flowers Are Not For You to Pick" and "Squirrel's Cage"; Lance Sieveking a radio morality called "Kaleidoscope"; Eric Maschwitz an adaptation of Compton Mackenzie's novel "Carnival", which ran for two hours. Experiments such as these were not always successful, but at least they were explorations of the powers of the new medium, where so much was yet to be explored.

Religion of course was prominent in the programmes; the Director-General's personal convictions ensured that. Sunday was kept holy, and services "within the main stream of Christian tradition" were broadcast with frequency and regularity. In January 1928 the high-power station at

(1) He was succeeded at the BBC in 1932 by Henry Hall, who also went into show business in 1937, after which the BBC Dance Orchestra was dissolved. This departure of popular broadcasters, and sometimes of complete shows, was by then becoming a problem for the BBC, but the appeal of seeing people you had heard had not made itself so apparent to the music-hall magnates in the period with which we are now concerned.

Daventry began to transmit a daily religious service, and in October 1931 the Rev. W.H. Elliott began the series of Thursday evening services, broadcast from St. Michael's Chester Square, that were to make him and his church nearly as famous as Dick Sheppard and St. Martin's had been in 1924.

Broadcasting was also developing on its educational side. Broadcasts to Schools, begun by the old Company in April 1924, were slowly spreading their appeal. Teachers and educational authorities had at first hung back, fearing that the broadcasters wished to displace the teacher and take over the educational policy of the schools. Also, wireless sets in the early days were often unreliable, and not every teacher was an expert operator who could feel confident of tuning in under the censorious eyes of his class. But as time went on the educational authorities realised that the BBC was taking all possible care to follow their lead on subjects and treatment; ever since 1924 it had had an Advisory Committee on Education, which finally developed into the Central Council for School Broadcasting that takes entire responsibility for the content, as apart from the radio treatment, of broadcasts to schools. As wireless sets became more reliable and found their way into more and more homes, teachers became increasingly conscious that the loudspeaker could not only bring their pupils very agreeable interludes in the day's work, but could also give them a real reinforcement in their own task (1).

In 1927 began a further educational project : Adult Education by wireless. A serious attempt was made to broadcast talks of special interest to people who were carrying on their own education, the idea being that they would form "listening groups", or "discussion groups", to follow up the broadcasts or debate among themselves the points that had been made. A Central Council for Broadcast Adult Education was set up, special pamphlets were issued for the use of the groups, and the number of people organised into listening groups rose to some 20,000. This was a disappointing figure

(1) Even in 1950, however, the proportion of schools known to be using the broadcasts was only 56%.

and the original conception of adult education by group listening was beginning to fade when it was sharply revived by the new needs that arose when a great number of young men were brought together in the Services during the war.

The Central Council for School Broadcasting and the Central Council for Broadcast Adult Education, which later turned into the Central Committee for Group Listening, were examples of a method of enlisting advice and support from prominent members of the public that was to play a great part in the external relations of the BBC. In the BBC Year Book for 1931, which recounted the developments of the previous year, seven such councils and committees were listed. Besides the two mentioned above, there was an Advisory Committee on Spoken English, an Advisory Panel for National Lectures, a Music Advisory Committee, a Central Religious Advisory Committee, and an Appeals Advisory Committee. Acknowledgment was made also to sub-councils and local committees in the Regions. The habit of forming these committees spread, until the war brought most of them to an end. After the war they sprang up again, and the BBC Yearbook for 1950 listed no fewer than 31 of them, with a total membership of more than five hundred persons.

This means of keeping in touch with leaders of public opinion, nationally or locally, has not always influenced the actual conduct of broadcasting so much as might appear from the deference accorded to the committees by the BBC. Some of the committees did effective work and directly influenced the broascasts that listeners heard. The School Broadcasting council laid down educational policy, the Spoken English committee issued lists of approved pronunciations that the announcers had to use, the appeals and religious committees saved the BBC from the onerous task of deciding how the religious denominations should share out the ration of time allowed for broadcast services, and which hospitals and other charities should reap the benefit of a Week's Good Cause appeal (1). But some were seen from inside Broad-

(1) These benefits were often very considerable. The record in appeals is that made by Lord Baldwin for King George's Fund for Sailors on December 17, 1939, the first year of the war, which realised £101,000. In the pre-war years a charity that secured an appeal on

casting House as no more than a device for using the semblance of consultation in order to acquaint influential people with the problems and policies of the BBC. A General Advisory Council, for instance, chosen entirely by the BBC itself, meeting three times a year to discuss subjects often chosen by the BBC, could hardly be of much practical use, and neither the chairmanship of such a public figure as Lord Macmillan nor the membership of such well-known personalities as George Robey could cause its recommendations to be known to or taken seriously by the people actually engaged in broadcasting, inside and outside the staff of the BBC.

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There were many public occasions when the wireless attracted its widest possible audience, such as the illness of King George V in 1928 and the General Election of 1929. Lord Reith has recorded in his autobiography how the rota of political broadcasts allocated to the three parties caused the usual discontent, and how different were the attitudes towards broadcasting of the various political leaders. British politicians have been slow to realise the importance of the microphone, and already they are threatened with the advent of the television camera, which showed its power in the United States in the Conventions of 1948 and made shrewd judges predict that only a man with a "television personality" can hope to become President in 1952.

On the technical side great progress was made during the first years of the Chartered Corporation. To Peter Eckersley, who remained Chief Engineer of the BBC until 1929, is due the credit for two innovations in broadcasting practice, both of which made for the old Company's ideal of "alternative programmes". In 1925 he had taken to the long waves (wavelengths between 1,000 and 2,000 metres) in order to

the National wavelength and got a popular personality to make it could usually count on solving its financial problems for some years to come. There were however causes and speakers that failed to stir the generosity of the public and raised only hundreds instead of thousands, and there is a legend about a local appeal for a Willing Shilling fund, broadcast from Aberdeen, which brought in a total of sixpence.

escape from the congestion existing on the medium waves commonly used for broadcasting (between 200 and 550 or 600 metres). These long waves cover a greater area than medium waves, given equal power, and so the long-wave station at Daventry, right in the centre of England, was able to do the work that would have required a number of medium-wave stations, each using up a separate wavelength.

This use of the long waves has become familiar but it remains one of the important innovations made by the British Broadcasting Company. Until the experimental broadcasts from Chelmsford 5XX, which led to the opening of Daventry 5XX in 1925, nobody had seen the possibilities of the long waves for broadcasting. Manufacturers had not fitted their sets to receive long waves, and they are not used for broadcasting in America to this day. In Europe, however, they are now part of the general resources of broadcasting, despite a constant struggle between the broadcasters and the authorities responsible for Service communications, meteorological information, and other non-broadcasting uses of radio, who also want to use the long waves.

But long-wave reception has its vagaries, and one long-wave station could not cover the country completely, whatever its power. Further, Britain's allotment of medium wavelengths was endangered now that more European countries were discovering the importance of broadcasting. The old Company had used twenty wavelengths for its nine main stations, ten relays, and Daventry; there was no assurance of keeping more than ten.

So long before the Company became a Corporation, a new scheme for alternative programmes was laid, and this too depended on an innovation in broadcasting practice: the use of twin stations radiating different programmes from the same site, and the "synchronisation" of transmitters so that several stations in different parts of the country could radiate the same programme on the same wavelength without interfering with one another.

Like the use of long waves, the Regional Scheme was the work of Peter Eckersley, and he has fully described its genesis in his book "The Power behind the Microphone". He also explains his own disappointment at the use to which the new

resource of full alternative programmes was put; but before the scheme came to completion he, like so many of the most brilliant of the pioneers, had left the BBC.

The project of alternative programmes was first tried out on an experimental station at Daventry. Daventry 5GB, built alongside the already famous Daventry 5XX, was opened on August 21, 1927, and its programmes were printed in the *Radio Times* as an alternative to those of London (still 2LO). The success of this experiment, coupled with the results of the World Wireless Conference held in Washington in the same year, gave the go-ahead for the complete scheme. This involved five twin transmitters giving National and Regional programmes, one pair to cover the London area, one the Midlands, one the North, one Scotland, and one the West and Wales. Each Regional transmitter would use a different wavelength and be able to transmit a different programme; but all the National transmitters would use the same wavelength to transmit the same programme, using the device of "synchronisation" to avoid interfering with each other.

A start was made in London, where the new Regional station was built at Brookmans Park, fifteen miles out in Hertfordshire. The new station opened on October 21, 1929, replacing the famous old 2LO transmitter, with its aerial on the roof of Selfridges in Oxford Street, which had been working since 1923, when the actual transmitting station was moved from its original location at Marconi House in the Strand.

The Regional Scheme went ahead according to plan, with twin stations opening successively in London, the Midlands, the West, North, and Scotland. It must be said that the plan never worked out to the complete satisfaction of listeners. The original scheme had accepted the need for single stations on the old pattern for Northern Ireland and the North-East coast, which were not covered by the twin-station scheme, and in practice the area round Aberdeen proved to be a similar exception. The North-East remained a thorny problem, with the Newcastle station taking a mixed programme drawn from National and Regional alternately. The West of England and Wales resented equally being coupled together and were always suing for divorce : they were finally given

separate programmes in July 1937. East Anglia turned out to be a blind spot in the scheme. Only Daventry long-wave was easily heard there, so this station, which normally transmitted the ordinary National Programme for long-wave listeners throughout the country, had to be diverted occasionally to carry items of interest to East Anglia alone.

More fundamental was the criticism that the Regional Scheme cut away the local basis of early broadcasting, which had drawn largely on local talent and catered for local needs. Even after more and more items had become "SB from London", there was still a strong local flavour in many of the old stations' own programmes, and the "service area" was small enough to give each station a fairly homogeneous audience with a preponderance of similar interests. The new high-power stations, physically situated on lonely heaths like Moorside Edge and Westerglen, covered areas too large and too irregular to be lumped together. The Regions, based on technical coverage rather than on social characteristics, were as arbitrary in their composition as a dynastic empire. The Black Country was lumped together with the Cotswolds, the mill-workers of Manchester with the fishermen of Whitby, the sophisticates of Bristol with the dwellers on the Cornish coast. Even the Welsh and Scottish Regions, which had the most logical basis, had their divergencies between Highlands and Lowlands, North Wales and South Wales; to say nothing of the rivalries between Glasgow and Edinburgh, Cardiff and Swansea, for possession of the radio capital.

Wales always presented special problems, even after it achieved a Region of its own. Some people in North Wales could hear the Northern programme more easily than their own, some could hear no Welsh on the air unless it was broadcast by Daventry, and on the other hand some people outside Wales were driven distracted by finding that Welsh programmes were all that they could easily hear.

The Regional Scheme was a brilliant answer to the curtailment of Britain's allocation of wavelengths, and it brought choice of programmes to millions who had only been able to listen to one, but it led to very great anomalies on the programme side. Regions disputed their boundaries, and claim-

ed the right to draw programmes from areas where another Region could be more easily heard, for "programme areas" and "service areas" did not always coincide. Gradually each Regional programme acquired something of a distinctive character, sometimes arising from the character of the country or the city in which its headquarters were, sometimes due to the accidental composition of its headquarters staff. The West became the expected source of agricultural programmes, the Midlands specialised in industrial programmes and variety, the North pioneered the "feature programme". As for London, it never attempted to cater for specifically local interests, for its role was that of the headquarters station, supplying items of general interest to National and Regional programmes alike. For the Regions, like the old local stations, still drew the most important part of their output from London, and for hours of the day listeners everywhere would get programmes coming from London whichever of the alternatives they heard.

The full effects of the Regional Scheme did not begin to show themselves until later in the thirties, when the scheme was complete. The immediate effect of the change was to demonstrate the importance of having a good modern receiving set. A set that could pick up a low-power station at very short range could not always pick up a high-power station a little further away. Peter Eckersley has described how he inaugurated the first experimental station at Daventry, and the first part of his speech was broadcast by the old low-power station in Birmingham, the second by 5GB. A friend of his was among the many listeners with old-fashioned sets who found that when the change-over was made he heard nothing at all.

The same thing happened to many listeners as the local stations went out and the Regional stations came in. Many a weird and wonderful old wireless that had given its owner complete satisfaction when the station was a few streets away failed him completely when the transmitter was moved to Brookmans Park or Washford Cross.

It must be remembered that in the late twenties and early thirties the general level of radio reception was very low. Transmission itself had not attained the technical excellence

that it now has, and few receivers picked up a fair sample of what the transmitter put out. The average wireless set was harsh or boomy, interrupted by crackles of interference or whoops of oscillation, subject to fading that anticipated the later technical device, beloved of producers, by which speech sank to inaudibility in the middle of a phrase, and music sounded as though the orchestra was playing from a ship drifting out to sea. Broadcast Proms might bring in an enthusiastic new audience, but serious music-lovers still maintained with some reason that you could not judge orchestra, conductor, or composer by the controlled and distorted version of the music that came out of the loudspeaker.

Yet it was at this time that serious musicians began to accept broadcasting instead of referring to it contemptuously as "canned music", as they had before condemned the gramophone. Melba and Chaliapine had broadcast in the pre-BBC days, but once the wireless ceased to be a novelty the great performers grew more cautious. Gradually the opposition yielded as it became apparent that broadcasting could help the artist, not so much by means of the fees he got for it, which were not large, as by making him known to a new public who would then buy his records. (A large proportion of listeners were also gramophone addicts, as the dance-band leaders well knew.) The BBC's new habit of giving public concerts also helped. An artist invited to perform at the National Concerts in the Albert Hall or the Proms in Queen's Hall could rest assured that all the critics and the *cognoscenti* would judge him in person in the hall, and if the unseen radio audience liked him and bought his records, all the better for him.

The obstinacy of artists was not the chief trouble that the BBC had to face in the years between 1926 and 1932. There were other bans that came and went; music-publishers, theatre managements, sports promoters, and other interests who feared that their business was threatened refused to co-operate, but they could not stem the flowing tide. The public wanted to listen to broadcasting; the number of licences, which had passed the first million at the end of 1924 and the second at the end of 1926, had climbed to 3,412,000 by the end of 1930 and 4,331,000 by the end of 1931. With

this power behind it, the British Broadcasting Corporation had no need to worry unduly about opposition and bans. Time was on its side, and the people who imposed the bans would be only too anxious to climb on the band-wagon as broadcasting rolled irresistibly on.

The Press remained the chief force that the BBC had to respect; its news activities, widened by the inclusion of sporting commentaries, were not widened in other respects at a rate that could cause alarm.

The Press preferred the BBC to commercial radio but it was not friendly to broadcasting, though it printed the programmes, or as much of them as the BBC would supply. It found the BBC easy game, for the Corporation was undoubtedly heavy-handed in its actions, and despite the deft work of its Press chief, Gladstone Murray (1), it provided plenty of openings for attack. In particular, the Press found Sir John Reith unapproachable, superior, and uncongenial, whilst at the same time he was a figure of whom it was very easy to make fun.

Some of the best openings that the BBC gave to Press attacks were brought about by the bans it itself imposed. Until March 1928 the Postmaster General had reserved his right to prevent any controversial matter being broadcast; at that date he removed this ban (subject still to his overriding powers as conveyed by the Charter and Licence) but there was no great surge of controversy into the BBC's programmes. The debate on Communism, broadcast so early as 1923, did not set a precedent. Broadcasting became more and more orthodox and conventional. Scripts were scrutinised with increasing care, and nobody was allowed to broadcast without first submitting a script; even Bernard Shaw was refused the air. In political affairs the BBC probably felt that it had enough to do to keep all three parties and the Government of the day from active hostility, and it could not afford to take risks. In the General Election of 1929 the three parties had their shares in the rota of political broadcasts,

(1) The phrase "public relations" had not come into common use at this time and Murray's BBC title was *Director of Information and Publications*. The first Controller of Public Relations was Sir Stephen Tallents, who succeeded him in 1935.

but when the crisis came in India the person many listeners most wanted to hear was Winston Churchill, and not being at that time the nominee of any of the parties he too was refused the air. Such incidents drew attention to the defects of an official monopoly; in the American system it was inconceivable that Churchill should not have been heard.

The Press had one permanent source of grievance against the BBC in the fact that its own publishing activities were constantly growing. The *Radio Times*, with a circulation now advancing towards its second million, had become the biggest weekly publication in the country, and this position was based on its monopoly of detailed BBC programmes for the whole week and its priority in all sorts of BBC news. Various attempts were made to break down these positions; one Sunday newspaper made a practice of printing items lifted from the advance copies of the *Radio Times* (which began printing almost a week before its publication), but this practice was discontinued after a false item had been included in the advance copies, appeared in the Sunday paper, and then been removed from the published copies of the *Radio Times*. Several newspapers in turn tried to expand their broadcast programmes beyond the bare summary issued by the BBC for use in the Press. Copyright in the programme details had never been established in the law-courts and no case was ever brought, but the practical difficulty of getting the information caused all these attempts to fail.

Meanwhile the BBC went on its way as a publisher, as the Charter of 1926 had specifically entitled it to do. In 1928 and 1929 it published a *BBC Handbook*, succeeded in 1930 by the *BBC Year Books* which have continued annually to this day. It published an increasing number of brochures and pamphlets containing concert programmes, opera libretti, the syllabus of broadcasts to schools and listening groups, or background information and illustration to series of talks. These were usually lavishly illustrated and expensively produced, they were on sale on all BBC premises, and same of them enjoyed a considerable sale.

The Press was really aroused when the BBC proposed to add a third weekly publication to its stable that already comprised the *Radio Times* and *World-Radio*, in the form of

a magazine called *The Listener*, which was to appear early in 1929. The new venture sprang from a recommendation in the report of the Hadow Committee on Adult Education that the BBC should back up its educational broadcasts in print, but it had grown into a more ambitious plan for a weekly not only reprinting broadcast talks but dealing generally with literature, music, and art. Press interests took alarm at this and approached first the Postmaster General and then the Prime Minister. After various negotiations (1) the BBC promised that it did not intend *The Listener* to contain more than ten per cent "original contributed matter not related to broadcasting", that it would not try to make a profit out of its advertisements so long as the paper covered its cost, and that it had no intention of starting any further "newspapers".

Helped rather than hindered by these conditions, *The Listener* came out in January 1929 as a threepenny weekly better illustrated and produced than anything else then appearing at that price. People found it invaluable for reading at leisure talks that they had missed and talks that had interested them when they heard them on the air, but it also contained most of the usual features of a literary magazine, and, at a later stage, criticisms of broadcast programmes. It soon settled down to a prosperous circulation of some 50,000, which was to rise considerably during and after the war. Since then the BBC has launched no new periodicals except two weeklies, *London Calling* and the *Arabic Listener*, which circulate only abroad, and the original trio of weeklies has been reduced by the disappearance of *World-Radio* in 1939.

The BBC possessed in its publications a very valuable reinforcement, if any were needed, to the great power it already enjoyed through its command of the air. Through them it could put its own emphasis on its programmes, call attention to the projects of which it was proud, explain tech-

(1) Widely differing accounts of these negotiations have been given by Lord Reith in *Into the Wind* and by R.S. Lambert, first Editor of *The Listener*, in *Ariel and All His Quality*. The chief point on which they agree is that if the Press had played their cards better they could have got considerably better terms from the BBC.

nical developments, and even on occasion answer criticism — though the BBC's essays at answering criticism overtly have usually been bungled and it has succeeded better with the technique of counter-assertion, conveying an anwer without referring to the charge.

It is worth noticing that in its various controversies with the Press, the entertainment interests, and later with advocates of commercial broadcasting, the BBC has refrained from using the microphone for direct argument. It has been used for putting the BBC's own case on such fairly impartial subjects as wavelength changes, and often used extremely well, and it has been used habitually for calling attention to the BBC's journals, though its use here has astonished American observers by its moderation. But the possibility of making direct answers to direct charges has always been held in reserve.

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All this time the headquarters of broadcasting had been at Savoy Hill, the leafy backwater between the Strand and the Embankment, behind the Savoy churchyard, to which Mr. Reith had led his small staff from Magnet House on March 19, 1923. Savoy Hill combined studios, control room, and offices in a maze of adapted flats, and the spirit of cheerful activity that pervaded the building is still a vivid memory with people who worked there or broadcast from the studios. Everybody was cheek by jowl—announcers, administrators, engineers, band-leaders, comedians, high executives; everybody knew each other and the commissionaires knew everybody. Working conditions were often very bad. A musical-comedy programme might come from a studio packed to suffocation, and the first "dramatic control panel" used for producing radio plays was housed in an office with a ground-floor window opening on to the street; but these conditions were not inappropriate to a medium that still depended so largely on the gusto and camaraderie of its performers and its staff.

Between 1923 and the end of 1931 the BBC was steadily out-growing Savoy Hill. The bulk of the programmes came

from London, and administration, finance, engineering, publishing, and all the ancillary activities were centralised there. Despite the increasing proportion of outside broadcasts (in the early days of which Savoy Hill proved conveniently close to the Savoy Hotel) the studios were both congested and inadequate. There was a wide gap between the sort of concert that could be broadcast from Studio One and the sort that could be broadcast from Queen's Hall. A disused warehouse on the South Bank, under the shadow of Waterloo Bridge, was turned into Number Ten studio, the largest so far, but the congestion went on.

On the office side things were even worse. By 1931 the BBC was renting numerous offices up and down the Strand, inter-office communications were slowed down, colleagues never met. These were internal troubles but the general state of confusion and delay, coupled with an increasingly rigid centralised administration, was not without its effect on what listeners heard.

So for some time the BBC had been looking for a new London headquarters, and the choice finally fell on the site at the foot of Portland Place opposite All Souls Church and the Langham Hotel, which had formerly been occupied by Foley House. A great building arose to make a new London landmark with its nine-storey frontage of Portland stone, whilst three more storeys below descended perilously close to the Bakerloo Tube. The official transfer of the BBC's headquarters from Savoy Hill to Broadcasting House took place on May 2, 1932. The second phase in the story of British broadcasting had closed.

CHAPTER FIVE

NATIONAL INSTITUTION

BETWEEN 1932 and 1937, British broadcasting completed its infiltration into the life of the people. The number of radio homes rose from less than four and a half million at the end of 1931 to almost eight million at the end of 1936 and nearly eight and a half at the end of 1937. The BBC itself became more of an institution, the recognised means of communication with the people on all national occasions; and it won a renewed Charter assuring it of continuance for the ten years beginning in 1937, with the fair assumption that this way of running broadcasting had now become an accepted feature of the British scene. With the start of broadcasts to the Empire it began to spread its impact beyond these shores.

At the same time it began to find rivals. "Wired wireless" challenged the claims of radio broadcasting, commercial broadcasts challenged the BBC's monopoly, and television challenged the dominance so swiftly attained by a medium that had to work through the ear alone.

The move to Broadcasting House in May 1932 (1) seemed to symbolise the change in the status of British broadcasting. Savoy Hill had been an old building in a backwater; Broadcasting House was a vast new building, specially designed for its purpose, facing on to London's widest and most stately street. Lord Reith has recalled that the staff who went from Magnet House to Savoy Hill numbered 31, "including a commissionaire, a cleaner and an office boy". When he addressed the London staff in the great new concert hall

(1) The official opening of Broadcasting House as a programme centre took place on May 15, and the previous night there was a very elaborate broadcast called *The End of Savoy Hill*. Lord Reith says in his autobiography that the BBC flag was first flown from Broadcasting House on May 2.

nine years later there were "about seven hundred of them", and Regional headquarters and transmitting stations up and down the country employed many more.

In retrospect Broadcasting House has something of the aspect of a BBC Folly. But it had many good features; it provided more than twice the number of studios previously available and their sound-insulation and air-conditioning were a great improvement on anything that had been known before. Technical facilities were far greater than they had been and elaborate programmes could be produced with greater certainty and less strain. As for the incidental pomposities and affectations of the new building, the rapidly-outmoded extravagances of its decoration and the inconvenience of much of its office accommodation, these were symptomatic of the mood of the BBC at the time, but they were also symptomatic of the stage that broadcasting had reached. Both in Europe and in America radio organisations were housing themselves with similar grandiosity, perhaps only as a reaction from the days when "the wireless" was carried on from stables and garrets, and to be "in radio" was assumed to mean being either an announcer or an engineer. By now many of the most important people in radio were neither. Careers could be made without ever speaking into a microphone or turning a knob.

A more serious defect of Broadcasting House was that it was not big enough. The ideal of having all the BBC's headquarters activities under one roof was not realised in May 1932 and has not been realised since. The new concert hall would not hold the Symphony Orchestra so the BBC used Queen's Hall. Variety shows wanted a bigger audience than the variety studios could hold so the BBC took over St. George's Hall. Studio Ten under Waterloo Bridge was kept on until four new studios could be built in a former skating-rink in Maida Vale. Offices spilled over, up and down Portland Place and further afield. Even before war brought unlooked-for expansion, the BBC was scattered more widely over London than it had been in the days of Savoy Hill.

In the Regions too the BBC was busy re-housing itself. There was a great deal of studio-building, involving constant

experiment in the little-understood science of acoustics for the microphone. The early studios had been muffled so as to deaden all echo, but the effect itself was dead, and as transmission and reception improved so that some at least of the *nuances* of tone got through to some of the listeners, radio men began to aim at differing degrees of "brilliance" according to the type of programme that was being broadcast. In Britain and elsewhere they tried all sorts of new devices in studio construction; every broadcasting headquarters could show you some such novelty as a studio with no two walls parallel, or a concert-hall with revolving panels of absorbent and non-absorbent material that could give all possible combinations of reverberation. Heroic devices were introduced to insulate studios from outside sound. London's Broadcasting House had the majority of its studios contained in a brick tower built inside the steel framework of the main building, and NBC's New York headquarters in Radio City had its biggest audience studio "floated" within the main structure.

A great deal of progress was made and studio acoustics improved markedly, but many of the most ambitious experiments proved unpractical and were quietly abandoned. Some of the best results came by chance, and just as no studio had ever proved better for sound than the Palm Court of the Grand Hotel at Eastbourne, so some first-rate results were subsequently got from buildings hastily equipped with microphones and put into service during the exigencies of war.

Through the early thirties the BBC was busy completing its Regional Scheme, bringing alternative programmes to the great majority, though neither technically nor in the contrast of programmes did it work out altogether in accordance with Eckersley's original ideal. In January 1934 the BBC secured an extra medium wavelength (allotted by the European Broadcasting Convention which met at Lucerne) and it could now dispose of eleven medium waves instead of ten, with one long wave in addition. By the end of 1936 the distribution was as follows:

There was one long-wave transmitter radiating the National Programme, with three medium-wave transmitters

covering London, West, and North; these three all synchronised on one wavelength, as in the original plan. Then were six Regional stations (London, Midland, West-and-Wales, North, Northern Ireland, and Scotland) all broadcasting on different medium waves. But there was also a Scottish National transmitter using a different wavelength from the other three National transmitters, and there were auxiliary stations at Plymouth and Bournemouth (these two sharing a wavelength), Aberdeen and Newcastle. The long-wave transmitter radiated certain programmes that could not be heard on the medium-wave National stations although they were heard on the medium-wave Regional stations. The main Regions produced some programmes themselves, took more from London Regional, some from other Regions, some from National, and the auxiliary stations might take them from anywhere.

With all these complications, the Regional Scheme never succeeded in giving listeners all over the country choice of contrasted programmes on an ordinary set at all times of the day. The BBC was on the air for rather more than twelve hours a day but there were many periods when both sets of stations were sending out the same items, and even when they were different they did not always form a contrast in anything but name. On the other hand, during the periods when the Regions did branch out into their own programmes, a listener with a good set might get choice of more than two programmes. This applied especially to listeners living near the border of two Regions, but the more expensive sets could bring in all the Regions, in varying quality, after dark, as well as many programmes from stations abroad.

The outstanding achievements of British broadcasting during those years were undoubtedly on Royal and national occasions; the visit of King George V and Queen Mary to Broadcasting House in July 1932 seemed to symbolise the new status of broadcasting and its fitness for the highest tasks. There had been royal broadcasts before this, but Christmas Day of that year was the first occasion when the King spoke directly for listeners instead of being relayed from some public gathering, and his speech was preceded by the first of the "round-the-Empire" programmes that were

to become a regular feature of Christmas Day. The King was heard also by listeners in the Empire, by means of the short-wave broadcasts that had started a few days before, which will be more fully referred to later as one of the new and enterprising activities of the BBC.

On May 6, 1935, King George V celebrated the Silver Jubilee of his accession, and the BBC marked the occasion with the most ambitious series of broadcasts it had ever attempted. For some seven million families, the wireless set was the chief means of contact with the official ceremonies and gave the most vivid expression to the national mood.

This new part that broadcasting could play became even more prominent when the reign came to an end. The King broadcast as usual on Christmas Day, 1935, and within a month listeners were following his last illness with an intensity unknown before. Increasingly frequent bulletins led to the solemn announcement "The King's life is moving peacefully to its close", and for the next three hours, as Lord Reith puts it, "the world almost listened-in to the room in Sandringham House", until shortly after midnight he himself announced the death of the King.

The BBC's arrangements had been carefully made and they were efficiently carried out. On occasions of national solemnity, such as the death of a President, it is the custom for American radio stations to cancel their commercial programmes, out of an obscure feeling that this much-prized manifestation of the national spirit is somehow not in keeping with the public hush. The BBC had no commercial programmes to cancel but it cancelled almost everything else. Nothing was broadcast the next day except set announcements, and in the lengthy interval between a royal demise and a royal funeral the public heard little but solemn music. The funeral itself was broadcast, and broadcasting then settled down into its usual routine.

The new King, Edward VIII, was soon at the microphone; he broadcast to the Empire on March 1. He was already well known as a broadcaster and an exceptionally good one, though his light voice with its slight twang contrasted markedly with the slow deep tones of the old King.

Later in 1936 his abdication gave broadcasting its greatest

moment. The King's statement announcing his abdication was broadcast on December 10, and on the following day Edward sat down before a microphone in Windsor Castle to make his own personal statement, undoubtedly the most eagerly-awaited and widely-heard broadcast since broadcasting began. In two hemispheres listeners bated their breath when Edward started his statement with the words "At long last I am able to say a few words of my own". It was a moving broadcast and it left millions in tears, though it did not contain the revelations that some listeners had expected, nor any criticism of the conduct of the Prime Minister or the Archbishop of Canterbury; the world had to wait fourteen years for these to appear in *Life* magazine.

1937 brought greater magnificence, if less poignancy, with the Coronation of King George VI. Here again the BBC's efficiency was beyond praise. The ancient ceremony itself was broadcast from start to finish, with rubrics reverentially uttered by the BBC's Director of Religious Broadcasts; the procession was described from a dozen points; facilities were given to guest broadcasters from a score of countries; and the first outside broadcast by the new television service brought viewers a close-up of the Royal coach as it passed out of Hyde Park, with the cameras only a few feet from the King and Queen (1).

The new King followed his father's example by broadcasting to his peoples on Christmas Day, 1937, the first Christmas of his reign, and this annual broadcast, which seemed at one time likely to be abandoned, was continued throughout the war and has now become an expected feature of the radio calendar.

In a very different connection, the near-universality of listening to the BBC was strikingly shown by the scenes at the Crystal Palace fire. The great glass building caught fire on the evening of November 30, 1936, and the first mention of the fire was broadcast in the nine o'clock News.

(1) This is usually referred to as the first "outside broadcast" in television history. Actually, it was the first to be achieved by high-definition television anywhere in the world. But John L. Baird televised the Derby from Epsom as early as 1931, using low-definition television, which could be sent over ordinary telephone lines.

Everybody seemed to have heard the news and disregarded the added warning not to block the roads. All over London crowds gathered on hills and roof-tops to gaze at the flames afar, and those with cars droves straight to Sydenham in such numbers that fire-engines had the greatest difficulty in getting near the fire. One of the victims of the congestion was the BBC's own director of Outside Broadcasts, S.J. de Lotbinière (1), who had rushed down to try to arrange a broadcast from the spot, and it was nearly midnight before he succeeded in getting through from a telephone in a house nearby.

Apart from royal and national occasions, the BBC went on catering for all tastes, though in varying degrees. Sir Henry Wood continued to conduct the Proms every summer, and the rapturous crowds that queued for Queen's Hall were augmented by recruits from the army of listeners. In 1932-1933 a season of Winter Proms was added, but though these were broadcast they never attained the prestige nor the popularity of the concerts that had always been given in the dog-days. Adrian Boult (who was knighted in 1937) conducted the Symphony Concerts, with the aid of various visiting conductors, notably Toscanini, whose first concerts in 1935 still linger in the memory of music-lovers (2). A very fine organ was built in the Concert Hall at Broadcasting House, where also concerts of contemporary music brought listeners many works that would not otherwise have found a hearing here. The BBC had become the chief patron of music and musicians, not only in London but in the Regions, and although there was no actual evidence as to how many people listened, there can be little doubt that hearing good music on the radio did make many people buy scores (or more likely records) and go to concerts, so contributing directly to the support of live music-making, which broadcasting had inevitably done so much to supersede.

One curious aspect of this association of broadcasting with music-making was the opera subsidy. Grand opera at Covent Garden was threatened with extinction through financial

(1) He was appointed in 1935 to succeed Gerald Cock, who had begun the task of starting the television service.

(2) He came again to conduct for the BBC in 1937, 1938 and 1939.

difficulties, and the Government wished to save it. It would have been unprecedented at that time for Government money to be paid directly to a theatrical management, and the BBC was unwilling to contribute permanently out of the licence money to a concern that was not one of its most reliable sources of programmes. The solution found was for the Government to make the BBC an annual grant of £17,500, which of course could be ear-marked to the proportion of the licence money that the Treasury retained, and for the BBC to pay £25,000 a year to the Covent Garden management. This arrangement was made in 1931, when Philip Snowden was Chancellor of the Exchequer and Mrs. Snowden, who was a great believer in grand opera, was a Governor of the BBC.

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Serious music was, of course, not the only preoccupation of the BBC. The Concert Hall organ in Broadcasting House was soon followed by a theatre organ in St. George's Hall, with Reginald Foort as the first permanent organist. He had made a great reputation by his broadcasts from the New Gallery Cinema, and aided largely by his insistence on making his own announcements, he achieved a remarkable position as a broadcaster before he left in 1938 to tour a huge transportable organ round the music-halls. He was succeeded at the BBC by Sandy Macpherson, formerly of the Empire Cinema. Henry Hall became director of the BBC Dance Orchestra in 1932, leaving the fans full scope to argue the merits of his band and his music as against those of his predecessor, Jack Payne.

There had always been popular programmes in the variety category, mostly individual turns by artists like Stainless Stephen, John Henry, Clapham and Dwyer, and Norman Long, but also some "book shows" such as Ernest Longstaffe's radio pantomimes. But for the most part these programmes had been broadcast irregularly; you might enjoy one but you had no idea when the next would be, and if you tuned in at the same time on the same day next week you might get a Symphony Concert or an opera from Bayreuth. The first

variety programme to have a fixed day and time was "Music-Hall", a Saturday-evening variety show that made its first appearence in March 1932 and is still running in 1950. The radio Music-Hall was the reverse of "radiogenic", to use the term then fashionable for the sort of radio programme that was essentially contrived for the medium and could be presented more effectively in a broadcast than in any other way. It consisted mainly of vaudeville artists doing their ordinary acts, and it was presented to an audience in St. George's Hall, with curtains, numbers in the frame, and all the concomitants of the flesh-and-blood variety house. But the atmosphere of the music-hall apparently got over to listeners at home and, as so often happen, outweighed the demerits of the programme considered strictly as a radio show.

At this time, however, the BBC's broadcasts of light entertainment were severely handicapped by the hostility of the music-hall managements, represented primarily by George Black, who controlled a near-monopoly centred on the London Palladium and could virtually deny popularity on the halls to any artist whom he chose not to employ. Seeing the success of broadcasting he feared the inroads that it might make on his audiences, and as the BBC did not pay its artists enough to make them independent of stage work, he could usually cut off an artist from the microphone by giving him or her a contract containing a clause by which broadcasting was barred unless the management gave its consent.

This war between the music-hall combines and the BBC continued intermittently for some years. The music-hall magnates were not blind to the uses of broadcasting in popularising artists who had yet to arrive, and any number of acts billed themselves as "the radio comedian" or "the BBC favourite" on the strength of one or two casual engagements, or inclusion in a relay from a music-hall. The managements were willing enough to allow such artists to broadcast whilst under contract to them, but when it came to the stars, where broadcasting would really benefit, they usually refused. There was a period when they made raids on broadcasting's own preserves, booking up artists who owed their fame to radio, or complete radio shows, and these would then be allowed

to broadcast only when the managements thought it would help their box-office.

Finally the point came where the managements realised that they could no longer resist; they would gain more by playing in with the BBC. Largely through their own short-sightedness, the British music-hall was in a decline. The Palladium, shop-window for British variety, had become almost a preserve for visiting American movie stars, and the profession was not producing the constant stream of new talent necessary to combat the appeal of the talking films. The growing use of pre-recording helped both sides, for artists could give their performance into the microphone in their spare time and the recording of it could be broadcast at a "peak audience" hour without interfering with their stage work. Nowadays it is a commonplace for an artist to be broadcast in one role at the very moment when he is playing quite a different role on the stage (1).

The history of the Royal Variety performance as a broadcast makes an interesting commentary on the relations between the BBC and the music-halls. This annual variety gala is a charity show and in the thirties it was always held at the Palladium and always broadcast in whole or in part, the BBC paying a considerable fee to the Variety Artists' Benevolent Fund. It was usually the biggest variety broadcast of the year, and the BBC was quite prepared to fill in part of the time by broadcasting spoken descriptions of entirely visual acts in order to get the stars who might not be allowed to broadcast at any other time. The annual broadcasts of the Royal Variety Performance lasted from 1926, when there was a half-hour relay from the Alhambra, until 1945, after which they were stopped at the instance not of the music-hall managements, but of their rivals, the cinema-proprietors.

But even if the BBC could broadcast the annual gala, the musical-hall bans kept it from getting topline stars for programmes like the weekly "Music-Hall". It had to rely on

(1) For instance, both Bonar Colleano and Bernard Braden starred in comedy shows on the radio whilst they were playing in *A Streetcar Named Desire* at the Aldwych Theatre in 1950, and both radio shows were broadcast during the evening performance when their heroes were on the stage.

invention rather than use of ready-made names, and in 1933 radio variety was erected into a separate department and put under the charge of Eric Maschwitz, formerly editor of the *Radio Times* (1). His first success was with "In Town Tonight", which began on November 18, 1933, and has continued to be a feature of Saturday-night broadcasting through most months of the year until the present day. This programme typified the new approach, which was that of journalism rather than of the stage. Celebrities visiting London, odd London characters, people just back from strange places and people just off to strange places, people with odd hobbies, were interviewed before the microphone by skilled broadcasters whose job it was to get the most possible out of them in the shortest possible time. Through good scouting, good editing, and good interviewing the programme became immensely popular; some of the "characters" were able to capitalise their new fame and some of the interviewers became popular favourites, like Bryan Michie, who was the first of the regular staff to leave the BBC and make much more money on he halls.

The variety department created many other popular shows not depending on star artists from the stage, amongst them Café Colette, which so well exploited the atmosphere provided by romantic music and Continental accents that many listeners thought it came from a genuine Continental café. The Scrapbook series, in which a bygone year was re-created in speech and song, started in December 1933 and has run as an occasional programme ever since. More controversial was the introduction of a dancing troupe, employed by the BBC to lend atmosphere to "Music-Hall". The Eight Step Sisters, trained by Mrs. Rodney Hudson, made their radio debut in 1933, and they were later succeeded by the Dancing Daughters trained by Rosalind Wade. They were much publicised but many critics objected that it was absurd to hire a team who contributed nothing to the microphone but taps which an effects boy could produce equally well, and that the BBC ought to be able to find some better way of achieving atmosphere than that.

(1) He left the BBC in 1937, when his musical romance *Balalaika* was an outstanding stage success, and was succeeded as Variety Director by John Watt.

The BBC had however one legitimate use for a dancing troupe and that was at the Radio Exhibition at Olympia. This annual exhibition by the wireless trade became more and more important as the industry grew, and although trade buyers and potential private purchasers viewed it mainly as an occasion for looking over new developments in set design, the general public prized most highly the chance to get a glimpse of broadcasting personalities in the flesh. So the BBC contributed a stage show, and the broadcasts from it helped to keep the exhibition in the news.

These stage shows began in 1933, and continued year by year. But the appeal of seeing radio personalities and radio shows on the stage, to which they were often ill suited, soon needed reinforcing, and television was called in. In 1936 the station at Alexandra Palace was opened ahead of time so that the viewing screens at Olympia could provide the chief novelty attraction of the exhibition, and in 1938 a glass-walled television studio, from which real programmes were performed, replaced the stage show.

Another type of programme that rose to popularity in these years was the "feature programme". This phrase had been used loosely since the early days of broadcasting to express any assemblage of items strung together by an idea, though the idea might be no more precise than "The Sea" and the items might consist of a more or less miscellaneous collection of bits of music and poetry which mentioned the sea in their titles. The idea persisted that radio could be used in forms other than those of the straight play, concert, lesson, or talk, as had indeed already been shown by such original productions as Tyrone Guthrie's "The Flowers are Not for You to Pick". But in the thirties "documentary" had become the fashion amongst the *avant-garde* of the films; Robert Flaherty's earlier achievements had been further publicised by the success of "Man of Aran", and John Grierson and the men who worked with him were making documentaries that thrilled the critics here. Documentary was in the air, and the thinking men of the BBC, who were nearly all connoisseurs of films, naturally turned to this form to show what the radio medium could do.

The rise of the feature programme (in the new sense of the word) was largely due to E. A. F. Harding, who had produced

the first "Round-the-Empire" Christmas Day programme in 1932. Having gone to the BBC's North Region as Programme Director, he found there an unknown writer named D.G. Bridson who had a gift for original expression in radio terms, and before long the North Region became the stronghold of the feature programme, which brought out the potentialities of the radio medium on quite a new side. Especially notable was "The March of the '45", first broadcast in 1936, which set out to tell the story of the Jacobite rebellion not as a historical event but as a human epic, put across to the listener with every resource of verse, music, and effects. This was real sound radio, working within its own technique and on its own ground, and it led the way to many more experiments in the same *genre*, from Archibald MacLeish's American programme "The Fall of the City" to more recent examples such as Louis MacNeice's "The Dark Tower".

The intellectual ascendancy of the feature programme was not an unmixed blessing to listeners; it lent itself to a good deal of "radiogenic" nonsense, in which the medium was used artily for purposes that nobody except the author really understood; but the real usefulness of the form was to be revealed later by the exceptional needs of war.

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Whilst broadcasting consolidated its hold in Britain with better transmission, better reception, more choice of programmes, and more variety in the programmes themselves, it was launching out on the quite new venture of broadcasts directed specifically to listeners overseas.

Inside Europe there had always been international broadcasting and international listening. Radio waves do not stop short at frontiers, stations like Daventry, Hilversum, and Eiffel Tower were known to have considerable foreign audiences, and on occasions one country deliberately broadcast for the benefit of listeners to another. The possibility of broadcasting from Britain to the Empire was opened up by the use of ultra-short waves (between 15 and 50 metres), which can travel great distances by alternate reflection

from the upper atmosphere and from the land or sea, and can be directionally beamed, or concentrated to form an invisible searchlight rather than an invisible beacon, and so can be aimed specifically at any part of the world.

The short waves soon became the playground of the amateurs, those enthusiasts who had given the first welcome to broadcasting. As listening settled down into a habit and ordinary people prosaically turned on the radio to get entertainment or news, the "DX-ers" went on fishing in the ether in the hope of logging new stations rather than listening to anything in particular. Once they had tuned in a hitherto inaccessible station they would listen long enough to identify the call-sign and the programme, and then write off to the station asking for confirmation of their claim to have heard it. The expert DX-er would have his mantelpiece adorned with row upon row of these confirmatory cards.

Short-wave broadcasting multiplied the stations and countries that they could hope to hear. In the early days of short-wave listening the names of fame were Pittsburgh (KDKA) and Schenectady (WGY), and many a British listener tuned them in after the BBC had closed down for the night. Many amateurs gradually lost interest in chasing new stations and found real enjoyment in listening to programmes so different from what could be heard at home. But the real "hams" moved in the other direction. The *élite* among them took out an "experimental" transmitting licence and entered into a strange freemasonry of the air. They talked constantly to other amateurs in other lands, and made friends they had never seen in places they would never visit. Sometimes these amateurs did valuable work in passing on communications that would otherwise have been lost. Roaming the by-ways of the ether they picked up messages from ships, explorers, aeroplanes; there was one fantastic occasion when a doctor in America was sent to a neighbour across the mountains only a few miles away by an amateur in Surrey who had picked up the appeal for help.

These were some of the adventures lying in wait for the keen amateur, but even without a transmitting licence he could pick out of the ether many things more piquant then formal broadcasts. He could overhear the "service convers-

ations" in which radio men arrange important international broadcasts and speak with professional levity of the great ones of the earth. He could eavesdrop on the transatlantic telephone (which he was not supposed to do but who was to know?) and divert himself with conversations between Americans in Europe and their friends at home. In those days speech was not scrambled (1) on the radio-telephone, and although different wavelengths were used for incoming and outgoing circuits, an expert operator could tune from one to the other fast enough to hear most of what was said.

Britain did not enter the short-wave field so early as America; the first short-wave broadcasts from Britain were those from Chelmsford, which opened on November 11, 1927, and soon made Chelmsford's call-sign 5 SW familiar to short-wave listeners all over the world. Chelmsford went on broadcasting, sometimes transmitting BBC broadcasts of such outstanding occasions as the solemn service of thanks-giving for the recovery of George V in 1929, until it was replaced by the Daventry short-wave station that was to become even more famous. It was from Daventry that the BBC broadcast its first special daily programmes deliberately planned for an Empire audience, and Daventry continued to provide the chief link between Britain and the far corners of the Commonwealth through the great expansion of short-wave broadcasting that came with the war.

The BBC acted boldly in starting Empire broadcasts. It had no mandate to do so, and the licence-holders who provided the money might well have complained that they paid their yearly tĕn shillings to provide themselves with radio, not to subsidise broadcasts that they could not hear. But the BBC was acting on its principle that if there was any broadcasting to be done in or from Britain, the Corporation was the body to do it. The advantages of radio as a means of facilitating understanding within the Commonwealth had become

(1) Scrambling is a neat technical device whereby speech is rendered unintelligible before it is transmitted and decoded, so to speak, at the other end. It was used for all important radio-telephone conversations during the war, and although it is technically possible to record scrambled speech and subsequently unscramble it, this is an intricate and laborious job.

increasingly obvious, and various Government Departments had been pressed to do something about it. By starting its Empire broadcasts on its own responsibility and with its own money, the BBC ensured that the service should remain independent of Government. It also struck a stout blow for the principle of a broadcasting monopoly; everything broadcast from Britain was under the control of the BBC. And it gave an excellent example of public spirit, which was to be quoted frequently in arguments about the constitution of British broadcasting when the first Charter came to an end.

The Empire Service from Daventry began on December 19, 1932, and consisted originally of five separate transmissions, spaced through the twenty-four hours, for five zones covering amongst them the world from Canada to Australasia. The Empire Service remained a very small dependency of the BBC, but it was staffed by enthusiasts rather as domestic broadcasting had originally been, and without much money or much supervision they achieved creditable results. As world tension grew and the threat of war increased the Empire Service gained in importance, until in 1938 it was joined by the first foreign-language broadcasts in which the element of counter-propaganda was admittedly supreme.

While Daventry made a new name for itself with listeners thousands of miles from Britain, a new high-power station had come surging into radio homes here. From October 1934 the National programme on long waves came from the new transmitter at Droitwich, which backed it with the latest ideas in technical design and a power of 200 kilowatts. A far cry from the 1½ kilowatts of the 1920's, or even the 25 kilowatts that had ranked as "high power" in 1925.

Firmly established in the home countries, heard and respected in the Empire as the most intimate link with Royal and national occasions, British broadcasting on the plan established in 1927 seemed to have become part of the British way of life. Not that there were not troubles, difficulties, even rivals arising, as the ten years of the first Charter rolled on.

CHAPTER SIX

DIFFICULTIES AND CHALLENGES

SIDE by side with the successes went the difficulties and the challenges that the British system of broadcasting met and overcame during the years of the first Charter. As has been briefly mentioned before, some of these threatened the BBC as an institution and some threatened the supremacy of broadcasting itself.

To deal first with the BBC. Throughout the thirties it met with constant criticism, which always found a ready mouthpiece in the Press. Some newspapers were especially active in reflecting and if need be exaggerating the defects of the broadcast programmes and the mistakes of the BBC. Serious criticism of the content of broadcasting and its general trends was rare, largely because the majority of serious people did not take the wireless seriously and expected little of the BBC. But this was the age of the radio critics in the popular newspapers, some of whom had very large followings amongst their readers. Sydney Moseley, the pioneer radio critic, had often embarrassed the BBC by revealing plans and decisions that had not yet been officially announced, and many members of the BBC's own headquarters staff used to read him in the *Daily Herald* so as to find out what was going on upstairs.

Similar revelations were later to become the speciality of Collie Knox, Jonah Barrington, and Garry Allighan, and they always found plenty to reveal. The BBC became increasingly maladroit in its public actions, and its own mistakes gave colour to a great many attacks to which it really had a sure reply. Readers who for their own reasons found the broadcast programmes not to their liking were ready to believe the worst of the institution that provided them, and no member of the staff could leave the Corporation, nor any band-leader or artist fall into disagreement with it, without

their assuming immediately that the BBC was in the wrong.

Although much of the criticism was unfair, there was some fire behind the smoke. Sure of its own strength and confident in its Director-General's ability to negotiate with Governments and political parties, the BBC did tend to ignore the wishes of its listeners. Its strict Sabbatarianism was a constant source of annoyance to people who found their best opportunities to enjoy their wireless on Sundays and were driven to foreign stations to find anything they could enjoy. There were misjudged experiments like the attempt in 1934 to introduce the twenty-four hour clock, which the BBC thought it could popularise without support from any other quarter, so that whilst trains still left and posts were collected and public clocks worked by the traditional twelve-hour times, announcers persisted in saying that the next programme would begin at eighteen hundred hours or end at twenty-three-oh-five. In this instance Broadcasting House itself was astonished at the vigour of the public's reaction and dropped the experiment with some haste, but in general the impression given by many of its actions was that it did not know or care what people liked or wanted but decided out of its own higher judgment what they should have.

One of the most constant charges against the BBC was that it behaved tyrannically towards its staff. The public's idea of the typical BBC official of the period probably took the shape of a respectable young gentleman with a brief-case and a rolled umbrella, and it was widely believed that the more active and enterprising were frequently forced to leave. Again, Sir John Reith was known to believe that appearance as a respondent or co-respondent in a divorce suit was incompatible with any role of prominence in the BBC, and amongst those who left for this reason the most outstanding was Peter Eckersley, the original genius of the technical side. Under the British system, to leave the BBC was to go out of British broadcasting, and in an age when divorce was becoming common and the distinction between guilt and innocence was often merely technical, this rigid attitude was not in accordance with the general opinion of the public.

Morals were not the only department in which the management of the BBC was suspected of interfering with the

private lives of its staff, and when the case of Lambert v. Levita came into the courts in the autumn of 1936 the public began to feel that the wildest newspaper stories might have been true. The case aroused public interest through its most exotic incident, the story of the Talking Mongoose said to haunt a farmhouse in the Isle of Man, which danced, sang, whistled, was eighty-three years old, and answered to the name of Gef. It aroused more serious attention for the light it cast on the management's dealings with one of its staff (1).

The essential facts were that R.S. Lambert, editor of *The Listener*, proposed to bring an action for slander against Sir Cecil Levita on account of statements made about him to Gladstone Murray, a senior official of the BBC, by Levita in February 1936. The disagreement between Lambert and Levita arose out of disputes in the Film Institute and not out of Lambert's work for the BBC, but Lambert claimed that the allegations, which included his "belief in the occult, notably the talking mongoose", tended equally to show that he was unfit for his job in the BBC.

What the case revealed was the surprising action of the BBC towards an employee seeking to defend himself in a private lawsuit. Sir Cecil Levita was able to approach the Chairman of the Corporation, and his lawyers were in correspondence with its Vice-Chairman, without Lambert's knowledge, and subsequently his immediate superior informed him that if he went on with his action there was serious danger that he might prejudice his position in the BBC, one of the grounds being that he would seem to be placing his own interests in priority to those of the Corporation.

The immediate result was a verdict for the plaintiff with the resounding damages of £7,500. The next result was the appointment by the Prime Minister of a Special Board of Enquiry "to enquire into certain statements made in the course of the recent case Lambert v. Levita, affecting the British Broadcasting Corporation" (2). The enquiry took into

(1) The case has been fully described by its protagonist in *Ariel and All His Quality*, by R. S. Lambert (1940). The story of the mongoose was told in *The Haunting of Cashen's Gap*, by Harry Price and R.S. Lambert (1936).

(2) The Ullswater Committee of enquiry into the future of broadcasting

cognisance developments in the relationship between Lambert and his employers after the verdict, and its report criticised them for some of their actions before the case came into court and him for some of his actions afterwards. But it pointed out the lack of any ordinary procedure in the BBC for dealing with matters affecting the personal interests of its staff, and emphasised that the BBC had no right to demand that its employees should always put the interests of the Corporation before their own.

There is no doubt that the incident had more far-reaching effects. Coupled with changes inside the BBC itself, it gradually brought about a very considerable change in its attitude towards its staff. Autocrats usually believe they are benevolent and paternalism usually thinks it is acting in the best interests of erring sons, but from this time onwards the BBC was less confident in its exercise of autocratic paternalism. The door opened gradually to the idea of staff representation by councils or associations recognised by the management, which were a feature of most big concerns and were highly developed in the Civil Service but had not yet taken root in Broadcasting House.

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The domestic concerns of the BBC have always been of inordinate interest to the British public, partly because the BBC itself has been so reticent about them that there has been ample scope for unauthorised revelations and hints, partly because the output of the BBC goes into every home and everybody has his own opinions of it, partly also because as British broadcasting is a monopoly people feel that the comings and goings of its personnel have a direct effect on what they can hear on the air. But in this period between 1931 and 1937, broadcasting and the BBC triumphed over far more formidable opposition than that of the radio critics

had completed its work in 1935 and no further enquiry would normally have been due for ten years. Sir Stafford Cripps did mention the Lambert incident in the Commons debate in April 1936, which resulted in the grant of the second BBC Charter, but as the case had not come into court his reference was naturally guarded and brief.

and a few unusually independent members of its staff.

First there was the challenge of "wired wireless", which threatened the very basis of broadcasting. "Wired wireless" means that the individual listener gets his programmes not through an aerial attached to his wireless set but through a wire. The wire connects him to a master station which may pick up programmes from the air, using if necessary a far better installation than the individual listener can afford, or may receive them, also by wire, direct from a studio or transmitter. The system first came into use here in the very first phase of broadcasting, when a Mr. A.W. Maton began supplying his friends with BBC programmes received on his own set and fed to their houses by wire. In those days radio sets were not always easy to operate and aerials were often unsightly, so there was much to be gained by having only a loudspeaker in your house and letting somebody else have all the worry of picking up the programme. Mr. Maton was able to start a commercial "relay exchange", which opened in the village of Hythe, near Southampton, in January 1925, the charge to subscribers being 1s.6d. a week.

Although the subscribers did not have their own wireless sets, they had to have their own licences. Mr. Maton secured permission from the Southampton Post Office to open his exchange, and it was given on condition that each subscriber took out a licence. So the popularity of the relay exchanges was never based on licence evasion. It was rather based on convenience, certainty of getting good reception in areas where reception was difficult, and sometimes on the attraction of hearing foreign stations as well as the BBC.

"Wired wireless" did not long remain the monopoly of the village of Hythe. Other exchanges were started where conditions favoured them, and although the rate of progress was slow compared with that of broadcasting itself, at the end of 1929 there were 34 exchanges with 8,592 subscribers, out of a total of nearly three million licence-holders.

It was at this time that Peter Eckersley left the BBC and before long he had brought his immense ability and prestige to the aid of "wired wireless". He has described in his book "The Power Behind the Microphone" how he was attracted to the idea of "wireless without worry" whilst he was still

Chief Engineer of the BBC, how he developed it from the original system, which required special wiring for each subscriber, into a system that could give a choice of six different programmes by using the ordinary electric mains, and how his system was opposed by all the interests already concerned with broadcasting, until all progress was blocked by war. Mr. R.H. Coase, in his book "British Broadcasting; a Study in Monopoly", has traced in detail the history of rediffusion and wired wireless up to the White Paper of 1946.

Briefly, the story is that although the Southampton Post Office had given Mr. Maton permission to go ahead at Hythe, the new system soon aroused the fears of the Post Office, the wireless manufacturers, and the BBC. The Post Office had to bring it into line with the Telegraph Acts of 1869 by giving relay operators a licence to pass messages over wires. The manufacturers foresaw a time when most people would need to buy only a loudspeaker and not a complete wireless set. The BBC feared for its programme monopoly, for as has been previously mentioned, Sir John Reith's theory of monopoly rested largely on the maintenance of programme standards, and the "balance of programmes" would be upset if anybody other than the BBC could influence what the public heard. For instance, the relay companies might provide programme items of their own, or they might relay foreign programmes, even sponsored programmes, instead of BBC programmes when they seemed likely to attract more listeners, for instance on Sundays. As soon as wired wireless made its appearance the BBC decided that the only safe thing to do with it would be to put it under the direct control of the BBC.

But the radio manufacturers were still alarmed lest the relays should kill the sale of wireless sets, and the Post Office thought it impossible for a State monopoly like the BBC to compete with private enterprise by itself running the relays. It did the next best thing for the BBC by issuing a new licence for relay operators in April 1930, which prevented their providing any programmes except what they picked up from radio stations, though these could be any stations and not merely those of the BBC. At the same time it introduced a clause making the licence terminable at six months' notice

after the end of 1932, with compulsory purchase of plant by the Postmaster General without compensation for goodwill.

Despite these restrictions the exchanges increased tenfold between the end of 1929 and the end of 1935 and the number of subscribers rose from eight thousand to nearly a quarter of a million. As the challenge of sponsored broadcasting grew through the thirties, the BBC increasingly regarded the relay services with distrust. They were not allowed to originate programmes but they could relay sponsored stations and there was even the possibility that a big relay company might buy time on a foreign station and produce its own programmes, which it would then be entitled to relay here.

The Postmaster General came to the rescue again and imposed some new restrictions in the relay operators' licence. They might be expressly forbidden to relay programmes from any named station, and were anyway forbidden to relay "political social or religious propaganda" in English from any foreign station or the result of any sweepstake in connection with a horse race; this last provision being a reminder of the constant struggle of British authority to foil the people's obvious desire to buy tickets in the Irish Sweep. Finally, the relays were forbidden to take money from anybody but their subscribers, so that they could not sell their time.

The arguments over wired wireless in its various forms went on, and they were all paraded in Parliament when the Middlesbrough Corporation asked for the right to distribute broadcast programmes through the electricity mains in a Bill that they promoted in 1933. This clause was opposed in Lords and Commons on the grounds that municipalities should not compete with private enterprise, that this development would be unfair to theatres, cinemas, and the radio trade, and that it would upset the balance of programmes, or rather put it into the hands of the local authority instead of those of the BBC. The Middlesbrough Corporation's claim was rejected, and the same fate befell similar proposals when they reached Parliament.

The Ullswater Report on the future of broadcasting, published in 1936, recommended that the ownership and operation of the exchanges should be taken over by the Post

Office and the control of their programmes by the BBC, with a stipulation that the BBC should "take into consideration" any desire by subscribers for a selection from foreign programmes. This change was apparently to take place at the end of 1936, when the existing licences of the relay operators expired as well as the Charter and Licence of the BBC, though a reservation by Lord Selsdon recommended that the licences should continue for another two years, during which the Post Office should experiment with relays over the ordinary telephone wires.

The Government did not completely follow the Ullswater recommendations; they decided to continue the licences to the relays for three years, bringing them to the end of 1939, and impose a new condition by which relays distributing two programmes must always take one of them from the BBC.

Wired wireless continued, and the number of subscribers increased rapidly during the war, when listening became more important and it became more difficult to get and use an ordinary set. But by this time further restrictions on the choice of programmes had been imposed. One-programme services had to take BBC for 90% of the time, two-programme services had to give one complete BBC programme and 75% of the alternative must also come from the BBC; services giving choice of more than two programmes had to take two from the BBC. The main challenge of wired wireless to British broadcasting had failed. From now on it was mainly a technical device to let people hear the same programmes better, rather than an extension of what they heard (1).

The case for wired wireless owed much to the brilliant advocacy of Peter Eckersley and the Parliamentary support of W.W. Wakefield, the former England Rugby captain (he became Sir William Wavell Wakefield in 1944). It was true that it could eliminate some of the great obstacles to radio broadcasting: it circumvented the wavelength shortage, enabling more programmes to be heard by any one listener, with more fidelity and without the howls and crackles caused

(1) There was still a great future for wired wireless in other countries, particularly some of the British colonies, which will be referred to in a later chapter.

by "interference", and did all this with simpler apparatus in the home and no need for operational skill. On the other hand it turned its back on the prime virtue of broadcasting, which is that it requires no physical link between receiver and transmitter, so that anybody can set up a radio set and get broadcast programmes on it without being tethered to a radio station by a wire. The original relay system went back to the prehistoric methods of Electrophone and Theatrophone, necessitating a separate wire or set of wires laid to each subscriber's house, and even the later developments depended upon the use of wires already laid, either for electric light and power or for telephones. British broadcasting has always reached many homes that had not got the telephone or even the electric mains, and none of the wired systems could rival its all-round appeal.

Still, wired wireless could have prospered alongside broadcasting, doing little harm to anybody and good to many more than it has actually reached. As for the BBC's "balance of programmes", that has never restricted listeners who could afford comparatively expensive sets. They could always get foreign stations, and if they did not always get them in such good quality as the local stations, they often preferred what they heard. The time came when it was hardly possible to sell any but the cheapest set without demonstrating that it would bring in stations outside the domain of the BBC, and the commercial programmes about which so much anxiety had been shown were the chief reason for this.

The lesson of the struggle for wired wireless was the wide basis of Parliamentary support for the BBC's monopoly of programmes. None of the original arguments about wavelength shortage and need for centralised technical control applied in this new controversy, but Sir John Reith's view dominated the discussions. There were other factors, of course—the interests of the radio trade, the attitude of the Post Office, and the internal rivalries of the relay companies themselves, but the argument that was used most freely and carried most conviction was that the BBC was the only body fully fitted to decide what the listener heard.

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Wired wireless threatened the ascendancy of radio as the only means of direct communication with the listener at home, and television was later to rival it with home entertainment directed to the eye as well as the ear. Commercial radio threatened only the particular system of broadcasting that had been established in Britain, but between the two Charters it played a larger part in discussions and negotiations on the future of broadcasting than either of the other two.

As has been mentioned, commercial radio was the system adopted in the United States when broadcasting began, and ever since then American listeners had had their programmes provided mainly by advertisers, and almost entirely from stations that paid their way by selling time on the air (1). The listener bought his set but he paid no fee to anybody for the right to use it and in big cities he enjoyed considerably more choice of programmes than the two that were offered here by the BBC, though in remote and sparsely-populated rural areas he might have difficulty in getting one.

Under this system listening had become even more of a national habit in the United States than it had here, and enormous profits had been made not only by radio stations and radio manufacturers but by manufacturers who used broadcasting to sell their goods. This example made a natural appeal to business interests in other countries, and although few followed the United States in adopting the commercial system as their sole means of getting radio to the people, several instituted regimes in which commercial programmes flourished alongside non-commercial programmes controlled directly or indirectly by the State.

British business was no less alive to the advantages of the

(1) It should be mentioned again that not all American programmes were provided by advertisers; stations and networks contributed a certain proportion themselves, paying for them out of the profits on commercial operation; but the main character of American radio was given to it by the advertisers. Also there were some small stations that did not accept advertisement programmes, such as University stations, but these played a negligible part in the total picture of American radio.

American system than any other, and the pros and cons of commercial broadcasting were usually argued on the basis of comparisons and contrasts with the United States. These were seldom based on profound acquaintance with the results of both systems, and their rival merits were frequently distorted to suit the controversialists' own views. Advocates of commercial radio rhapsodised over the variety and vitality of American programmes, the wide choice available to listeners, the lavish expenditure on radio talent, the absence of bans and boycotts, contrasted with the dullness, rigidity, orthodoxy, and parsimony of the BBC. Defenders of the British system exaggerated the tastefulness and dignity of the BBC's programmes, its achievements in education and culture, its patronage of good music, its sense of responsibility, contrasted with the rowdiness and vulgarity of American programmes, their concentration on appeal to the widest public, the domination of big business, the irresponsibility that laid the American air open to demagogues like Father Coughlin and Huey Long.

Public-service broadcasting had become virtually identified with the BBC system and commercial radio with the United States system. There was little discussion of mixed systems such as those of Canada, Australia, or France, in which public-service radio existed alongside commercial radio, nor of any possibility of running public-service radio without monopoly.

British listeners could get some first-hand experience of commercial radio without going to the United States. British manufacturers could not buy time on the BBC so they bought time on foreign stations that could be heard here, and put on programmes in English aimed specifically at the British public. These sponsored programmes appeared sporadically from the earliest days, but they began to be organised on a serious business footing in 1930, when the International Broadcasting Company was formed in London by Captain L.F. Plugge. From that time until the outbreak of war in 1939, listening to foreign commercial stations became an increasingly popular alternative to listening to the BBC.

Originally the commercial programmes were cheap and trifling. Later, as more money and more talent were put

into them, they became far from negligible. Top-rank stars and expert producers turned out some programmes of very wide appeal. Advertisements on the radio were of course an unfamiliar intrusion to the British ear, and people who were satisfied with the BBC's programmes found them intolerably jarring, but many swallowed them easily for the sake of the entertainment that went with them, and the sales of products so advertised were evidence that no ill-will was caused.

This acceptance of advertisements on the air horrified many people of discrimination, and it is true that once you have become used to radio without advertising, exhortations to buy so-and-so's pills or use such-and-such a breakfast food sound very strange. Equally, if the British Press had grown up as a chartered monopoly whose newspapers did not take advertisements, the sight of a newspaper with advertisements alongside its news columns would have outraged many people. But even after a decade of non-commercial radio, a considerable proportion of British listeners were willing to accept broadcast "plugs" as the accompaniment to programmes that they preferred to those of the BBC.

How big the proportion was remained something of a mystery in the first years of commercial broadcasting to Britain, for the surveys taken by agencies directly concerned with the sale of time often conflicted with the technical estimates of station coverage made by the BBC. But surveys made in 1938 by a joint committee of the Incorporated Society of British Advertisers and the Institute of Incorporated Practitioners in Advertising, with Professor Arnold Plant as independent chairman, showed that the total audience listening to commercial programmes from foreign stations on Sundays was comparable with the total audience listening to the BBC.

For the rest of the week the foreign stations did not do so well; their best-selling times were those before the BBC opened and after it had closed down. The prosperity of the commercial stations was in fact built on Sunday broadcasting and was a direct result of the BBC's "Sunday policy". Listeners showed themselves willing to put up with commercial announcements, inferior reception, and the difficulty of

finding out what was to be broadcast and when, in order to listen to variety, dance music, and light entertainment that Sir John Reith would never have allowed to be broadcast on that day.

The favourite foreign stations were Radio Normandy and Radio Luxemburg in the South and Athlone in the North. These stations were of course free not only from "Sunday policy" but from the restrictions imposed on the BBC by its desire not to antagonise other interests such as the Press. It is hard now to realise that the BBC did not broadcast running commentaries on Test Matches in Australia until a foreign station led the way. This freedom from the understandings reached here after so much hard bargaining naturally exacerbated the interests concerned, and the Press was already sufficiently alarmed at the amount of money that was being spent by British firms on radio advertising, money that they felt would otherwise have been spent in the Press.

Various attempts were made to stop or at least to impede the broadcasting of commercial programmes in English from abroad. Representations were made to foreign countries, proposals were put forward to international broadcasting conferences, the newspaper proprietors denied the use of their special trains to newspapers that bought time on foreign stations or printed their programmes, the Post Office refused the use of trunk lines to agencies wishing to send their programmes to foreign stations "live". Incidentally, this last prohibition forced the agencies to record complete shows on gramophone records which could be sent abroad and broadcast from stations there, and so helped to develop the technique of "pre-recording" which the BBC began to use so largely during the war. The advertising agencies also did much to popularise the "audience show", in which a broadcast is produced in a theatre and an audience is invited and prompted to express its reaction audibly, which had become a feature of American radio and is now common practice with the BBC.

Throughout the thirties the commercial stations exercised considerable competition with the BBC. For the first time since 1922 there were independent radio studios in London and independent producers, some of whom had come from

Broadcasting House. Writers and artists were being employed in radio by agencies other than the BBC, and some of them were in consequence dropped by the BBC. To the ordinary listener, it seemed likely that the revision of the Charter at the end of 1936 might legalise commercial broadcasting here, and apart from the listener there were business interests who claimed that as radio advertising obviously sold goods, it was absurd that British manufacturers should have to take their money abroad and not be able to buy time here.

But once again the BBC triumphed. Commercial radio had powerful enemies; it was feared for different reasons by the BBC itself, the Post Office, the political parties, and the Press. Nor were the advertisers united in its support. Many of them felt happier with the old-established advertising media that they understood. Any prospect of commercial radio here was ruled out by the Ullswater Report of 1936. The guerrilla war with the foreign stations went on, and what stopped it was neither official action nor the defection of listeners, but the outbreak of war in 1939. After the war there were attempts to revive it, but the real opportunity had passed. The BBC had long since abandoned Sir John Reith's "Sunday policy", and the gap by which the commercial stations had entered was now stopped with some of its most popular shows.

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Finally, there was the coming of television. This quite new sort of radio entertainment, appealing to eye and ear together where sound radio could appeal only to the ear, showed itself from the first as a challenge to the existing form of broadcasting, but as it depended on radio transmissions from fairly short range it came within the scope of the monopoly and offered a problem rather than a challenge to the BBC.

Transmission of moving images either by radio waves or by wires was made possible by a series of scientific discoveries extending over more than fifty years, but it was first demonstrated by John L. Baird in January 1926. Baird was a brilliant pioneer, an inventor rather than a scientist;

no sooner had he achieved one feat hitherto deemed impossible than he was busy on the next. Within a few years he progressed from televising moving images over wires from one room to another in his Soho workshop to televising from London to New York, televising in colour, televising the Derby in a cinema on a big screen. Often he was rushing headlong up blind alleys, and few of his methods have survived the test of practice, but his achievements undoubtedly hastened the coming of television, and patriotic pride in his pioneering achievements aroused strong support for the idea of making Britain the first country in the world where television could be seen in the home.

The only serious rivalry came from the United States, and in the early days Britain barely kept ahead. The big American radio and electrical interests experimented in television, most prominent being the Radio Corporation of America, who had the help of Dr. Zworykin, inventor of the iconoscope pick-up tube and one of the great names in television history. There seemed to be a chance for the first country that established television as a regular service to capture the other's market and then the world. It seemed all-important for Britain to get there first, and Baird's early successes brought influential backing to his company in what soon became a struggle for recognition by the Post Office and the BBC.

By 1928 Baird was transmitting television regularly from the Baird Company's experimental station 2TV, on top of the converted garage in Long Acre where he was then carrying on his pioneering work. At this time television was still in the low-definition (1) stage and the wavelengths it used were in the band used for ordinary sound broadcasting, so the Long Acre television station could only transmit when the BBC was off the air. Considerable pressure was exercised by the Baird

(1) Standards of definition are usually referred to in terms of the number of lines, i.e. the number of times the scanning spot sweeps the image to make up the picture. With adequate transmission and reception, the greater the number of lines the more detail appears in the picture. In 1928 Baird was using 30 lines. The high-definition service from Alexandra Palace that started in 1936 uses 405 lines, the present American standard is 525, and France is transmitting on 819.

interests to make BBC take over television transmissions and put them out on its own stations and at more convenient times, and a controversy arose that has left bitter memories to this day.

There is no doubt that the BBC's technicians were right in their view that low-definition television using medium waves had no permanent entertainment value and that it would be dangerous to put it out over the BBC's stations, thus inducing the public to buy the home receiving sets that Baird's company was trying to sell. But the television interests claimed that the BBC was hostile to the very idea of visual broadcasting. Peter Eckersley has freely admitted that he was wrong in predicting that high-definition television, which uses ultra-short instead of medium waves, would not be practicable because of the limited range of these waves, but this was still an academic question when he left the BBC.

However, the spectacle of a British invention being kept from the public by an obstructive monopoly caused a great deal of criticism. The BBC was suspected of prejudice against television and against Baird, and it lent colour to the suspicion when in October, 1928, at the height of the controversy, it used its Daventry station to transmit not television but still pictures by the Fultograph process; transmissions that had no entertainment value whatever and moreover had nothing to do with broadcasting to the public.

Despite a great deal of support, the Baird company seemed to have little chance of success against the opposition of the BBC. But the very fact that the BBC was a monopoly made it reluctant to leave anything undone in case anybody else should finally establish a claim to be allowed to do it. So despite the technicians' doubts (and after Eckersley had left the BBC), the BBC took over transmission of Baird's programmes on September 30, 1929. The programmes were still produced in the Long Acre studios and paid for by Baird, but they went out from the old 2LO transmitter on the roof of Selfridges, which was just about to be replaced as the London station by Brookmans Park.

These first transmissions certainly ran no risk of popularising television prematurely. Not only did they take place at 11 a.m., but as only one wavelength was used sound and

vision had to be broadcast separately. A speaker or a comedian was first seen without being heard and then heard without being seen. In March 1930 television was given the use of the National as well as the Regional transmitter so that sight and sound could operate simultaneously, and it became possible to interest the public in the idea of buying Baird's twenty-five-guinea sets. He himself remained eternally the pioneer. Whilst most of his mind was given to such further developments as colour television, he made a sensation by coming out of the studio and televising the Derby of 1931, and in the following year the race was not only televised but shown by television to an audience in a London cinema —the Metropole at Victoria—on a screen ten feet by eight.

The Baird company was still providing the programmes for the BBC to transmit, but on August 22, 1932, the BBC took over responsibility for them and assigned a studio in Broadcasting House for their exclusive use. Here the BBC's first television director, Eustace Robb, worked heroically to pack entertainment into his late-night programmes. From 11 to 11.30 p.m. a procession that might include dukes, dancing-girls, and performing dogs passed across viewers' screens. The little studio, BB, formerly used by Henry Hall and the BBC Dance Orchestra, presented a nightmare picture during transmission. Lit by the flickering light of the scanning-ray, flanked by the stands carrying photo-electric cells that looked like something out of a Wells fantasy, people in a ghastly make-up of blue noses and black lips performed on a chequered black-and-white floor. And the small army of home viewers looked into a tall narrow screen some nine inches by four, glowing with a greenish light, and saw pictures recognisable indeed but dim, flickering, and crude.

Low-definition television was a miracle of ingenuity but it had no future. During the thirties both Baird and his rivals were working on high-definition television, which can give much better pictures but needs to be transmitted on shorter wavelengths than had yet been used. Quite new technical problems were raised, and at best these wavelengths have only a very limited range.

The decision to move from low to high definition was not taken until after a Committee of Enquiry had been set up by

the Postmaster General in May 1934, to consider the relative merits of the several systems and the conditions under which a public service could be started. The Selsdon Committee had to consider the systems in use by Baird's company (which was now transmitting experimentally from the Crystal Palace), and by other companies both here and in many other countries, notably Germany and the United States. It had to consider who should run television and how it should be paid for, and as it was obvious from the first that television would be at every stage a more expensive process than sound broadcasting, the possibility of selling time on the air was at once revived.

The committee reported in January 1935, and its report determined the future of television in Britain up to the outbreak of war. It rejected competition or commercial operation in favour of monopoly; it declared that low-definition television should give place to a public service on not less than 240 lines; and it recommended that two rival systems should be used, those developed by Baird and by the combine of Marconi and Electric and Musical Industries known as Marconi-EMI.

The Selsdon Report was accepted by the Government and acted upon by the BBC. The low-definition studio, which had been moved from Broadcasting House to 16 Portland Place in February 1934, was closed down on September 11, 1935. Part of Alexandra Palace, an outmoded Victorian pleasure resort on the heights of North London, was leased for studios and transmitters. Separate studios had to be equipped and separate transmitters built for the two systems, which worked quite differently and were to succeed each other in alternate weeks.

The official opening of the BBC's high-definition television service was on November 30, 1936, but transmissions intended for the public began before that. As a last-minute attraction for the national radio exhibition at Olympia, a television entertainment was hurriedly assembled and transmitted for two hours a day during the nine days of the exhibition, beginning on August 26. This improvised beginning proved to be typical of much television history still to come.

The high-definition Television Service was from the first

directed with energy and imagination by Gerald Cock (who had previously been in charge of outside broadcasts in sound for the BBC) and served by a brillant and devoted team. But it was gravely handicapped by the need to alternate the two systems, Baird and M-EMI, each week. There was no doubt which of the two the production staff preferred. The original Baird system was mechanical, depending for its scanning process on a spinning disc; the M-EMI system was all-electronic, using no moving parts. The Baird system used either a fixed camera before which the artists had to be ranged, or a process of "intermediate film" which caused a time-lag between action and transmission (and incidentally enabled performers to finish their act and dash across to the monitor screen to see themselves still appearing before the viewing public); the all-electronic process was instantaneous and used mobile cameras. Further, the Baird system gave a picture of 240 lines whereas M-EMI gave 405, the standard still used by British television in 1950.

A Television Advisory Committee had been set up after the Selsdon Report, to give continuous advice to the Postmaster General on major questions of television policy, and after some months of trial it recommended that the Baird system should be dropped. The last television transmission under this system took place on February 13, 1937, and from this time onwards Baird, though remaining an experimenter and a pioneer, was no longer the dominant figure in British television.

There can be no doubt that the decision to drop the Baird system was right, and in fact modern television may be said to date from the adoption of the all-electronic system in Britain in February 1937. It led directly to such triumphs as the television broadcasts of the Coronation procession in May of that year and the tennis championships at Wimbledon in the summer, and to the development of a technique of studio production that rapidly grew away from those of the stage and the film. In these respects pre-war British television led the world.

The final failure of Baird's system was a pitiful ending to his trail-breaking efforts to make television a practical proposition. Without his pioneering achievements the coming of television would have been slower by many years. But in

pinning his faith to mechanical scanning he had backed the wrong horse. There was some consolation to British pride in the fact that although the successful all-electronic system involved dependence on the cathode-ray pick-up tube, which had been invented by Zworykin in America, this tube had first been imagined by the British scientist Campbell-Swinton as long ago as 1909, and the actual system used at Alexandra Palace was the work of M-EMI's engineers, notably a brilliant pair who died in a bomber crash whilst engaged on radar research during the war—A.D. Blumlein and C.O. Browne.

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The subsequent history of the BBC television service will be told in a later chapter. It was yet to appear as a rival to sound broadcasting, but in 1936 and 1937 it was little more than a feather in the cap of the BBC. The few thousand owners of television sets in the London area could only be regarded as a crazy fringe by the eight million listeners who depended on their sound radio for home entertainment. In fact the millions could and did complain that their licence money was being diverted to provide for a minority who paid only the same fee as the rest.

In reality the financial question has never been so simple as that, for since the early days television has been taken into account in determining the proportion of the licence revenue that the Government paid over to the BBC. But the BBC certainly deserves credit for providing the bridge over which the new medium had to pass in order to prove that it could ultimately exert a mass appeal. Britain was fortunate in having one organisation well provided with money and able to spend it on an experiment that was bound to be expensive and might ultimately be unprofitable. In America, where technical progress had caught up, the uncertainty of television finance, and the certainty that if the new medium did succeed it would affect the profits of sound radio, combined to hold up its launching. The first commercial licence was not granted to an American station until 1941, five years after the BBC Television Service from Alexandra Palace had begun, and the boom in American television did not really begin until after the war.

CHAPTER SEVEN

THE SECOND CHARTER

The British system of broadcasting had been fixed in 1926, and both its successes and its shortcomings as compared with broadcasting in other countries sprang from the Charter that came into effect at the beginning of 1927. That Charter was due to expire in 1936 and if there was to be any change in the system, that was the time to make it. So a great deal of the energy of the BBC and its opponents was directed towards this issue, especially after the appointment of a Committee, under the chairmanship of Lord Ullswater, to inquire into the future of broadcasting, in April 1935 (1).

This Ullswater Committee embarked on a work of great importance; greater than it appeared at the time, for it was to be the last enquiry into the whole system of British broadcasting for fifteen years. Politically it was a strong committee, with an ex-Speaker at its head and two ex-Postmaster Generals among its members—Mr. Attlee, later to become Prime Minister, and Lord Selsdon, who had presided over the recent television committee. Amongst the other members were Major Astor of *The Times* and Lady Reading, later to become Vice-Chairman of the BBC.

The evidence given before this Committee has not been published and all we know of it is what Lord Reith discloses in his autobiography (2). This is not very much. The BBC put

(1) It was appointed by Sir Kingsley Wood and reported to his successor as Postmaster General, Major Tryon. Its terms of reference were: "To consider the constitution, control and finance of the broadcasting service in this country and advise generally on the conditions under which the service, including broadcasting to the Empire, television broadcasting, and the system of wireless exchanges, should be conducted after 31st December, 1936."

(2) *Into the Wind.* Lord Reith says there that Lord Ullswater sent him copies of the evidence given by other witnesses throughout, and he was able to "put in a document of rejoinder" in addition to the BBC's original memorandum of evidence and his own various interviews.

forward its achievement and claimed greater freedom from control by the Postmaster General, freedom from any remaining restrictions on the collection and broadcasting of news, and other alterations to its existing constitutional position. Its most ambitious proposal was that the new Charter, which it assumed it would get, should run for twenty years instead of the previous ten. Its most interesting suggestion was that instructions to broadcast or refrain from broadcasting anything should come from the Lord President and not from individual Government Departments or from the Postmaster General. Further, that if it received such instructions it should be allowed to disclose that it was acting under orders : in other words, to say over the air "The following is broadcast at the desire of the Lord President of the Council", or words to that effect.

As for the evidence of other bodies, Lord Reith mentions some of the charges to which he rejoined. They came from the periodical Press, authors and composers, Welsh Nationalists, the International Broadcasting Company (spokesmen of commercial radio), and various bodies representing musicians. Of the 34 pages of his memorandum of rejoinder, he says, 10 were occupied with "the discords of musicians".

Apart from its political claims and its rejoinders to critics, the BBC had a great deal in its record to display with pride. Lord Reith recalls that in 1935 98% of the population could listen on simple apparatus to one programme and 85% could choose between two. There were seven million licences, and two and a half million families took the *Radio Times*. The BBC was broadcasting on short waves to the Empire, and preparing to start the first high-definition television service in the world.

In fact broadcasting had grown beyond recognition since 1927, when the Corporation took over from the pioneer Company in Savoy Hill. All over the world the radio had become almost a necessity of civilised life. Programmes still contained a sprinkling of novelties and stunts, things that were being done for the first time, more of them perhaps in America than here; but listening itself had ceased to be a novelty. People took it for granted. The more prosperous had more than one wireless set; they had extension loudspeakers in

bedrooms and kitchens, portables to take into the garden or out on a picnic, car radio so that they need not stop listening even whilst they drove. In Britain in the thirties there were still many families who could not afford the few pounds for a set and the few shillings for a licence, but even among the poor there were many who regarded the radio as a necessary expenditure like the burial club. There were repeated suggestions that Old Age pensioners should be allowed to pay for their licences by instalments instead of having to save ten shillings out of their pension of ten shillings a week, and the blind, who did not pay for their licences, were supplied with free sets from the proceeds of the yearly appeal for Wireless for the Blind, which was broadcast on Christmas Day and ranked high among the charitable appeals of the year (1).

As for the BBC, as the sole broadcasting body in the country it had grown to unexpected size. Its imposing headquarters in Portland Place dominated a network of sub-offices, Regional offices, and transmitters all over the country, of all wavelengths and all degrees of power. Its staff of several thousand included specialists in many professions from short-wave propagation to education, Public Relations to publishing. And the monopoly that was founded when broadcasting was not a matter of serious interest had reached out to include everything broadcast in Britain, everything broadcast from Britain, the publication of BBC programmes in detail, and the new power to broadcast vision as well as sound. Reith's idea that an absolute monopoly was the only way of preserving programme standards had been fulfilled except for the intrusions of commercial radio from foreign stations, and the incomplete subservience of the wireless exchanges, which the BBC hoped the Ullswater Committee would help to redress.

On the programme side the monopoly had achieved very impressive results. In the field of culture it had a better achievement than any other national broadcasting system. It had devoted a high proportion of its time and money to good music finely performed, not merely the classical repertoire but new music and unfamiliar works. It had given a

(1) In 1935, the target aimed at in this one five-minute broadcast was £12,000. The record was subsequently made by Lord Woolton with the appeal broadcast in 1943, which raised £77,000.

hearing to men of eminence in all branches of learning, and its broadcasts to schools had succeeded in disarming much of the hostility of the teachers and making an increasing proportion of them welcome a new and powerful educational aid. It had broadcast great plays, and people who would most probably never have seen them in a theatre had heard Shakespeare, Ibsen, and Shaw. In an age when the churches were emptying it had put all its resources at the disposal of orthodox religion, made some preachers into popular celebrities, and kept the Sabbath as a day unmistakably different from any other in the week.

On the side of entertainment for the masses it had been less conspicuously successful but even here it had created nation-wide favourites like Henry Hall, Reginald Foort, Leonard Henry and Tommy Handley, and popular programmes like "Songs from the Shows", Music-Hall, and "In Town, Tonight". It was on the side of controversy that the limitations of monopoly were most clearly to be seen. The British air was no place for the heterodox in religion or politics or any other field of ideas. Birth-controllers and Unitarians were alike debarred, and political points of view could be expressed only by Party spokesmen broadcasting in a carefully-chosen rota. Between its own desire to be impartial, its feeling of responsibility for all that people heard on the air, and its lively fear that indiscretion would lead to closer Government control, the BBC found that to be safe often meant being uncommonly dull.

Financially the system had worked out extremely well. From the very first days when the original company was formed with a capital of less than £100,000, broadcasting had more than paid its way. The Company had handed over to the Corporation a thoroughly healthy concern, and the Corporation had made money for the Government as well as for itself. In 1935 the State was taking 5s.3d. out of each 10s. licence fee. Lord Reith says that between 1927 and the end of 1934 broadcasting had contributed nearly two million to the Post Office and five to the Treasury, with an additional £600,000 in "special contributions" and another £600,000 in income tax (1).

(1) The exact figures are given in the Ullswater Report.

Out of its share of the licence money, aided by its profits on publications, the BBC had found not merely revenue but capital expenditure. Lord Reith estimates that in eight years nearly £2 million profit had been made on publications and that this had met the cost of capital requirements and had subsidised revenue to the extent of £332,000. The BBC faced the future with the knowledge that no Government would be over-eager to kill a goose that laid such golden eggs.

The Ullswater Report was finished before the end of 1935 (it is dated December 31st, but Lord Reith says that he received his advance copy on Christmas Eve). It was not published until March 1936, and on the same day the Governors of the BBC published a pamphlet giving their views on it. It was debated in the House of Commons in April ; the Government issued a White Paper giving its own proposals in June, and a further debate followed in July. A new Royal Charter and Licence from the Postmaster General came into force in January 1937, to last for another ten years.

As the Governors' comments showed, and as Lord Reith has since testified, the BBC was not satisfied with the Ullswater Report. Nevertheless the Report, the debates, and the Government's subsequent action endorsed the system that the BBC had created and ensured it a further span of existence, strengthened in detail as well as by the assurance that the chartered-monopoly structure had now become almost an accepted part of the British way of life.

In general, the new Charter brought no effective change. It was again for ten years, not the twenty that the BBC had proposed; the Minister responsible for broadcasting was still the Postmaster General, from whose control the BBC had not unreasonably been trying to escape; the BBC was to do something to improve its handling of staff, which had already attracted considerable criticism, though the Lambert case, which finally focussed attention on it, had not yet come into Court. There were minor adjustments in the BBC's relations with the Post Office. Even the relay stations, or wireless exchanges, were left alone, at least for the moment. The Ullswater Report had recommended that they should be transferred to Post Office ownership and BBC control at the end of 1936, but the Government decided to postpone this

operation for another three years, largely because of the importance of wired wireless in the event of war. As has been previously mentioned, the relays were further restricted in their choice of programmes other than those of the BBC.

The wireless exchanges thus remained to mar the Reithian picture of a country in which one body decided what all the people should hear. So of course did the foreign commercial stations, which no Government action could abolish, though British advertisers could be, and were, impeded in their use by the opposition of Post Office, Foreign Office, Treasury, Press, and BBC. Luxemburg, Normandy and the rest continued to flourish, employing star artists and expert writers and producers, claiming an enormous audience, and certainly making a big impact on the British listener on Sundays, until they were closed down by the war.

The BBC's triumph was welcomed by almost all sections of opinion and hailed even by newspapers that had been most active in ridiculing its operations in detail. Mr. Coase has pointed out in his book "British Broadcasting: a Study in Monopoly" the special factors that made Conservative Government, Labour Opposition, Press and business interests support the chartered-monopoly system, but popular support went wider than the interests. Ordinary people criticised the BBC as severely as the Press did. They denounced the programmes and derided the highbrow snobbishness of the announcers. But the BBC was the only form of broadcasting they had ever known. They owed to it practically all the pleasure they had had from the wireless set since it came to enlarge the boundaries of the home. Luxemburg was all very well for Sundays, but after all it was foreign. The British had become proud of their radio; without having heard its competitors they were satisfied that it was the best in the world; the only alternative of which they were aware was an all-commercial system like the Americans had, and national pride flared up at the idea. They settled down happily to another ten years of grumbling enjoyment of the BBC.

The BBC itself settled down to the secure enjoyment of its status as a national institution, which might be criticised, reviled, even subjected to projects of minor reform, but would be left on the whole to go its own way. The last years of the

Reith regime were occupied largely by Royal occasions and Royal visits. As has already been mentioned, the great events of 1936 and 1937 made the BBC the family herald of the nation, and it had become more closely linked than ever with the monarchy as well as with the established authorities of Church and State. The new Royal family were of the generation to whom broadcasting was a familiar thing. They were habitual listeners, and although the King himself had his shortcomings as a broadcaster (offset in many minds by the resemblance of his voice to that of his father), the Queen and the two Princesses were later to show themselves perfectly at ease with the microphone.

There were still new developments during the years between 1936 and 1938. The high-definition television service which had been launched in the autumn of 1936 continued to be the only regular public television service in the world, and it confererd great prestige on the nation, the industry, and the BBC, but it affected directly only the few thousand households who acquired television sets before it was closed down by the war.

More important to many listeners was the inauguration of separate stations and programmes for the West of England and Wales, which had been promised to the Ullswater Committee in 1935 and came into effect in July 1937, thus redressing one of the outstanding anomalies of the original Regional Scheme.

There were various other innovations which were to develop more fully in later years. A system of staff training in broadcasting was started in October 1936, and a small Listener Research unit was set up in December of that year. 1938 brought the beginning of broascasts in foreign languages, which ultimately transformed the original conception of the Empire Service and laid the foundations for the vast edifice of radio propaganda that the BBC built during the war. Britain's entry into this field was provoked by the use already being made of the radio by Nazi Germany and Fascist Italy. The first foreign-language broadcasts were those in Arabic, started in January 1938 as a reply to the Italian broadcasts from Bari, and they were followed in March by a daily news service for Latin America in Spanish and Portuguese. These were short-wave broadcasts for distant reception. Many

English-speaking people in European countries already listened to the BBC, but the first broadcasts in European languages, on medium waves, came after the Munich crisis in September 1938.

There were still sensational broadcasts, intentional or unintentional, now and again. One of them was the running commentary on the fight for the world's heavy-weight title between Joe Louis, the American Negro who had just won the crown, and Tommy Farr of Tonypandy, the British champion, in New York on August 31, 1937. It was the first time for a generation that a British champion had had a real chance at the world title and although the fight happened at an unearthly hour by British time, the BBC opened up one station and people who crawled out of bed to listen were rewarded by one of the most memorable fights in boxing history, and one of the narrowest victories Joe Louis was to have for twelve years.

Another memorable broadcast, perhaps the most notorious of the thirties, was the description of the Fleet illuminations at Spithead in the Coronation summer of 1937. This was the occasion when a BBC commentator, gazing from a masthead over the lighted fleet, was overcome by the occasion and made a short but striking broadcast which left as a legacy the phrase "The Fleet's lit up", this being almost all he was heard to say. The idea that a BBC commentator should be cut off the air in the midst of a broadcast tickled the public immensely, and their enjoyment of this lapse sharply illustrated the standards of decorum usually expected from the BBC. The phrase became a stock joke and was even used as the title of a revue, but it showed how much the BBC was changing its views that the commentator in question was not fired.

Things were indeed changing at the BBC. It was the end of an epoch. Sir John Reith himself was known to be looking for new worlds to conquer. With the BBC transformed in fifteen years from a gamble by the radio manufacturers to an institution deeply embedded in the British way of life, he felt himself capable of turning his energies to some new task.

The end of the first generation came, however, with the

retirement of Sir Charles Carpendale in March 1938. Carpendale had been Controller almost as long as Reith had been in charge; he had more personal influence on the staff in the early days than anybody except Reith himself; and apart from one interlude between 1933 and 1935, when he had shared his authority with a newcomer (1), he had been second man to Reith throughout. He was Deputy Director-General when he retired, and the chief link with the old regime.

His leaving was marked by a ceremony that belongs distinctively to this phase of the BBC. The whole of the headquarters staff was gathered together in the Concert Hall at Broadcasting House to see him "piped over the side" with naval honours by ships' bo'suns imported for the purpose. This performance could not have happened a few years later, because nobody would have staged it, nor a few years earlier, because there was then no place where it could have been staged.

Reith's own departure followed soon after. He accepted an appointment as Chairman of Imperial Airways and left the BBC on June 30, 1938. There was neither ceremony nor *bonhomie* about his departure. He has recorded with great frankness in his autobiography how he so much resented the Board's attitude over the choice of his successor that he had the radio and television sets removed from his home and removed himself from the free list for BBC publications. Moreover, he withdrew a request that he had previously made to the Prime Minister to be made a Governor of the BBC. He entirely severed his connection with his old organisation, and except for his short stay at the Ministry of Information during the war, he exercised no further influence on broadcasting for almost ten years.

Reith's achievement has been discussed in an earlier chap-

(1) The work of Controller was divided in 1933, when Admiral Carpendale became Controller of Administration with Colonel Alan Dawnay as Controller of Programmes. Colonel Dawnay came from the War Office and in 1935 he left the BBC to command the Irish Guards. After this Carpendale became Deputy Director-General and there were four Controllers responsible respectively for Administration, Engineering, Programmes and Public Relations.

ter of this book. It may be criticised but it cannot be ignored. It is true that he had the luck to be appointed to a very important job before anybody knew how important it was going to be; broadcasting met the need of the age and it would have prospered in Britain anyway, as it prospered everywhere else. But Reith was not content to go up with the balloon. He imposed a course on it, and with certain deviations it has retained that course to this day.

It was his doing that the broadcasting monopoly was transformed from a matter of administrative convenience to a matter of principle. He contributed the idea that guardianship of programme standards must include the power to decide what people should not be able to hear. The concept of broadcasting as a public-service monopoly independent of Government, shareholders, advertisers, and customers was his, and in framing it he set a model not so much for broadcasting elsewhere as for public enterprise here. And what he conceived, his force of character and skill at negotiation carried through.

These contributions have continued to characterise the British system of broadcasting, although many of the things Reith most prized have passed away. The BBC has largely abandoned paternalism as a method of dealing with staff, has ceased to keep the Sabbath holy, studied listeners' opinions, and accepted the fact that only a small minority wants culture on the air. But the independent public-service monopoly remains, on the lines that Reith laid down but with a wider empire than Reith ever knew.

CHAPTER EIGHT

FROM PEACE TO WAR

In the first years of the new Charter British broadcasting went merrily on its way. The number of listeners increased steadily rather than spectacularly, and the licence figures crept up from nearly eight million at the end of 1936 to nearly nine million at the end of 1939. The listening habit was widely based, and even the highbrows made a point of listening on musical occasions like the Toscanini concerts and the concerts of contemporary music, though they still affected to disregard all the other activities of the BBC.

These were the days when people listened weekly to "Band Waggon", following the adventures of Big-Hearted Arthur Askey and Stinker Murdoch in their flat on top of Broadcasting House, and Syd Walker pushing his barrow through the streets of London, running into strange little problems and asking listeners "What would you do, chums?" They listened to the jollities of the Kentucky Minstrels and the White Coons, to commentaries on everything from motor-racing to ice hockey, to Christopher Stone announcing gramophone records, Walford Davies talking about music for the ordinary listener, Richard Goolden as Mr. Penny, Jeanne de Casalis as Mrs. Feather, Mabel Constanduros as Mrs. Buggins.

In the autum of 1938, the autumn of the Munich crisis, the BBC's home broadcasts ran from 10.15 a.m. to midnight on weekdays, and on Sundays from 9.25 a.m. until shortly after 10.30 p.m. (1) There were a National Programme, a London Regional Programme, and Regional programmes for the Midlands, the North, the West of England, Wales, Northern Ireland, and Scotland. There were also stations for Plymouth and Bournemouth, Aberdeen, and the North-East coast, this last being at stagshaw.

(1) One transmitter, the "Scottish National" at Westerglen, opened later throughout the week.

Altogether sixteen transmitting stations were at work, using eleven medium wavelengths and one long, with power varying from 150 kilowatts for Droitwich long-wave to 0.3 kilowatts for Plymouth medium-wave. Generally the main Regional stations, and the stations that sent out both National and Regional under the twin-station scheme, had a power of from 40 to 70 kilowatts, the exception being the 100-kilowatt Lisnagarvey, the Regional station for Northern Ireland, which in number of licences was always the smallest Region of the BBC.

Amongst them these sixteen stations sent out a number of programmes varying from eight at a time to one. The scheme was too complicated to be followed in full. Roughly speaking there was a main National and a main Regional, both controlled from London; the National programme was broadcast all over the country and the main Regional was often broadcast by all the Regional stations, but the six Regions produced their own programmes for a certain proportion of the time between the Second News at 7 p.m. and the Fourth News at 10. Sometimes these programmes originating in a Region outside London were relayed in the main Regional Programme, sometimes Regions took each other's programmes in preference to the London offering. All the Regions had programme staffs, programme allowances, studio centres, and orchestras of some kind (though all these were on a smaller scale than those at the disposal of the London programmes), and there was considerable competition among them to provide programmes that would be relayed outside their own borders.

But the scheme was full of anomalies. The long-wave station at Droitwich, which was supposed to radiate a National Programme for the whole country, had been released from the need to broadcast in Welsh since Wales attained the status of a separate Region, but it had still to be used to reach listeners in East Anglia when it was important that they should be reached; for instance, with the daily East Anglian Herring Fishing Bulletin. National and Regional joined for the Daily Service every morning and usually for the dance music at night. The Scottish Regional station broadcast the National programme almost as much as the Regional,

especially Broadcasts to Schools, and the Welsh Region departed from the Regional Pool in order to give its own School Broadcasts in Welsh. The extra stations at Stagshaw and Aberdeen, covering the North-East coasts of England and Scotland respectively, sent out mixed programmes that drew on National as freely as on Regional, and the Scottish National transmitter at Westerglen, although sharing a wavelength with the other National relays, started up at different times and radiated the Regional programme for half the day.

Both in technical coverage and in choice of programmes, the Regional Scheme had turned out very much less symmetrical than had originally been expected. The fixed points of the day, which could be heard by all listeners everywhere, were the Daily Service at 10.15 a.m., the Broadcasts to Schools in morning and afternoon, and two news broadcasts, either at 6 p.m. and 9 p.m. on National or at 7 p.m. and 10 p.m. on Regional . . . timings to which the BBC returned when the Home Service and Light Programme were established after the war.

The news broadcasts were longer in those days. The First and Second News were allowed 20 minutes, including the Weather Forecast, which was still given in orthodox meteorological terms; listeners heard a description of atmospheric conditions before they found out whether it was likely to rain, and the "deep depression over Iceland" was as well known as Big and Stinker and Lewis the Goat. The Third News had 25 minutes, including also a forecast for shipping, and the Fourth also 25 though this included news talks and sport. Only the News Summary on the Regional programme at 11.50 p.m. was confined to ten minutes.

Despite the length and the frequent tedium of these news broadcasts, listening to them had become a national habit even before the war; even before the increasing gravity of the international situation made political events of personal importance to everybody. Many listeners conceived so lively an admiration for one or other of the announcers who read the News that they imagined the world news was better when he read it, or complained that he was always given bad news to announce. On the other hand, listeners with strong

political convictions often accused the announcers of weighting the news by the way they uttered it ; for instance, Right-Wingers would seriously believe that "the announcer who reads the nine o'clock News" was a Russian because in reading items about the Spanish war he sounded so pleased whenever the Government side won, whilst Left-Wingers thought the announcers sneered openly at the plight of the unemployed at home.

As a matter of fact few listeners knew exactly who was reading the news on any one night. A number of the London announcers shared the duty on a rota system, and none of them ever gave his name. At an earlier period the BBC had tried to extend the rule of anonymity to all its staff, even those who were producing programmes or performing in them, but this had now lapsed, and the announcers alone never had their names announced. The veil was lifted now and again by the *Radio Times*, which gratified listeners' curiosity by publishing not only names but photographs of the announcers, with details of the times in the forthcoming week when they could be heard.

In spite of this, constant listeners came to know their announcers as well as they knew their personal friends, and like them all the better because their relationship was strictly one-way. Stuart Hibberd, Frederick Grisewood, Frank Phillips, Alvar Lidell and the rest had their regular fans, who listened to programmes because these voices announced them; and as in the early days of broadcasting, it was still true that an announcer could not cough during a broadcast without receiving countless presents of everything from cough-lozenges to woollen underwear.

This lively interest in the announcers and in anybody who broadcast regularly was fanned by the popular Press. Special magazines were started to collect all the tit-bits about personal affairs that the BBC's own publications did not print, and the newspapers, whilst continuing to criticise the BBC and its programmes, gave copious space to the doings of its broadcasters and its staff.

Broadcasting had become the shortest way to nation-wide celebrity. The bans and boycotts that surrounded the BBC in its early days had yielded to sheer self-interest, and artists,

theatre managers, sports promoters, writers, preachers, and politicians all sought their share of the publicity that came from being on the air. Except for Parliament, which viewed with distrust any suggestion that its proceedings might be broadcast, the microphone was welcome everywhere and people sought eagerly to get on to the air; not only people whose professional interests depended on being known to the public, but members of the public who had nothing tangible to gain by being interviewed in the street or invited to participate in a broadcast Spelling Bee.

Theatre managers in particular were beginning to realise the aid that broadcasting could bring to the box-office. The BBC's relations with George Black, the music-hall magnate, remained uncertain, but an increasing number of music-hall acts billed themselves as "the BBC comedian" or "the broadcasting band", and periodical appearances on the air were regarded as essential to a touring artist's public appeal. Even more marked was the effect of broadcasting extracts from shows direct from the stage. A good example was that of "Balalaika", a musical play by Eric Maschwitz, the BBC's Variety Director, which was showing symptoms of failure on its first West-End production in 1936 until well-chosen broadcasts brought it to the notice of the wider public and it became an outstanding success. The same thing happened a year or two later with Lupino Lane's production of "Me and My Girl", which was saved by a broadcast and went on to enjoy one of the longest runs in theatrical history. It was also televised, and this had already acquired considerable publicity value, although the number of actual viewers was still small.

The radio programmes for those years included practically every outstanding artist from Guilhermina Suggia the cellist to Billy Bennett ("almost a gentleman"), as well as resident and visiting statesmen, thinkers, and dignitaries of the Church. But broadcasting went on making new reputations as well. Among the most popular names on the air were those of people who had never been heard of before, and people who had found in the microphone a more rewarding vehicle than those that they had previously used.

Many of these personalities had survived from the earlier

days. The roll of commentators still included Col. Brand (lawn tennis), Major Bourne-May (military ceremonial), Squadron-Leader Helmore (air races), George Allison (soccer), R.C. Lyle (racing), and the versatile Howard Mashall, who could and did describe anything. This versatility was becoming the hallmark of the new type of professional commentator. Howard Marshall, John Snagge, George Blake, Thomas Woodrooffe, Freddie Grisewood might turn up on any sort of occasion, frivolous or serious, whilst there was a fringe of more lightly armed experts, still very versatile, like John Watt, specialist on back-stage and behind-the-scenes, and Bryan Michie, the interviewer of "In Town Tonight".

There were regular talkers like Sir Walford Davies, still carrying on his campaign to bring music to the ordinary listener, with relief from other experts such as Donald Tovey and Percy Scholes; John Hilton, Harold Nicolson, Lord Elton, and Stephen King-Hall. Raymond Gram Swing was broadcasting weekly from America; he had become known to British listeners when he was an American newspaper correspondent in London and now that he was back home he was still better known here than there. Alistair Cooke, who came from America to be the BBC's film critic, had gone back there, and after producing a notable series of gramophone records of American work-songs was starting a weekly series "Mainly about Manhattan". These two speakers went on interpreting the United States to Britain, in their own ways, through the important years for Anglo-American relations that lay ahead.

Plays, feature programmes, magazine programmes, religious services, schools broadcasts poured out of the loudspeakers; there were 9,600 schools on the listening register in the autum of 1938. But there were still many listeners who shunned the human voice except for news and sport, and devoted their listening mainly to orchestras and bands. The name of these was legion. There were the BBC's own lengthy string of "house orchestras", the great concert orchestras like the Hallé and the Philharmonic, the orchestras of enterprising municipalities like Bournemouth, Hastings, and Torquay. But there were also countless smaller combinations that made household names of Reginald King,

Wynford Reynolds, Fred Hartley, Falkman, Medvedeff, Leslie Bridgewater, Philip Whiteway, and many more.

Then there were the dance bands, still as popular as in the early days but no longer confined to the Savoy. Even the most expensive restaurants and cabarets found it profitable to have a broadcasting band, and BBC microphones were welcomed in every night-spot from Park Lane to the Strand, as well as in dance-halls and hotels thoughout the country. This sort of music was despised as "commercial" by the swing fans (the terms "swing" and "jazz" had not yet changed places), who preferred to spend their time playing their Louis Armstrong records except when the BBC put on a special "jam session" for them. Several of these jam sessions were arranged in America (where the BBC had had a New York office since 1936), and the fans sat enraptured whilst maestros of the Dixieland or Chicago styles took it in turn to express themselves in improvised solos, loyally backed by the rest of the little band.

The BBC was constantly being accused of unfairness to dance music (which meant jazz), and the popularity of this highly uncultural activity was undoubtedly a source of pain and embarrassment to Broadcasting House. But it is also true that the dance bands gave the BBC more trouble than anything else in its programmes. There were repeated rows with dance-band leaders who wanted to announce their own numbers in very un-BBC voices instead of handing over to an announcer, there was trouble over "slushy vocals" (an expression used to cover a great variety of offences in the words of songs), over "scat-singing" (a form of gibberish popularised by the coloured American Cab Calloway and for some reason considered injurious to public morals), and most of all over "song-plugging", which has continued to this day and caused many grey hairs in the BBC.

Song-plugging is a well-established custom by which music publishers pay to have their songs performed, in order to profit by selling them to the public afterwards. The growth of broadcasting and the certainty that listeners would base their buying of records on tunes they heard broadcast expanded it to unprecedented dimensions. This was particularly true of dance bands. As soon as a band was signed for a broad-

cast, its leader would be approached by song-pluggers from all the popular publishers, and before he drew up his programme he might hold a sort of auction to decide what the band should play. The result might easily be that plug-money rather than merit would determine what tunes the listener heard broadcast in turn by band after band.

The evil was obvious but the remedy was not easily found. The custom was wide-spread and though all publishers disclaimed it they would never all agree to give it up, and unless all did none would try. Band leaders argued that the fees paid by the BBC would not cover the cost of the broadcast unless they took publishers' money as well. They wanted to make the best showing on the air and by the time they had augmented their band and had special arrangements made they were out of pocket unless somebody closed the gap. Anyway the plug numbers were the ones you would hear most wherever you went so what was the difference if they did accept free arrangements from the publishers and even a few pounds in cash on the side ?

Endless attempts were made to solve this problem, without success. The BBC kept careful records of the percentage of tunes by different publishers played by different bands; it cut down the number of vocals; at one time it even cut out the titles of numbers played by outside bands; it set a shining example with its own incorruptible Henry Hall; it issued statements and had repeated conferences with the trade. But the public wanted dance bands, big bands, and plenty of them, good players and good arrangers became more and more expensive, the BBC's fees remained low, broadcasting remained the best way of selling records, and the problem of plugging was never finally solved.

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The general pattern of BBC programmes had changed somewhat since the twenties, but not much as it has changed since the war. The chief things that would strike a listener of today, if he were suddenly confronted with the programmes of 1938, would be the short hours of broadcasting, the dullness of the Sunday programmes, the lack of fixed days and times when

you could expect to find the same programmes, the uncertainty of timings generally, and the leisurely way items followed each other on the air.

The "fixed-point" system, long familiar in American commercial radio, had not yet been adopted by the BBC. Besides the News, religious services, charity appeals, and "service" broadcasts meant specifically for farmers, seamen, and other special categories of listeners, there were some broadcasts that came at the same time and on the same day every week (and these included the most popular), but many more that dodged about from week to week. Even the most popular fixed-time series were apt to have a short run and then be "given a rest", to be replaced by something quite different likely to appeal to a different type of listener. Even the published timings were often falsified by under-runs and over-runs. Symphony concerts in particular frequently exceeded their allotted time, causing equal fury among music-lovers if they were cut off and among people who wanted to hear the next programme if they were left on (1).

Under-runs occurred frequently too, and listeners waiting for the next item on that wavelength were left with silence or one of the Interval Signals that were a familiar feature of that time. The BBC was constantly inventing new signals, all of which became unpopular if only because intervals themselves were naturally not liked. There was a metronome that was soon christened "the death-watch", a piano rendering of the notes BBC, and the famous recording of Bow Bells, which must have filled days of air time before the war.

It took a pretty considerable interval to evoke the use of an Interval Signal in those leisurely days. Visitors who were used to commercial radio, where air time is money and dead air is the fatal offence, were bewildered by the gaps between BBC programme items, and the fact that if anything went wrong a programme would simply fade into silence, followed some minutes later not by an announcement or apology but by the ubiquitous Bow Bells. But some listeners who had

(1) The classic instance of an over-run, however, was on the wartime Home Service, when a production of *Hamlet* had exceeded its time by some 45 minutes before it was cut off, having reached (if I remember rightly) as far as the graveyard scene.

grown up with the BBC's methods warmly defended this and claimed that silent intervals increased the impact of what went before and after. They would have liked to go further and have a gap of several minutes left deliberately after such solemn broadcasts as symphony concerts and religious services, so that they could digest their experience and compose their minds before the next item without having to switch off their sets for themselves. Indeed, the possibility of switching off the set was seldom recognised either by the advocates or by the critics of the BBC.

As for the Sunday programmes, the foreign commercial stations provided popular fare, but the BBC itself remained comparatively austere. The Ullswater Report had recommended that "one of the alternative programmes should be of a lighter and more popular character than the other," and there had been some change in consequence, but not very much. The Bach Church Cantatas had indeed ceased to be a regular feature of Sunday broadcasting, and listeners could hear light music, spirituals, theatre organs, spelling bees, and plays—even musical plays; but dance music and variety were still tabu for National and Regional alike.

In fact there was no distinction in kind between the two. The same sort of programmes appeared on both, and the same items were often broadcast first on one and then on the other. The Regions were the only element of variety, and their contributions were often orchestral with no distinctive local flavour. If one Region had an interesting programme to offer it was likely to be heard on other Regions and often in the London Regional Programme as well, and this, whilst giving better service to local-station listeners, cut down the choice of programmes available to those who had good wireless sets. However good your set, there were few times of the day when you could hope for choice of more than two programmes from British stations (a state of affairs often contrasted with that in the United States), and listeners with such sets spent a lot of their time listening to music broadcast from abroad.

Short-wave listening to distant stations continued, though the BBC's increasing practice of relaying broadcasts direct from America removed some of the incentive for it. Nor

was there any need to resort to the short waves to hear the propaganda with which Hitler and Mussolini were flooding Europe; that was to be found all over the long and medium bands.

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Inside the BBC things changed rapidly as the international outlook blackened. Early in 1937 the BBC had made its first preparations against the possibility of war; lists of skeleton staff who could carry on in a state of emergency were drawn up, plans were made for dispersing offices and studios, the engineers worked out schemes for carrying on broadcasting in the event of air raids. The Munich crisis of 1938 passed over but apprehensions were redoubled. It was in this atmosphere that Reith's successor arrived to take over his new job.

The new Director-General was F.W. Ogilvie, a Balliol man who had been President of Queen's University, Belfast, since 1934. He was a man of culture and humanity and his appointment helped towards spreading those often neglected qualities in the BBC, but he was not well fitted for the arduous job of running broadcasting in time of war. He came to Broadcasting House on October 1, 1938, after a three-months' interregnum during which the man in charge of the BBC had been Cecil Graves, the Deputy Director-General, one of the old hands from Savoy Hill, who had been Reith's nominee to succeed him when he went (1).

Plans for the war-time organisation of broadcasting had already been laid. From the BBC's point of view, the danger had been that in time of war home broadcasting would be taken over by the Ministry of Information that was to be formed, and foreign broadcasts by the Foreign Office. This threat had been averted before Reith left. He records in his autobiography that the director-general of the BBC was to be responsible to the new Minister, "on a level with, but in no way subordinate to", the Ministry's own director-general. The relationship was made even clearer by the fact that the

(1) Ogilvie was knighted in 1942, the year he left the BBC. Graves received the K.C.M.G. in 1939.

director-general of the Ministry was to be Sir Stephen Tallents, who was then Controller of Public Relations in the BBC. The BBC was to keep its independence, subject to guidance and direction on policy, but it was to lose its Chairman and Board of Governors. As Reith puts it :

> Consideration about the board of governors in such circumstances had led to the conclusion that their retention would be embarrassing and would serve no purpose. The board would therefore cease to function if war were declared. In order, however, to preserve the BBC's constitutional position, Gardiner of the Post Office lit on the clever idea that the director-general and deputy should be appointed governors when the others dropped out (1).

With its independence secured, the BBC had still an anxious amount of preparation to do. Like every big organisation it had to take measures for civil defence, and like every Government department it had to concern itself with security. Also its responsibilities in the propaganda field grew steadily. The original broadcasts in Arabic and to Latin-America were added to by daily news in German, Italian, and French, broadcast on the Regional wavelength (September 1938, the time of Munich), a short-wave service in Afrikaans (May 1939), Spanish and Portuguese for Spain and Portugal (June 1939), and a European Service on short waves (August 1939). After that came the deluge, with new languages being added almost every day.

The shadow of the international crisis kept falling across the big broadcasts of the last year of peace. When Queen Elizabeth launched the great liner that was named after her, few listeners could have foreseen the dramatic maiden voyage that the ship was to make at the height of the war, but on the evening of the same day Neville Chamberlain broadcast on his return from Munich with the promise of "peace for our time". Despite his assurance, nerves remained stretched,

(1) *Into the Wind*, by Lord Reith. The clever idea was never carried out and the BBC retained its Chairman and Vice-Chairman throughout; the full Board was reconstituted in 1941. Nor did Sir Stephen Tallents ultimately become Director-General of the Ministry of Information, though Reith himself was for a time Minister.

and it was shortly after this that American radio provided an example of panic far outstripping the scare caused in Britain by Ronald Knox's broadcast of 1926. On October 30, 1938, Orson Welles produced an adaptation of H.G. Wells's novel, "The War of the Worlds", in which he made the Martians land in New Jersey, and despite numerous announcements that the broadcast was fictitious, people in many States fled from their homes.

In May 1939 the BBC performed prodigies of organisation to cover the Royal tour of Canada and the United States, with numerous broadcasts from points on the route, many of them by Richard Dimbleby, a staff reporter who travelled in the Press train. Here again the shadow of war intruded. The warship in which the Royal party were to have travelled could not be spared from the fleet, and British listeners, uncomfortably close to their enemies in Europe, found it heartening to hear the warmth of the welcome that the King and Queen received not only in Canada but in Washington and New York.

Every month the broadcast news became a matter of greater gravity; at the beginning of 1939 the First News was even broadcast on Sundays as well as weekdays at 6 p.m. (instead of 8.50), though there were no news broadcasts earlier than 6 p.m., Sundays or weekdays, until the war. But many listeners, indifferent to foreign affairs or exhausted by the long-drawn crisis, found their entertainment in serial plays like "The Prisoner of Zenda", tuneful music like Louis Levy's "Music from the Movies" and Geraldo's "Dancing Through", the crazy humour of "Danger!—Men at Work!", or the more straightforward guffaws of Saturday-night Music Hall. Music-lovers revelled in the broadcasts from the London Music Festival, with Toscanini once again conducting the BBC Symphony Orchestra; sport-lovers heard England playing Italy at football and the West Indies at cricket; and except for Sundays, dance-music fans had a succession of outside bands on the air for the last hour or so every night.

Apart from its secret preparations for war, the BBC was still expanding in many directions. In the last year of peace it built a studio centre in Glasgow, with a main studio

bigger than anything in London's Broadcasting House (1), new studios at Aberdeen, and an imposing new headquarters for the Northern Ireland Region at Belfast. In London a row of old houses in Portland Place had been pulled down and excavations were being dug for an extension that would bring Broadcasting House to more than double its original size. On the technical side, besides continuing improvements in studio acoustics, fidelity of transmission, and recording technique, a twelfth medium wavelength had been gained for Britain at the Montreux Convention. Of two new transmitting stations opened in June 1939, the 100-kilowatt station at Start Point with its directional aerials was a notable addition to the high-power stations of the BBC, and its ability to cover the French coast was to be of great value during the war.

Inside the BBC a spirit of comparative liberalism reigned. It was well shown by thenew attitude towards organised representation of the staff. The Ullswater Report had recommended, in its mild fashion, that the BBC, though not bound to negotiate with Trade Unions, "should make it clear that it will provide all necessary facilities for any representative organisation, whether a single staff association or smaller bodies representative of appropriate groups, which its employees may wish to set up", and Mr. Attlee, the Labour representative, had added a reservation "that the BBC should definitely recognise the right of every employee to join an appropriate union and that a proper system of consultation and collective agreement should be instituted". Later in 1936 the special board of enquiry appointed by the Prime Minister to enquire into the BBC's handling of the Lambert-Levita case made similarly mild recommendations that the BBC might profit by the experience of the Civil Service and business organisations in setting up some machinery for dealing with the personal affairs of its staff.

By this time the BBC had in fact appointed a Director of Staff Administration, the first experienced administrator it had ever employed, and he was in time to have a considerable

(1) The biggest studio was however in Maida Vale, where a converted skating-rink now housed some of the most important musical activities of the BBC. No. 1 Studio at Maida Vale had a floor space of 110 feet by 72. The big studio at Glasgow was 80 feet by 57, and 40 feet high.

influence on its affairs. But in 1937 the staff themselves seemed to prefer paternalism. In that year a ballot was held to decide whether some form of staff representation should be set up. The staff were assembled division by division and the issues were explained to them by their respective Controllers. The story had already been spread that Sir John Reith was opposed to the whole idea and that if any formal machinery were established they would lose their right of direct access to him. By an overwhelming majority they voted to keep things as they were.

Another ballot was held in a different atmosphere in November 1938, and this time the vote showed a different result. The BBC set about establishing some form of consultation with its staff, but its plans were interrupted by the outbreak of war in September 1939. During the war the staff finally took matters into their own hands and staff associations were actually formed, but their history belongs to a later section of this book.

The new outlook was expressed also in the attitude towards Listener Research. Sir John Reith was known to be strongly opposed to "counting of heads", or ascertaining the tastes and habits of listeners and trying to meet them in the broadcast programmes, and he has never wavered in this consistent opposition, even in the days of his rapprochement with the post-Reithian BBC. A Listener Research Unit had indeed been formed before he left, but even its most ardent advocates did not hope for much more than "intensive" research . . . detailed studies of particular communities which might in time build up a picture of the country as a whole, but in the meantime would demonstrate the BBC's interest in its audience without committing it to any action. One such report was in fact commissioned from workers of the Bristol University Settlement, who took a district in East Bristol as the field for a survey of the social effects of the coming of broadcasting on the individual and on family life (1).

In the upshot, and under the new regime, the BBC's new unit did much more than that. It undertook "extensive" research, in other words the very procedure of counting heads

(1) *Broadcasting in Everyday Life*; BBC 1939.

(though by means of a sampling system) to which Reith was most opposed. During 1938 the unit was getting its hand in and breaking the idea of research to the BBC by carrying out specific inquiries into reactions to the Children's Hour and talks for discussion groups, and by taking occasional "random samples" in which some 30,000 listeners filled in forms saying which type of programme they liked. During 1939 it was preparing more ambitious plans for a daily house-to-house canvass, which came into effect in December—one of the few domestic developments to be accelerated rather than delayed by the outbreak of war.

Up to this time the BBC had gone on for 17 years content to have no check on its results except the monthly licence figures, which were of course affected by many factors besides the attractiveness of the programmes and at best gave no clue at to what people liked, what programmes they listened to, or even when they listened. Every other public entertainer or public utility had some sort of factual check, not of course on its prospects but on its results. Theatre, music-hall, cinema, and concert-hall had their box-office; newspapers had their circulation figures and book-publishers their sales; water, gas, and electric companies and all forms of public transport had their record of peak loads and could base some of their future estimates on them. Even the commercial radio stations aimed at British audiences had their market research, though its published results sometimes seemed to be governed more by desire for promotion than by zeal for facts. The wireless exchanges alone could provide figures on the extent of listening to BBC programmes by measuring the load on their power supplies, but they were not sufficiently wide-spread or representative to give much guidance, even if guidance had been sought by the BBC.

It is hard now to realise how little the pre-war planners of British broadcasting knew about what happened to the programmes they put out. They had no means of knowing factually when listeners listened or what they listened to, much less what they liked. In the course of years numerous conceptions had been evolved about the different type of listeners and their different tastes, and these were the basis of "vertical planning" (which meant arranging programmes

on one wavelength so that anybody who listened only on that wavelength should in course of time hear all sorts of programmes) and "programme contrast" (which meant that listeners who tuned from National to Regional should not hear the same sort of programme at the same time). But these conceptions of types of listener and types of programme were all subjective, very often sensible but not based on any known facts.

Only one department of broadcasting was in constant though limited touch with its audience, and that was the department in charge of Broadcasts to Schools. As early as 1927 it was realised that "some external investigation" was necessary, and in 1928 the Carnegie Trust published the results of a research into the effectiveness of school broadcasts that it had carried out in the County of Kent. This was an example of "intensive research", an enquiry into a specialised type of broadcasting with a specific object, carried out in a limited area, but it had profound effects, and thenceforward the schools broadcast department attached prime importance to what it called "listening-end study". It sought for reports on the extent to which different broadcasts attained their effect not only from representative educationists and individual teachers, but from "watchdogs" sent round by the BBC itself, including Education Officers and the oddly-named Education Engineers. Incidentally, this department was recognised as being one of the most professionally efficient in the BBC.

Broadcasts to schools were in a class by themselves: it was easy to find out how many schools listened to each programme and how many children formed each audience. Otherwise, the BBC had no idea how far each of its broadcasts was heard, much less how far it was liked.

There were odd sources of information that cast occasional light. The BBC received some guidance from comment by Press critics, which was officially ignored but often eagerly awaited by staff producers as well as outside performers, and newspaper ballots, which gave only the views of those who cared to write to the papers. The BBC had its own letters from listeners, including fan mail to artists, which were known to be an unreliable index to the opinion of those who did not write but were carefully counted and analysed in

Broadcasting House. There were odd facts picked up at random from outside, such as the celebrated case of the Southampton Water Board.

An official of the Board wrote to the Editor of the *Radio Times* pointing out the effects of the Cup Final broadcast on the local demand for water. During the first half the demand sank to an unprecedented low level; at half-time it leapt to a peak; second half, rock-bottom again, followed by another peak. The incident was not mentioned in the *Radio Times*, owing to the possibility of ribald guesses as to the reasons for the half-time demand, but in a generalised form it became one of the BBC's stock instances of the effects of broadcasting on people's lives. The Controller of Public Relations, who was then trying to institute Listener Research, often referred in speeches to the way in which public utilities such as water engineers could provide evidence of the popularity of broadcast items, and Sir John Reith has recorded that he finally passed this generalisation on to King Edward VIII. Yet nobody set out systematically to collect more information on the same lines; rather as if a man picked up a lump of gold on the Witwatersrand and carried it off to show to his friends without ever suspecting that there might be more to be found.

Apart from such accidental sources, the verdict on the success or failure, popularity or unpopularity of individual programmes depended on the opinions of the senior staff, buttressed by those of their friends and acquaintances. These of course tended to be people of their own social group . . . relations, club-members, fellow-travellers on the morning train. The opinions of the lower classes were deduced mainly from the comments of charwomen, gardeners, taxi-drivers, and commissionaires.

Under this system a great many popular programmes were in fact produced, but the BBC never knew for certain which they were. The fact was that it did not really want to know. In the Reithian concept of trusteeship it was more important to give people what the BBC thought best than to give them what they wanted to hear. The BBC's responsibility was to its own high standards and not to public taste or demand, and this view was frequently to be heard in Broadcasting

House. It was to be modified though not radically altered when Listener Research began to operate extensively during the war.

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A whole era of British broadcasting ended on September 1, 1939. Hitler had attacked Poland, Warsaw had been bombed, the British Governmend had issued an ultimatum giving the Germans forty-eight hours to withdraw, which nobody thought they were likely to do. Broadcasting went on to a war-time footing without waiting for the ultimatum to expire. On September 1 alternative programmes vanished, the Regions disappeared, television closed down, and a single programme called the Home Service began. With its customary technical efficiency, the BBC smoothly and suddenly altered its whole distribution system in such a way that broadcasting would not have to stop during air raids. Troops of producers, engineers, musicians, actors, secretaries, and administrators left for provincial centres where there was thought to be less danger of bombing. The BBC, like the rest of the country, nerved itself to face the blitz that everybody expected to burst even before the ultimatum expired.

CHAPTER NINE

TELEVISION FLASHBACK

WHEN the BBC Television Service closed down on September 1, 1939, it had been in existence for three years, and despite its many limitations it had already shown clearly that broadcasting in vision was a new medium, different from any that had preceded it, and having hardly anything in common with broadcasting in sound.

Its launching has been referred to in an earlier chapter. Like so many things in BBC history, it had no one starting date. The first transmissions from the new station at Alexandra Palace went out in August 1936, the formal opening of the service and the beginning of regular programmes took place in November, and serious progress began with the adoption of an all-electronic system in February 1937. The first occasion when the programme possibilities of television were realised by the public came with the "outside broadcast" of the Coronation in May.

The new station and the new service were planned with no experience to serve as a guide. The only television programmes yet seen in Britain were the 30-line transmissions which were more primitive than any form in which sound broadcasting had come before the public; enterprising as they were, they represent little more than the Morse stage of television; a viewer had to be terribly keen before he would take the trouble to pick them up and puzzle them out. High-definition transmission had been performed experimentally, in America and elsewhere, but never on a service basis . . . never with regular programmes expected by the public at fixed times every day. When Gerald Cock was put in charge of the BBC Television Service, more than a year before it finally opened, he had before him more of a pioneering task than any one man had ever had in the short history of sound broadcasting.

He himself had clear ideas about the future of television. In an article that he wrote in the Television Number of the *Radio Times* (published on October 23, 1936, the week before the new service opened), he foresaw many developments that are only now coming to pass: television screens of not less than 24″ × 18″, a daily news service freely illustrated, as well as a daily television newsreel on film; educational programmes, a woman's hour, and extensive use of specially made films. Even then he could see that the ordinary feature film, made for a mass audience watching it in a cinema, would not have the same appeal to the home viewer as an outside broadcast of something actually happening at the time.

However, the BBC had no ambitious plans. The original idea was that television programmes would consist largely of radio performances during which the audience could see the performers, and the studios, scenery, and staff for the new station at Alexandra Palace were set up on the scale that this would have required. But once born, the new service rapidly outgrew its cradle. In no time the black-and-white curtains that draped the studios were hidden behind solid scenery, the scene-making department had become one of the most important in the station, dressing-rooms, make-up rooms, and wardrobe were all conquering new space, and Alexandra Palace itself had turned into something like a mixture of a theatre and a movie studio, with the apparatus of broadcasting thrown in.

On the side of performance, progress was unexpectedly quick. In November 1936 the Television Service was struggling with the alternation of the Baird and M-EMI systems, each with its separate studio, cameras, transmitter, and engineers, and each giving different results on the screen. By the following summer it had advanced beyond the televising of the Coronation procession to the point where it was no longer tied to studios, nor to specially-prepared cables, but could go out and get its programmes from anywhere in the London area and send them back to the station by radio link, to be sent out again to viewers in their own homes.

Television has one thing in common with sound broadcasting: both developed most rapidly in their earliest years, but whereas sound broadca sting grew in the number of it

stations and the number of its listeners, television remained the hobby of a very small minority in one corner of the country whilst it shot up spectacularly on the programme side.

Its achievements were indeed remarkable during the first three years. It began with a set-back, omen of many since. The first short-notice transmissions for the viewing-rooms at Radiolympia in August 1936 were followed by a prolonged period of experiment and rehearsal (during which such long-lived programmes as "Picture Page" were born) before the official opening of the station by the Postmaster General on November 2. But it was ironical that the official opening should have presaged a close-down lasting for a week. This was no more than a reminder of the technical hazards always surrounding the production and transmission of high-definition television, depending as it does on a multitude of technical processes all performed with incredible accuracy and at incredible speed . . . a task that makes the one-time miracle of sound broadcasting seem almost like a labourer's job.

Once started, the television service went ahead with an extraordinarily ambitious programme. Into its two separate hours of transmission a day it packed plays, ballet, music, talks, stories, interviews, personality appearances, and even "feature programmes": Cecil Lewis produced one for Armistice Day, based on a German film, and one for the end of the year, recalling the "pattern of 1936". There were films, too; occasional films made by television's own film unit, regular screenings of Walt Disney cartoons and the newsreels of two of the commercial companies, Movietone and Gaumont-British News. There was even an attempt to televise from the open at night, when Cecil Lewis showed the flashes of anti-aircraft batteries firing in Alexandra Park.

These broadcasts from the park that lies below the studio windows were a feature of the very earliest days. First a television camera was taken out on the balcony alongside the studio and the wide view across North London flashed on to the home screens. Then a camera was taken down to the terrace to show a comedian leaving in his car. Then came riding lessons, miniature golf, sheep-dog trials, model aeroplanes, all televised by taking the Emitron cameras out

of the studio but leaving them coupled to the control room by the bulging many-stranded cable that carried the signals back.

The length of this cable was the radius within which television could gather its pictures. Already the Post Office was laying a permanent cable round the West End, through Broadcasting House to Alexandra Palace, so that great events could be brought to the transmitting aerial. But it had already been realised that cable was not the only possible link. A portable transmitter on the spot could send back the signals to the main station for televising to the public, and then move on to the next site, and this method was soon to be used.

Early in 1937 the Television Advisory Committee authorised the BBC to drop the Baird system and operate entirely on the all-electronic M-EMI, whose Emitron cameras had been responsible for the progress already made. Of the two studios at Alexandra Palace, one had been assigned to each system, with a control-room and vision transmitter attached. Whilst Baird himself went on experimenting into still uncharted realms such as that of colour television, his apparatus was removed from the television station and Studio B was freed for rehearsals, though as it had no control room of its own it could only be used for transmission as an "inside outside broadcast point", a place where cameras could be stationed so long as the producer controlled them from the gallery of Studio A. It was not until in the autumn of 1938 that Studio B got its own separate control room, and a central technical control room was provided to combine the output of the two.

Outside broadcasts were always the most spectacular achievement of television, and once they started the milestones raced past. The Coronation procession was followed by the Wimbledon tennis championships of 1937, the finish of the Oxford and Cambridge Boat Race of 1938, the Derby, the Calcutta Cup match at Twickenham. These were all "radio link" pick-ups of events happening well outside the range of the special cable, and for Twickenham a new transmitting aerial had to be brought into use. This was mounted on an extensible fire-escape which could raise it to a height of 75 feet.

The vehicle carrying the fire-escape added a fourth to the caravan of great wagons that took the road when television did a "radio link O.B.". The other three contained a mobile control-room, where the producer and technicians worked much as they did at Alexandra Palace, but in even greater congestion and sometimes in uncomfortable heat; a mobile transmitter, and a mobile generator to provide power. This travelling circus became a familiar spectacle to the crowds at big events, and one of the sights at Wimbledon or Wembley was the aerial protruding over the back of the stand, a constant reminder of the still miraculous fact that people many miles away were watching it all in their own homes.

The list of events went on: in 1938 the McAvoy-Harvey championship fight, Test Matches, relays from theatres, the most celebrated of these being the one of "Me and My Girl" from the Victoria Palace that helped to make a success of the show. In September a brilliant piece of improvisation brought viewers the sight of the Prime Minister, Neville Chamberlain, arriving at Heston Airport from his visit to Hitler at Munich, waving the piece of notepaper on which he built such high hopes. Around Christmas there were relays of a first night in the West End . . . "Under Your Hat" at the Palace Theatre; pantomime from Covent Garden, the circus from Olympia. In February 1939 came the Boon-Danahar fight at Harringay which was shown on large screens in several cinemas equipped for the purpose.

This last was an interesting development for by a three-cornered agreement between the BBC, the promoters, and the cinema managements, the cinemas paid the promoters a fee for the right to show the fight to their customers, over and above the fee paid by the BBC. This arrangement suited all parties, as the cinemas' money added thousands to the hundreds that the BBC was prepared to pay, and far-sighted promoters began to foresee the day when the hazards of big open-air fights would be ended, and the men would meet in a comparatively small hall where ringsiders paid heavily for their seats, whilst more people saw the spectacle televised in the cinemas than could possibly have crowded into the most distant seats if the fight had been staged in a baseball stadium or a football field.

The only danger of this proceeding was that a cinema that had not contributed to the fund might "pirate" the fight. This was because the copyright in television as in broadcast programmes had never been established, and the only way the BBC could have dealt with the situation would have been to cancel television altogether, thus robbing home viewers as well as contributing cinemas of the show. But other factors intervened to stop the practice after the war.

Television was still a novelty, and unless it was shown in cinemas it had no wide public, so showmen welcomed it for its publicity value without caring much about its competition with their box-office or gate. Such opposition as did show itself was usually circumvented by the adroit diplomacy of Gerald Cock. His chief problem was with the film industry, which had found sound broadcasting no competitor but a useful source of publicity and occasional material. But when the BBC monopoly began to purvey visual entertainment they were quick to take alarm. Cock succeeded in getting the right to use two newsreels a week, Gaumont-British and Movietone, and the Walt Disney cartoon films, and these were among the most popular items in the pre-war service. But apart from these concessions the film-makers remained suspicious, and only short documentaries of no box-office value were shown.

Meanwhile, television's studio productions showed astonishing enterprise. The pre-war programmes, short as they were, were packed with varied entertainment. "Picture Page" weekly brought into the studio celebrities of all kinds . . . visiting sportsmen, film stars, actors, statesmen, everybody who had just got into the news . . . as well as a long list of picturesque Londoners like Pearly Kings, Lord Mayor's coachmen, and women chimney-sweeps. Algernon Blackwood told uncanny stories with a virtuosity that made viewers realise how much they had been missing when they heard him on "old-fashioned radio". There were ballet, variety, cabaret, sports demonstrations, fashion shows, musical recitals, illustrated discussions; some of them not the real stuff of television but all fascinating novelties for people who were first experiencing the sensation of seeing the people you heard. And there were plays, to which television came

to look for a great proportion of its steady appeal once the novelty of seeing anything had begun to wear off.

In the first year of the service there were two one-hour transmissions a day, afternoon and evening (except on Sundays when there were none), and the short sessions were packed with short programmes, many of which were repeated from afternoon to evening or even in the following week. There were short plays, short sessions of ballet, instrumental recitals, songs, turns by cabaret artists, illustrated talks and discussions, often lasting for no more than a quarter of an hour. But there were also more ambitious productions like George Robey's tour of the television station in Coronation week, when cameras were moved all over the BBC's premises in Alexandra Palace to show viewers everything from the entrance hall to the long corridor that borders the studios, control rooms, make-up room, dressing-rooms, and wardrobe. This tour lasted a full hour and took up the whole of the transmissions on Saturday, afternoon and evening.

But the programmes were always bursting their bounds, and though the evening transmission was still scheduled from 9 to 10 p.m. it habitually overran its time. Play-producers were growing more ambitious every day. Flecker's "Hassan", televised in November 1937, was admitted to be the most lavish production Alexandra Palace had yet staged (incidentally it starred Greer Garson, not yet a name in films), but a month later the Hollywood burlesque "Once in a Lifetime" made history by being the first production to run for ninety minutes, which soon became a standard length for television plays.

There was still plenty of drastic condensation: the first television pantomime, at Christmas 1937, took only half-an-hour, and "Alice in Wonderland" was cut to a nominal twenty-five minutes. Early in 1938 Sunday evening programmes were added (to be followed later by Sunday afternoon programmes), and close-down was scheduled at any time between ten and eleven, whilst the evening might start as early as 7.45 if there was a theatre relay like "Under Your Hat". Ninety-minute plays were coming at the rate of two or three a week, and in Christmas week of 1938 television produced the amazing total of seven full-length

plays (1) as well as two short plays, a children's party in St. George's Hospital, six variety, cabaret, or band shows, two editions of "Picture Page", newsreels, talks programmes, and a relay of New Year's Eve festivities in the ballroom at Grosvenor House.

All these programmes were produced in conditions of the greatest difficulty. The two studios, now fully at work, were so heavily occupied by actual productions that no adequate time was left for setting, lighting, and rehearsal; actors had to rehearse in hired rehearsal rooms bearing no resemblance to the studio in which they would perform, and sets were built and lighted in a constant rush between the end of one show and the beginning of the next. Yet productions often achieved a very high standard, and showed unmistakably that a new force had come into home entertainment, not merely a peepshow, a form of illustrated broadcasting, or a home movie on a smaller screen.

Even in its primitive conditions, as primitive as those in which Mack Sennett made his slapstick films, television gave thoughtful people plenty to think about. The addition of a quite new medium had changed the character of the BBC's monopoly, and although television spread so slowly, the one thing obvious was that people who had once become viewers would never willingly go back to listening. Whatever its handicaps, entertainment by eye and ear together was more compelling than entertainment by the ear alone.

In 1939 this menace of television was no more than the size of a man's hand. In less than 20,000 homes (2) in the

(1) Noel Coward's *Hay Fever*, Kaufman and Hart's *Once in a Lifetime*, Gordon Daviot's *Richard of Bordeaux*, Denis Johnston's *The Moon in the Yellow River*, Brandon Thomas's *Charley's Aunt*, Beaumont and Fletcher's *Knight of the Burning Pestle*, with Frederic Austin's music, and Edgar Wallace's *The Ringer*. Casts included Maurice Denham, Olga Edwardes, Fabia Drake, Joan Miller, Gwen Frangcon-Davies, Frederick Ranalow, Gina Malo, Lydia Sherwood, Jack Livesey. All were scheduled for 90 minutes except *Hay Fever*, which was allowed nearly two hours and televised twice during the week.

(2) As there was no separate licence for television there was no accurate check on the number of set-owners. The BBC put its estimate at 23,000 and higher figures were given by sections of the radio trade. A check taken after the war revealed however that the total number of sets sold

South-East corner of England the privileged few drew the curtains, turned out the lights, and settled down to watch the pictures on their little screens. The screen would probably be 8‴ × 10″ in size, though larger and smaller models were sold; the picture was not bright enough to compete with any other lighting so nobody could read or write in the same room; neither in detail, in definition, nor in focus did it compare with the standard cinema picture. Quite often it broke down. Often too the set itself went wrong and the picture broke out in strange distortions, or began to revolve, or strayed out of position so that you saw an actor's feet at the top of the frame and his head below. Then the owner had to grope his way to an elaborate series of controls, reminiscent of the very earliest radio sets, and after juggling one of them he would probably find that he had to juggle the other eight or nine to get the picture back at all.

These sets were not unduly expensive, but they cost a lot more than sound radio sets. The cheapest television set cost about £35, whereas a good radio could be bought for £10. On the other hand there was no purchase tax and no extra licence. The viewer paid his ten bob like anybody else. But he usually needed an elaborate aerial, even in the vicinity of Alexandra Palace; he was using innumerable valves that would need renewing sooner or later, and an amount of power that would give him a nasty shock if he ventured into the interior of the machine; and he knew that the cathode-ray tube on the end of which he saw his picture was the most expensive and the most vulnerable part of his set. Worse, he was never sure how long it would be before the technical improvements that he read about—higher definition and colour— would put his set on the scrap-heap and make him have to start all over again. And he had to buy an expensive set. There was no crystal set of television, and very little home construction; not many people were skilful enough to build their own television sets before the war.

This factor of cost has from the first differentiated television

before 1939 was between 18,000 and 19,000. This number would have been greatly increased as the result of orders placed at the Radio Exhibition of 1939, during which television was closed down on the advent of war.

from sound broadcasting and has been one of the factors limiting its growth. If it cost the viewer more than listening, it cost much more at the sending end too. It was not merely that television productions needed lights, scenery, costumes, make-up, and far more rehearsal than sound programmes, but the process itself was inherently more expensive because it was more delicate, more complex, calling for greater precision and greater skill. A television transmitter cost far more than an ordinary broadcasting transmitter, and every bit of equipment serving it cost more. The simplest forms of television, like transmitting a caption card or a ready-made film, were far more expensive than their parallels in sound—transmitting a ready-made record or a tuning note.

And the stations that cost so much to build had a very limited range. High-definition television had to use ultra-short wavelengths, and when Alexandra Palace started it was thought that their range would not reach beyond the visual horizon. The higher the aerial the wider the horizon would be (hence the choice of a site that already stood on a 300-foot hill) but the range was not expected to be more than about 25 miles. This proved to be an under-estimate, and after the war the range was thought to be an average of 40 miles. It is now known that a powerful transmitter with a high aerial can give good reception as far 100 miles away, but the lie of the country and local interference affect television far more than ordinary broadcasting and it is never possible to know beforehand where, at any distance, a station will be well heard.

This limitation of range has a profound bearing on television's international future, which will be mentioned later, but domestically it meant that there could be no Daventry or Droitwich of television. If it was to cover the country it must rely on a number of local stations as broadcasting had originally done, and these stations would be expensive to build and would then have to be provided with programmes, either expensively on the spot or almost as expensively by relaying them from London. High-definition television could not be sent over the trunk telephone lines as sound broadcasts or Baird's low-definition television had been. It required special cables or special relay stations, the cost of which was thought

to be likely to work out at something like £1,000 a mile.

The future of television was therefore obscure even whilst the service from Alexandra Palace was the wonder of the world. No other country had anything like it. The United States had seen many successful telecasts of big events but no American station was licensed to run a regular "commercial" service until 1941. France, Italy, Holland, and Sweden had experimental transmissions, and Germany had a two-way television telephone between Berlin and Leipzig by which you could see your correspondent as well as hear him. Russia was said to have three television stations but little could be learnt about them. By the time war broke out many countries were just adventuring into regular television, but South-Eastern England remained the only part of the world where you could go into a shop, buy a television set, install it in your own home, and see programmes at regular times every day.

As the atmosphere and the apparatus of war grew more familiar in daily life. . . as shelters and gas-detectors, gasmasks and A.R.P. exercises multiplied in the streets . . . it must have occurred to many viewers that television would make the ideal occupation for blacked-out nights. To watch it you blacked yourself out, drew the curtains, showed no lights; you did not have to go out and help to form dangerous crowds. But in reality the television service already ranked high on the list of destined casualties. The BBC's plan of re-grouping stations so as to give no guidance to hostile aircraft could not apply to a programme broadcast on ultra-short waves from a unique station in a known place. Further, the Services had their eye both on the transmitter (which they later used) and on the technical staff, who were to play a large part in the manning of radar when the war began.

So it came to the fatal day. On Friday, September 1, 1939, a Mickey Mouse cartoon was being transmitted for viewers at the Radiolympia exhibition. A caricatured Greta Garbo had just said "Ay tank Ay go home" when the long-awaited order came, and the world's first television service closed down.

CHAPTER TEN

BROADCASTING GOES TO WAR

THE outbreak of war brought far-reaching changes to the part played by broadcasting in British life and to the role of the BBC. Twelve years of steady, almost imperceptible evolution since the British Broadcasting Corporation was founded were succeeded by six years of rapid developments evoked by rapid changes in national needs.

From the first, broadcasting was recognised as an important element in maintaining civilian morale. It was realised that people in this country were going to have a dull and perhaps a terrifying time, and the radio would be not only a source of news, but the only diversion that most of them had. Responsible work in the BBC was classed as work of national importance, security regulations were extended to its premises, and it was treated in many ways as a Government department, although it retained a great measure of its independence throughout.

By 1939, indeed, it would have been impossible for any Government in any country to overlook the importance of broadcasting. Its impact on the home public had been rivalled by its effectiveness as a weapon of propaganda abroad. The Axis powers had used it almost as a weapon of war. In Germany particularly Dr. Goebbels had introduced a new concept of the way radio could be used to spread defeatism in neighbouring countries and raise doubts in countries all over the world. Many a British listener had felt uneasy when he heard Hitler's frenzied utterances greeted with equally frenzied roars from a vast audience of "Sieg Heil! Sieg Heil!".

At the same time the governments of the democracies were also depending more and more upon the radio. President Roosevelt's "fireside chats", delivered with perfect command of the microphone, had done much to steady the American

public in the financial panic that was already raging when he was elected in 1932. In the British Commonwealth, the voice of the King speaking directly from Windsor or Sandringham had become one of the chief influences making for unity, and in Britain itself the familiar voice of the announcer was as reassuring a sound as a nervous public could hear. Almost unknown to listeners in this country, Britain was already broadcasting not only in English to the Empire, but in other tongues to other nations in Europe, Latin-America, and the near East, though its propaganda broadcasting was puny compared with the great machine that Goebbels had already built up. As for the United States, which had led the world in the early days of long-range broadcasting, its competitive commercial system made it nobody's business to undertake broadcasting that brought no financial reward, and although amateurs listened to the World Radio University's broadcasts from Boston, neither government nor people thought it important to have the voice of America heard abroad.

In Britain the BBC rose to its greatest heights during the war. It expanded, adapted, reacted swiftly to every emergency and every demand. New stations and new studios were built, new services in new languages started almost overnight, new staff taken on by the thousand. New programmes were devised for new situations and new audiences; amongst black-out, bombing, and every sort of interruption of normal facilities and normal communications, broadcasting went on all day and all night. The war brought out a new resilience and resourcefulness in the BBC, and brought into its orbit many projects and many people having no connection with its peace-time work.

Like the real war, the war in the ether went through various phases. There was the first stage of apprehension, when everything was organised on the assumption that Britain would be blitzed as Poland had been; then the transition to the Phoney War, with special programmes for the British Expeditionary Force in France and jokes about hanging out your washing on the Siegfried Line, with an under-current of menace from German broadcasts. During this time Britain's overseas broadcasts were rapidly expanding

and the mechanism of propaganda and counter-propaganda was being built up. In the course of 1940 the war suddenly became real. Britain was beleaguered, Winston Churchill became a familiar and inspiring broadcaster, the radio became the prime source of news. In 1941 the cessation of air raids and the German attack on Russia left Britain still blockaded and radio was almost the only way of breaking the blockade and communicating regularly with the free world of America and the remnants of freedom in Europe. Japan's attack on Pearl Harbour in December widened the struggle and confused the issues. From then onwards British radio had the complicated task of keeping up the morale of workers at home and troops overseas, whilst fanning the flames of resistance in Europe and the over-run countries of the East, impressing the neutrals, and providing facilities for all the allies who used Britain as a base.

These new activities changed the whole function of British broadcasting and left it at the end of the war with new experience, new equipment, new staff, and new ideas of its own power, but still independent and free to choose for itself how many of its new attributes it would shed on the return to peace and how many it would retain.

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On September 3, 1939, the Prime Minister, Neville Chamberlain, broadcast in the new Home Service, telling the nation that Germany had disregarded the British ultimatum and that this country was therefore at war. A few minutes later the air-raid sirens sounded in London, and one of the first surprises for many listeners was that the radio took no notice but went on without interruption and without any mention of what was later proved to be a false alarm.

The BBC's scheme for wartime broadcasting was in fact inspired by the determination to go on broadcasting during raids. The pre-war system, with stations at known places broadcasting on known wavelengths, would have made it easy for raiding aircraft to take their direction from the broadcasts they picked up. The wartime scheme substituted one programme broadcast on two medium wavelengths,

with each wavelength shared by a group of stations, the locations of which were kept as secret as possible. When hostile aircraft were reported to be approaching one station of a group it would close down, but listeners would still receive the programme on the same wavelength but from a more distant station. Only a very widespread raid could have taken all the stations off the air.

In so planning their wartime transmissions the BBC engineers had decided differently from those of France and Germany, where broadcasting continued much more normally at first but stopped dead when the big air raids began.

In the same way the BBC programme departments dispersed so as to reduce the likelihood that heavy bombing would force individual programmes off the air. These precautions were well taken in view of the general expectation that Hitler would start the war with a tremendous onslaught on Britain, but in the complete lull that followed September 3 their consequences caused severe criticism of the BBC.

The early programmes were in fact those that would have been possible, and very welcome, during a blitz, and the blitz did not come. The main idea was to allow for news every hour on the hour, from 7 a.m. until midnight, with further news broadcasts at 1, 3 and 5 a.m. if need be, the rest of the time being filled with gramophone records, pre-recorded programmes, and such live shows as could be scraped together; in particular the theatre organ broadcasts of the BBC's Sandy Macpherson, who played indomitably, night and day, in the eerie surroundings of an otherwise deserted St. George's Hall.

When nothing warlike happened west of Danzig these first war-time programmes came in for copious abuse. But by that time live programmes were coming in again. Rightly regarding London as the first target for bombers, the BBC had sent bodies of broadcasters to provincial centres that were thought less likely to come under fire. A team of variety producers went to the Regional headquarters at Bristol with a troupe of broadcasters including Tommy Handley, Leonard Henry, Sam Costa, and Webster Booth, but the biggest of the new centres was a country resort known as "Hogsnorton", after the legendary village that Gillie Potter

had popularised in many pre-war broadcasts. In a country house at Wood Norton, near Evesham, formerly owned by the Duke of Orleans and adorned with silver coronets on every drain-pipe and bath-tap, a mixed company of actors and musicians gathered to broadcast from studios recently converted from such humbler puposes as stabling. Plays were performed there by the BBC Drama Repertory Company, a corps of professional dramatic broadcasters which was born of the war but has survived to this day. Many of its original members have since left it, but the first company included Patricia Burke, D.A. Clarke-Smith, Ralph Truman, Carleton Hobbs, and Gladys Young, whose rise to the position of First Lady of British Radio really dates from the versatility that she displayed in those early years of the war.

Cheek by jowl with the actors and drama producers were orchestral players, including 75 out of the 119 who normally made up the BBC Symphony Orchestra, with their conductors Sir Adrian Boult and Clarence Raybould. Stanford Robinson and his Theatre Orchestra were there too. And to add to the Babel in this country resort and the confusion in the neighbouring town of Evesham, the new activity of monitoring was also carried out at Wood Norton. Monitoring meant listening continuously to enemy broadcasts and reporting both factual information and indications of new propaganda lines, and it was done mostly by refugees from the Nazi and Fascist countries, so whilst plays and concerts were broadcast from the rambling buildings of Wood Norton, hundreds of foreigners sat all night long transcribing Axis propaganda in special huts built up the hill.

Monitoring was only the passive side of the BBC's counter-propaganda activities, just as Bristol and Evesham were only supplementary sources for programmes. The news continued to go out from London, and the big building in Portland Place remained the centre of BBC activities until it burst its bounds. It was from Broadcasting House that new foreign-language services were launched in bewildering profusion. When war broke out Britain was broadcasting to the world in English, Arabic, Spanish and Portuguese, German, Italian, French, and Afrikaans. September 1939 brought new broadcasts for Poland, Hungary, Czecho-Slovakia, Rumania,

Yugoslavia, Greece, and French Canada, with Turkey following in November. 1940 saw the start of broadcasts in Bulgarian and Swedish (February), Finnish (March), Norwegian and Danish (April), Hindi for India (May), Maltese (August), Burmese, Cypriot, and Flemish (September), Albanian (November), Icelandic and Persian (December), and 1941 was to bring such additions as Slovene, Thai, Malay, Tamil, Cantonese, Kuoyu, and Bengali, with still more languages and dialects to follow before the end of the war.

The starting dates of some of these new services may seem typical of the current habit of "missing the bus", but the BBC could hardly be blamed for this. Once the Government had decided that it was necessary to broadcast to a foreign country in its own language, the BBC showed commendable promptitude in launching the service; which involved finding trustworthy foreign nationals, or others with ability to speak and write the language concerned, and setting up the machinery by which these newcomers could have access to the microphone and access to the news, in spite of the security restrictions which lay thickly about Broadcasting House. Within a few weeks of the outbreak of war, news in foreign languages was being broadcast nineteen times a day.

At the same time the overseas services in English were expanding. These were meant primarily for the Dominions and Colonies and for people of British birth living abroad; they were not yet addressed to specific countries, and no broadcasts were ostensibly aimed at the United States, which was very conscious of its neutrality in the war. But the six short-wave transmissions to countries outside Europe ran for almost twenty-four hours a day, including fifteen news broadcasts in English, some which could be heard in practically any part of the world.

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At home people settled down to their war-time radio as they settled down to the other queer concomitants of the Phoney War. They soon got used to the absence of weather forecasts before the News, for the weather was now a military

secret; "deep depressions over Iceland" vanished from the announcer's vocabulary, and tremendous pains were taken to prevent any incidental references to sun, rain, or snow, which were apt to creep into many broadcasts, for instance those dealing with sport.

In the first months of the war there was only one BBC programme on the air, but it ran from 7 a.m. to 12.15 a.m., much longer than the pre-war National and Regional (though the news broadcasts allowed for in the small hours never materialised), and it was packed with talent, for as theatres closed and tours became impossible, most of the stars were glad to go to Bristol and do a few broadcasts. In September 1939 people were listening to their old favourite "Band Waggon", to the familiar voice of Mr. Middleton on Sundays, to Raymond Gram Swing's weekly broadcasts from America, and to Kevin Fitz Gerald and Eric Gillett reading weekly instalments of J.B. Priestley's new novel, "Let the People Sing", which was the first novel to be serialised on the air before it appeared in print.

In October outside broadcasts began again as sport and entertainment got under way. There were football, racing, boxing, visits to local music-halls, camp concerts, and rehearsals by the ENSA concert-parties that were to become so celebrated during the war. The BBC dispatched a party of "observers", including Richard Dimbleby and Charles Gardner, with a recording car to the Western Front, where British and French troops were awaiting events in and behind the Maginot Line (1). Walford Davies broadcast to schools and Sandy Macpherson played the theatre organ, his Postbag system of collecting suggestions from listeners laying the foundation for the tremendous spate of "request programmes" that was to come. There were relays from foreign countries, one of them from Italy, not yet at war.

With the reopening of theatres the stars began to leave Bristol again. "Band Waggon" resumed its stage tour and was broadcast weekly from different halls; it was still

(1) The first BBC correspondent to cover an active front was Edward Ward, who went to Finland in January 1940 to report on the Russo-Finnish war. British sympathies were strongly on the side of the Finns, and Ward's recorded dispatches made a strong impression here.

the family favourite, and Sir Samuel Hoare referred to it in the House of Commons as "perhaps the most popular programme of all". But competition was looming. "Garrison Theatre" started in November, with Jack Warner and his catchword "Mind my bike", and by that time "It's That Man Again" was beginning to catch on. This show, which was to become the great hit of the war years, had begun in July 1939, and begun like "Band Waggon" in a small way, but it was after it started again at Bristol that it climbed quickly into the top class, and during the blitz period of 1940-1941 that it became a household word, as much of a "must" for millions of listeners as the Nine O'Clock News.

Itma, as it was universally called, was the result of a close partnership between three men: Ted Kavanagh the writer, Francis Worsley the producer, and Tommy Handley the comedian. All three had varied experience of radio but in this collaboration they reached new heights. From being first one job amongst others and then a full-time job, Itma became practically their life-work, right up to the time when Tommy Handley died in 1949.

It was an irreverent, irresponsible show, fast-moving and topical, with Tommy Handley as the central figure in a kaleidoscopic world of crazy characters. These characters recurred week after with their idiosyncracies and their slogans, the best-remembered being Funf the German spy who appeared only as a menacing voice on the telephone (achieved by Jack Train speaking across a tumbler), Mrs. Mopp with her "Can I do you now?" (played by Dorothy Summers), and Colonel Chinstrap, whose answer to every question was a dignified "I don't mind if I do" (also played by Jack Train). But it was one of the attractions of the show that new characters were constantly being introduced, and every time the door-knob rattled listeners might meet a new personality whose catchwords would become household words overnight.

In November the Queen broadcast to the women of the Empire, and listeners at home heard the first piece of considered anti-Nazi propaganda in a series of feature programmes called "The Shadow of the Swastika", denouncing the evils of Hitler's regime in a way that had never been heard on the air before. The part of Hitler was played with frenetic

brilliance by Marius Goring, and the broadcasts did more than many reasoned arguments to show the British people what they were up against.

On Christmas Day of 1939 the King broadcast after a programme of Empire Greeting which brought spokesmen from the three Services, the six BBC Regions, the Dominions, and the Colonial Empire, represented by a Malayan naval rating from Singapore. There were five broadcasts from the British Expeditionary Force in France, ending with one by Gracie Fields at an ENSA concert behind the lines. And early in the New Year the BBC gave listeners at home an alternative to the Home Service when it started a special B.E.F. programme broadcast from 6 p.m., which was extended in February to run for twelve hours a day.

Up to this time listeners at home had had only one programme from the BBC, and many of them had resumed the habit of roaming the ether in search of alternatives. Foreign programmes, excluding those of Germany and her satellites, were in fact printed under the heading of "Alternative Programmes" in the *Radio Times*, which also published the times and wavelengths of the BBC's own overseas services. Some listeners made a point of tuning in to BBC news broadcasts for Europe, believing that they would be more accurate than the news chosen for home consumption, just as in after years some listeners in Europe tuned in to Home Service news believing that it would be more accurate than the news addressed specifically to them.

Into the routine of the Phoney War came the bombshell of Narvik and an accelerating tempo of events up to the miracle of Dunkirk. The radio became again a source of news breathlessly awaited rather than a diversion for empty hours in the billet, the fire station, or the canteen. The Minister of Information, Alfred Duff Cooper, became a frequent broadcaster, Herbert Morrison, Minister of Supply, came to the microphone urging armament workers to "Go to it", there were broadcasts about bombing raids on Germany and recorded programmes from Cairo, where Richard Dimbleby had been sent in the wake of the British troops hastily rushed out. Then came the beginning of the air Battle of Britain, with Charles Gardner's recorded commentary on a dog-fight seen

from the cliffs of Dover, which thrilled most listeners but shocked some who felt that a life-and-death struggle was being treated as a sporting event. Mr. Winston Churchill, now Prime Minister, broadcast on the imminent danger of invasion. But instead of invasion came the Blitz, when first London and then the provincial centres could expect death and destruction from the air any night.

The BBC's precautions now met the menace that had been foreseen a year before, and they stood up to it well. Some stations went off the air but thanks to the grouped-transmitter system the programmes still went out, and with any luck listeners everywhere could hear them. Very often the radio brought the first warning of raids, not explicit, for security forbade any mention of them at the time, but to be deduced from the sudden loss of volume and deterioration of quality on the listener's set, which meant that his local station had closed down and he was receiving the same programme from a more distant station in the same group. This was always a sign that in a few minutes the local sirens would begin to wail. But it was noticeable that the power always seemed to come back for the Nine O'Clock News.

Moreover, the service during air-raids steadily improved as the BBC engineers added small transmitters in big towns to the high-power regional transmitters already in use. These small stations did not have to close down until enemy aircraft were very close, so they were able to go on working long after the nearest high-power station was off the air. Sixty of these stations, all sharing the same wavelength, were put into operation in 1940-1941.

During the arduous months of the Blitz the radio played a great part in keeping up morale. It did not provide so much news about the raids as many had expected: security restrictions circumscribed broadcasting and when information did come it was colourless and generalised—"a district in North London... considerable damage to house property.. .. two churches and a cinema hit . . . many casualties, some fatal". These restrictions made the news less informative to the enemy but even more alarming to the home listener, who could all too easily identify everything he heard with some place or person he happened to know. But they were imposed

by the Government departments concerned and could not be laid to the charge of the BBC.

Apart from the news, the radio provided unfailing entertainment and stimulus in days that were often frightening and at best drab. The new Prime Minister, Winston Churchill, became known as an inspiring broadcaster who put into words all that the nation would have liked to think of itself. J.B. Priestley's Sunday Postscripts, following the Nine O'Clock News, were a source of weekly inspiration to millions of listeners. Observers' stories, talks and feature programmes cast new lights on sides of the war that people could not see for themselves, Michael Standing's visits to the shelters gave every shelterer the feeling that he might find himself in "In Town Tonight", whilst plays, music, and variety provided a means of escape from the whole weight of the war.

Under the watchful eye of the Government, the BBC was highly conscious of its role as a supporter of the nation's morale. The very familiarity of radio had a reassuring effect. The well-known voices of the news-readers and announcers became symbols of reality in a topsy-turvy world. If you were waiting in a fire-station for the bells to go down, if you had lost your home that morning, if your place of work had turned into a pile of rubble overnight, still nine o'clock would bring the strokes of Big Ben and the unfailing News (1).

The news-readers and announcers carried much of the burden of broadcasting in those years. They were constantly faced with news of all sorts of gravity, with mentions of foreign places and foreign names that nobody knew how to pronounce, with crises when programmes could not be broadcast and broadcasters failed to appear. They had to sound unruffled whatever happened at their end of the microphone, for nothing would have been more apt to spread panic than any sign of it on their part; and they always did. One innovation welcomed by most listeners was that the announcer now gave his own name at the beginning of the news. This was a security measure, designed to make it easier for listeners to recognise the authentic voices and reject any attempts that

(1) The introduction of Big Ben at nine o'clock, instead of the more accurate Greenwich Time Signal, came about in a curious way. There was a strong movement to introduce a daily Silent Minute, not for prayer

enemy agents might make to broadcast fake news, as they had done during invasions on the Continent. It was introduced on July 13, 1940, when Frank Phillips read the one o'clock news, and soon no phrase was more familiar than "This is the nine o'clock news and this is ..... reading it".

Incidentally, this practice did not survive the emergency that brought it in. The moment the danger of impersonation was over, the BBC reverted to its cherished principle of anonymity. Stuart Hibberd recalls in his diary, "This is London", that he gave his name for the last time when he read the six o'clock news on May 4, 1945, and at nine o'clock John Snagge announced that news-readers would no longer be named.

The war-time corps of announcers was commanded by John Snagge, who had returned from outside broadcasts on the outbreak, and it included many men and women for whom it was only a war-time job; actors and actresses, producers, television artists, people who had left announcing or left the BBC. At the beginning of the Blitz the news-readers, all stationed in London, were Alvar Lidell, Alan Howland, Frank Phillips, Joseph Macleod, and Frederick Allen, two of whom are still with the BBC. The announcers, scattered all over the Regions and the dispersal centres, numbered some two dozen. At their head was Stuart Hibberd, the Senior Announcer, and among them were Frederick Grisewood, Elizabeth Cowell (formerly a television announcer), Roy Rich, Raymond Raikes, Lionel Gamlin, Hermione Hannen the actress, Kay Cavendish the pianist and singer, Patric Curwen, Ralph Truman, Bruce Belfrage, hero of the BBC bomb incident, and Wilfred Pickles, who afterwards became the top star of the British air.

(which might antagonise the section of the population that did not believe in prayer) but for reflection and mustering of the will to win, and it was realised that the innovation could only be made by the BBC. Pressure came from such high political quarters that the BBC saw it could not resist, but somebody fortunately discovered that the quarters and strokes of Big Ben at nine o'clock took just a minute and suggested this alternative to a minute's complete silence, and the new procedure began on November 10, 1940. As a further compromise this was billed not as the Silent Minute but as the Big Ben Minute, and it has continued in the Home Service to this day.

Their task was made even more difficult in the autumn of 1941, when an "enemy voice" began cutting in with sardonic comments during pauses in the news, forcing the readers to fill their time with an accuracy not hitherto known in British home broadcasting. But during the Blitz period the chief menace to the peace of mind of British listeners was the voice of Lord Haw-Haw. This broadcaster from Hamburg had been so christened by a newspaper critic in the early part of the war (his real name was William Joyce, and he was subsequently executed for treason, for although his nationality was doubtful he had used a British passport), and listening to him had been an amusing break in the monotony of the Phoney War. As the news grew worse and the war came nearer he became more of a menace. He seemed so well-informed about events here that his threats carried an uncomfortable air of conviction. But he was largely helped by inventive gossip, spread either from malice or from mere desire to show off. For instance, the classic Haw-Haw story was that he had addressed a broadcast to a particular town, saying that it would be bombed the next night, and he had shown his familiarity with every detail of the town's life, ending up by saying "If you don't believe me, go out and look at the clock on the Town Hall. You'll find it's four minutes slow." The clock had indeed been four minutes slow and the town had been bombed on the next night. This story was widely told but the BBC's monitoring service could find no trace of it amongst Joyce's broadcasts. Like the "Russians with snow on their boots "of the first World War, this seems to be one of the legends that grow up when censorship stops so much of the real news.

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On Christmas Day of 1940 British listeners could hear the Forces Programme (so named since the B.E.F. withdrew from France) from 6.30 a.m. to 11 p.m. and the Home Service from 7 a.m. to 12.20 a.m. The King did not broadcast, and instead of the usual round-the-world feature there was a more modest programme including pick-ups from Palestine and

Egypt but otherwise confined to Britain, and appropriately entitled "Christmas under Fire". After it there was a touching war-time broadcast: "Children Calling Home", one of a series in which the BBC, the National Broadcasting Company of the United States, and the Canadian Broadcasting Corportation joined forces to enable evacuated children across the Atlantic to talk to their parents here; a series that became all the more touching, from the British listener's point of view, as the years went by and the evacuees grew more and more American in their speech until the parents could hardly understand what they said.

There was an ENSA show from a shelter, a Christmas Cabaret with Donald Peers fourth on the bill, variety with Arthur Askey and Richard Murdoch, Elsie and Doris Waters, Jack Warner, and Geraldo's band. Adrian Boult conducted Mozart, Ernest Bevin appealed for Wireless for the Blind, John McCormack sang, and there was an Anglo-American band programme in which the Columbia Broadcasting System provided a famous American band to alternate with a famous band here.

Towards the summer of 1941 the raids died down, though everybody was prepared for them to start again, and the production drive went on at full pitch. In June came the German attack on Russia, and an immediate broadcast by the Prime Minister, Winston Churchill, addressed primarily to the United States. His assurances that he retained all his horror of Communism whilst accepting Russia as an ally against Hitler did much to keep American opinion sympathetic to Britain in the new situation, and forestall isolationist efforts to keep the United States strictly neutral spectators of a Nazi-Soviet war. Then in December the Japanese attack on Pearl Harbour brought another hemisphere into the war and led to the greatest disasters that had yet been suffered but to success in the long run.

There were many thrilling broadcasts but no change in the general pattern of the BBC's home broadcasting between 1940 and 1943. Home and Forces programmes continued, and the habit of listening became more wide-spread and more firmly established than ever before. There was no spectacular leap in licence figures; on the contrary, the annual total

receded for the first time (1), but this was due to the uprooting of households caused by call-up, evacuation. and dispersal. What grew beyond recognition was the habit of communal listening. In wardens' posts, factories, fire stations, shelters, camps, and billets, each set might have an audience running into hundreds. There had never been a time when BBC broadcasts had been more of a bond between people, when tunes and catchwords from radio shows had had so universal a currency, when every sort of programme was more widely heard and more generally discussed.

Meanwhile the BBC itself was increasingly pre-occupied with international broadcasting and with its own relations with Government departments, exiled Governments, and the armed services of Britain and its allies. New problems were constantly being tackled, new demands encountered, new needs met. The last remnants of peace-time self-sufficiency were relentlessly exorcised from Broadcasting House.

(1) The figures for the end of the first war years were as follows: 1939, 8,948,000; 1940, 8,904,000; 1941, 8,626,000. After this they recovered and grew again until the total was nearly 10 million by the end of 1945.

CHAPTER ELEVEN

INSIDE THE BBC

THE war provided shake-up after shake-up for the BBC. Even before the raids began there was the dispersal, when staff who had lived in the Home Counties and worked sedately in Broadcasting House found themselves cycling from country billets to rehearsals in hastily adapted stables. In the headquarters building itself life changed beyond all knowledge. Seniors who had always gone home promptly at six o'clock now slept in the office and encountered the strange night life of war-time, when volunteers with truncheons roamed the corridors looking for saboteurs, Germans and Czechs and Magyars worked late on news broadcasts, and celebrities arrived at midnight to broadcast to America in the small hours. As the war went on Broadcasting House sprouted defences inside and out; there were blast-walls and barricades, armed sentries in steel pill-boxes; people came to meetings in Home Guard uniform, often strangely inconsistent with their office rank. The stately Concert Hall and the arty Green Room, once reserved for famous musicians, were turned into dormitories, and announcers in pyjamas and dressing-gowns could be seen reading the early-morning news.

When the raids came, home broadcasting was always presenting new problems. Programme departments were moved about the country, studios and control rooms went underground, armoured cars stood by to rush a news-reader to the Maida Vale studios if it became impossible to go on broadcasting from Portland Place. Broadcasting became again an urgent task, the *raison d'être* of the whole organisation, instead of being almost a routine activity, less conspicuous in the work of the hierarchy than administration, organisation, and public relations, as it had seemed at times in danger of becoming in the peace-time BBC.

On the technical side the BBC rose to all occasions. New

networks linked the new studios, transmitters, and control rooms; sirens, gunfire and bomb-bursts were kept from the ear of the microphone even in outside broadcasts; it was only occasionally that programmes were faded out or failed to come through. Broadcasting House itself suffered three times from bombs, but only once did even a trace of the result go out on the air.

This was when the first bomb burst inside Broadcasting House during the nine o'clock news on October 4, 1940. It was a time bomb that crashed through the fifth-floor wall on the Portland Place side and came to rest on the third floor, inside the central studio tower. In the confusion it was some time before the bomb itself was found, and when it exploded six people were killed, most of them monitors who had been listening to foreign broadcasts. The explosion happened whilst Bruce Belfrage was reading the news, but listeners heard only a distant thud and a whispered reassurance before the news went on. People who had seen the effects of bombing for themselves thought better of the BBC when it was subsequently revealed that a bomb had indeed burst inside Broadcasting House and that programmes had gone out smoothly for the remainder of the night (1).

There were two more "incidents", as they used to be called. On December 8, 1940, a land-mine burst in Portland Place and the blast did a great deal of damage in Broadcasting House; and on April 16, 1941, a "very big bomb" fell on the adjoining houses, which the BBC was using as offices, and demolished them. Each of these explosions damaged delicate electrical gear; there were often fires in the complicated wiring, studios would be knee-deep in water, everything looked as though it would take weeks of patient work to get broadcasting going again. But the BBC engineers attacked each new lapse into chaos with furious energy and unfailing resourcefulness, and the programme always went out.

As broadcasting became again the prime concern of the

(1) It is less well known that the news in German was going out at the same time from another studio in Broadcasting House, and the newsreader, Karl Brinitzer, also continued to broadcast without giving listeners reason to think that anything unusual had occurred.

BBC, so the listener gained an importance that he had never had before. It was in the national interest that listeners overseas should be enlightened, edified, and cajoled, and pleasing the home listener had become a vital matter from the point of view of the nation's morale.

This interest in the home listener took many forms; for instance, the "Music While You Work" broadcasts were directly inspired by the need for increased production and they were shaped according to the reports of factory managers and Ministry of Supply experts on the times, duration, and type of broadcast that would best help workers through the hours when fatigue began to set in. But the most important and permanent machinery for finding out the impact of broadcasts on listeners was the BBC's Listener Research system, which came into its own during the war.

Mass research of this kind was less sensational than it would have been a few years earlier. The methods of market research used by manufacturers and commercial radio stations had been noted by the new Ministries, and they too were busy carrying out mass enquiries into the state of popular opinion and popular morale. The Reithian objection to "counting heads" cut less ice when it became a patriotic duty to keep people cheerful rather than to elevate their minds. And once programme planners began to learn something about the tastes and habits of their public, the information proved very hard to disregard.

The "Listening Barometer" began in December 1939, and this mass enquiry has remained the central feature of BBC listener research and has had a powerful effect in the subsequent eleven years. In its final form it involved a daily questioning of some 3,000 people, so chosen that their geographical distribution and the proportions of old and young, rich and poor, men and women, reflected those of the population as a whole. These people were asked to say which programmes they had heard on the previous day, and the replies were totalled so that every programme item received an index figure showing the proportion of people who had heard it. The next day another 3,000, chosen on the same system, were questioned, and so on throughout the year.

This method of "sampling by recall" has its limitations, and it has never been claimed that its results are absolutely correct. But it can be claimed that they are relatively correct, and within a known margin of error they do give a pretty reliable indication of how the average audience varies at different times of day, and whether the audience to any particular series is going up or down. Naturally, the number of people listening is not the only test of the value or effectiveness of a broadcast, but it is one of the things that planners and producers want to know.

The second main activity of the BBC's Listener Research department aimed at qualitative rather than quantitative enquiry: finding out not merely how many listened to programmes but how much they liked them. This was done not by daily interviews but by weekly reports from people selected from among those who volunteered to give their own opinions, and those of their immediate circle, on types of programmes in which they were especially interested, such as drama, variety, or talks. From 1941, when the new plan was put into effect, their reports served as the basis for a weekly "thermometer", or "appreciation index", which was probably less reliable than the daily listening figure since it depended on opinion rather than fact, and partly on second-hand opinion at that. Taking the two in conjunction, however, it was often possible to get very useful guidance as to what sort of programme would please a maximum audience at a particular time; and this information was badly needed in the critical years of the war

Another internal activity of the BBC that had been begun before the war took on a more immediate practicality after it, and this was radio training for staff. The BBC had pioneered the idea that the principles of radio production could be taught, and its pre-war training courses had been attended by members of overseas and foreign broadcasting organisations which had nothing of the kind at home. These courses, which began in 1936, were lavish and leisurely, each lasting for three months, and on the outbreak of war the Training School was closed down.

Its reopening in June 1941 was due to no academic theories but to the urgent need to teach the use of the radio medium to the many newcomers on the BBC's staff, many of whom were

experts in their own subjects or experts in publicity in its other forms but without any experience of getting their effect over the air. It was important also to give them some idea of the workings and procedures of the BBC. The new courses were streamlined and business-like, lasting for three weeks instead of three months, but they answered their purpose, the proof being that heads of programme departments which were frequently overworked and under-staffed were yet willing for their own sakes to release members of their staff to attend the school.

During the war as before it, the BBC training school catered for some people who were not even temporarily on the BBC's own staff. It went so far as to train secret agents not only in broadcasting from secret stations but in ways of sabotaging a broadcasting organisation. As the BBC's director of training drily remarked, "It was jobs like these that saved the training staff from developing too academic an outlook during the war" (1).

Apart from these cloak-and-dagger visitors, the BBC's own staff had been changed out of all recognition by recruitment in war conditions and to meet war-time needs. People who had taken up broadcasting as a pre-war career, attracted by its combination of respectability, security, and association with the arts, were swamped in the flood of people who would never have found themselves in the BBC but for the war. There were foreigners of every nation to which Britain broadcast, from China to Peru; experts in foreign languages, foreign propaganda, foreign countries; newspaper men, advertising men, university professors, commercial radio men, some of whom had left the BBC for more lucrative employment before the war. There were hundreds of men and girls who had been hurriedly recruited and hurriedly trained for the semi-skilled engineering jobs that war-time methods had created. Most of them worked under heads who were products of the peace-time BBC, but even these had often changed their jobs and were facing new situations and consequently more open to new ideas.

(1) E.A.F. Harding, *The Past and Future of Staff Training*, BBC Yea Book 1947.

With such a staff the old system of paternalism had no appeal, and the BBC's pre-war steps towards staff representation or collective bargaining, suspended on the outbreak, were now resumed with greater vigour by the staff themselves. Both technical and non-technical staffs set up their own staff associations on their own initiative, and after some vicissitudes succeeded in establishing them as bodies with which the management found it desirable to deal. The two bodies later amalgamated into a general BBC Staff Association with a full-time secretary, which became the negotiating body for all questions affecting wide categories of staff. By this time its claims were threatened from the other side by the craft Unions representing journalists, musicians, electricians, and so on, who sought the right to deal with the BBC on questions affecting those of their own members whom it employed.

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Looking at the top of the pyramid rather than the bottom, the BBC went through no essential changes in the first two years of the war. It remained independent, though its responsibility to a war-time Minister of Information was different in kind from its pre-war responsibility to the Postmaster General. It had to watch not only its relations with political parties and organised interests but the effect of its broadcasts on morale at home and on the attitude towards Britain of countries overseas, for in war-time the consequences of mistakes would be disastrous to the nation rather than to the BBC.

The Minister of Information was the minister answerable in Parliament for the BBC, and this ministry changed hands rather frequently in the early years. Lord Macmillan held it in 1939-1940, Lord Reith in 1940, Alfred Duff Cooper in 1940-1941, and Brendan Bracken for the remainder of the war. But the BBC had in addition to deal with many other Government departments, notably the Foreign Office, Dominions and Colonial offices, the Service departments, and the succession of bodies that were charged with propaganda to enemy countries and countries occupied by the enemy. These latter culminated in the Political Warfare Executive, a

Government agency which finally took over policy control of the BBC's broadcasts to enemy countries and enemy-occupied countries, so far as the British Government could. Even then, however, there were numerous dealings first with the Allied and exiled governments in London and later with the different American organisations established here. Throughout the war the BBC retained its constitutional independence but at the cost of partial surrender of policy control and endless skirmishes with invaders from all sides.

The question that was most easily solved was the thorny one of censorship. As the war progressed this problem resolved itself into two. There was "security censorship", designed to stop the broadcasting of information helpful to the enemy's forces or harmful to our own, whether it was broadcast to Britain or to countries overseas. This included the obvious categories of facts about weather, bombs, troop movements, new weapons, and movements of Royalty and the Prime Minister, as well as less obvious ones such as visits to London by commanders back from the field, even though their presence might be well known. (There was a case when General Montgomery's visit to London was the subject of a "security stop" although he had visited a West End theatre and been acclaimed by the audience and greeted from the stage.) The other was "policy scrutiny", which aimed to excise from broadcasts anything that might encourage the enemy or alienate neutrals, allies, or indeed troops in the field. In this category would be such diverse items as mentions of anti-war movements in Britain, references to Americans as Yankees (which would annoy the South), emphasis on Christianity in broadcasts to the East, and, at a later stage of the war, jokes about Italian prisoners and farmers' wives, if broadcast to British troops who had not been home for years.

Security censorship of course depended on rules laid down by the Service departments, but it was exercised by the BBC. Instead of having Government censors assigned to check BBC broadcasts, it was arranged that the BBC itself should appoint certain of its own officials to be delegate censors, able to refer when necessary to other BBC officials who worked in the Ministry of Information and could take queries on the interpretation of the rules to the authorities on the spot.

The BBC maintained a small corps of full-time censors in Broadcasting House, mainly to check broadcasts by Americans to their own networks, but they could do only a fraction of the work, and when the volume of broadcasting rose to its peak practically every senior producer in the Overseas Service had his own censor's stamp and received the daily lists of "stops" and "releases", study of which was very nearly a full-time job.

This system, it must be said, worked very well. Despite the constantly accelerating tempo at which broadcasts were poured out, little of possible danger got through. There were occasional lapses—mentions of weather and land mines and military objectives; and some of these happened even when an official censor had been specially called in and sat in the studio or the control cubicle clasping a switch with which he could instantly cut the broadcast off the air. There is no reason to believe that national security was ever endangered as a result of leaving security censorship to the BBC's own staff.

Policy scrutiny was more a matter of discretion, for there were no rules, and the limits of what could be said expanded and contracted in different directions with the varying course of the world war. It imposed far more of a strain on the BBC producers who had to exercise it, as they could not fall back on arbitrary instructions from outside and had to use their own powers of persuasion to induce their broadcasters not to say what they wanted to say. Of course the producers possessed the ultimate sanction of cancelling the broadcast, but this seldom had to be used.

All the programme departments of the BBC kept in close touch with the many Government departments concerned, and there were few occasions of serious friction. In war-time the Government took the right to order the BBC to broadcast anything it wanted broadcast, without allowing it to say that the broadcast was at the Government's orders, but this situation did not often arise. There was one instance when the BBC fought to the last ditch before accepting the Minister of Information's order to put on a talk by a popular journalist, but usually one side or the other gave way before a head-on collision could occur.

The BBC received constant requests from Ministers who wanted to broadcast, and became expert at referring them to the Post Office, which referred them to Downing Street and often found that nobody there wanted the Minister to broadcast. The Prime Minister of course broadcast when and at whatever length he wished, but his speeches were as popular as anything the BBC could put out so it had no reason to complain. With a coalition government in power there was no problem of party political broadcasts. The views of the minority inside and outside Parliament which was "opposed to the war effort" were barred from the air, and self-proclaimed pacifists were not allowed to broadcast even on non-political subjects. An exception was one appearance by James Maxton, the I.L.P. member, who was picked by the Speaker of the House of Commons to take part in a two-way broadcast with American Congressmen; a situation that Maxton enjoyed and did not abuse.

The chief change in the BBC's relations with the Government was in the field of finance. Before the war the licence revenue had subsidised the Treasury, as only part of it was given to the BBC. Now the Treasury subsidised the BBC. The Post Office continued to collect ten-shilling fees from civilian listeners, but there was no attempt to relate expenditure on broadcasting to the amount so raised. It was realised that war-time broadcasting, especially to other countries, was a national responsibility and could not be paid for by licence-holders at home, and the BBC submitted its estimates and drew its money direct from the Treasury. Nor was it ever restricted by lack of funds. In fact there were occasions when the Government urged it to expand faster than it had contemplated; for intance when the Ministry of Information pressed for a 200% expansion of overseas services in 1941. The practical limits in such cases were set not by lack of money but by the difficulty of getting equipment and staff.

There was more friction between the BBC's Board of Governors, now headed by Sir Allan Powell, and their own Director-General than between the BBC and the Government, and in January 1942 Ogilvie resigned. He was succeeded by joint Director-Generals, Robert Foot and Cecil Graves. Foot had until recently been General Manager of the Gas

Light and Coke Company; he had been brought in a few months earlier to do an organising job, and although he had no knowledge of broadcasting he carried out one useful reform. He abolished the system of "Internal Administration" under which heads of output departments had to look for all executive business, and all material resources, to officers of a separate division which was not responsible for output work; so that Administration had become the most powerful section of the BBC. Graves on the contrary was one of the old hands, and the only broadcasting man ever to rise to such a height in the BBC. He had been in charge of home programmes and of the new Empire Service before becoming Reith's deputy, and had been Reith's nominee to succeed him in 1938.

The duumvirate lasted until September 1943, when ill-health forced Graves to retire. Foot's single reign did not last long, for in November W.J. Haley of the Manchester *Evening News* was appointed to the new job of Editor-in-Chief, jointly responsible for output with Foot. This new arrangement did not last long either for in March 1944 Foot left and Haley has been sole Director-General ever since (1).

These changes at the top were less unsettling than they would have been in peace-time, for everything else was constantly changing in the BBC. Departments and divisions were always being formed and re-formed in response to new needs, and the whole organisation was necessarily in a state of continuous flux. New tasks arose more quickly than the pre-war machinery could possibly deal with them, administrative procedures were never able to catch up, and at the cost of some mistakes and some anomalies, the BBC was doing the biggest job it had ever done, with more expedition and more success than the history of British broadcasting could show since the original Company brought broadcasting to Britain between 1922 and 1926.

(1) Ogilvie subsequently became Principal of Jesus College, Oxford; he died in 1949. Foot left the BBC to become Chairman of the Mining Association of Great Britain. Haley received the K.C.M.G. in 1946.

CHAPTER TWELVE

CROSS-ROADS OF WORLD RADIO

As THE years rolled on and news of raids by the Luftwaffe began to give place to news of raids by the R.A.F., people went on listening to the Home and Forces programmes of the BBC. They listened ardently to news of great events, speeches by the Prime Minister, postscripts by Priestley and Duff Cooper and Emlyn Williams; Quentin Reynolds, the American magazine writer, aiming his shafts at Hitler and Goebbels; the lively discussions of Julian Huxley, C.E.M. Joad, and Commander Campbell ("when I was in Patagonia"), chaired by Donald McCullough, in "Any Questions", afterwards known as the Brains Trust. They listened also to sporting commentaries, features about troops in training and workers at work, religious servies and speeches by religious leaders; to serious concerts, band concerts, camp concerts, Itma and Music-Hall; to the programme for gun-sites and balloon camps, "Ack-Ack, Beer-Beer", and the programme for merchant seamen, "Shipmates Ashore"; to a succession of radio plays that showed a distinct leaning towards the early twenties, the drawing-room shockers of Arlen, Lonsdale, and Maugham. They listened to almost anything during those blacked-out evenings when there was nowhere to go.

But they heard only a small proportion of the radio traffic that was flowing through the British air. From Dunkirk onwards London became the focus of attention for listeners everywhere except in the Axis countries, and for the remainder of the war, despite the diversion of interest to the Pacific, it remained the radio cross-roads of the world.

The BBC itself was increasingly preoccupied with international rather than domestic broadcasting. Whilst it was rapidly expanding its own international broadcasts it was also developing a very complete system of listening to broad-

casts from other countries. The monitors who were killed by the time bomb in Broadcasting House were a few among the hundreds who sat for hours clamped in headphones, listening amongst the babel of tongues, the constant shifting of wavelengths, and the clatter of atmospherics, to broadcasts not meant to be heard here. And behind them was an array of typists, transcribers, recorders, and editors, turning their listening into reports that gave a daily picture of enemy propaganda as well as very often a source of unreported news.

This Monitoring Service was one of the greatest war-time enterprises carried through by the BBC, and one that has survived the war. Every morning it produced a bulky Digest of broadcasts from all over the world on the previous night, with an index, and a more concise report surveying the trend of world broadcasting in the previous twenty-four hours. All these were circulated not only inside the BBC but to numerous Government departments who depended on them for a considerable proportion of their intelligence material. In addition, the Monitoring Service issued special reports on particular aspects of enemy propaganda or world opinion, and a "flash service" for sending out news likely to be of immediate importance as soon as it was heard.

These various reports were very important in the running of the BBC's own news and propaganda services, as the war of propaganda was being waged mostly in the air. The monitors also succeeded not infrequently in obtaining news scoops, and the Service departments were well aware that they might get their first news of important military developments from the BBC.

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The growth of the BBC's broadcasts to other countries is really a story in itself, a story of ever-increasing complexity as languages, networks, and transmitters multiplied and broadcasting took on more and more tasks, from propaganda talks to "Thank You" messages for American gifts, from encouragement for resisters to "get-together" conversations between GI brides and their future in-laws in the United States.

The formal division of the BBC's "external services" was into European and Empire (later changed to Overseas) both of which broadcast in English and in other languages, but the practical divisions were rather different. There were broadcasts to troops overseas and to the "exiles" in Dominions and Colonies, those who regarded Britain as home; broadcasts to the general public of the English-speaking countries, and to foreign-language Dominion citizens like French-Canadians and Afrikaners; broadcasts to allies and neutrals; to occupied countries, and to enemy countries. All these raised different problems and different methods had to be found for each.

To meet these needs transmitters, studios, staff, and resources were constantly increased. Mention has already been made of the rapid increase in the number of foreign-language services in the early part of the war. In 1942 the BBC was broadcasting to other countries to the extent of 71 programme hours a day; by the end of 1943 the figure had risen to over 100 hours, of which just over 44 was accounted for by the European services and 56 by Overseas. At that time 47 languages were being used, some for a few minutes, some for hours every day.

Some of these broadcasts were pumped out into the void, with little chance of finding out whether they were heard and what effect they had; those to occupied and enemy countries, for instance, could only be finally judged after victory was achieved. But it was soon realised that wherever possible the BBC must have the co-operation of broadcasting stations on the spot. Short-wave listening was the only resort of many listeners in outposts far from a local station, but wherever there was a broadcasting system able to reach its listeners by the easier method of medium-waves, the bulk of the audience would always prefer to listen to that.

The story of overseas broadcasting after the first phase of the war is therefore largely the story of co-operation with the local stations: finding out what sort of broadcasts they would take and at what times they would take them, and then ensuring that although acceptable in style and handling they would remain essentially British in content. By this means BBC broadcasts were brought to people who had no particular

interest in Britain and would never have taken the trouble to tune in to the short waves.

Rebroadcasting flourished in the Colonies, many of which had small-scale rediffusion systems which put BBC programmes on their wires, sometimes picking them up direct from transmission and sometimes getting them from recordings sent out from London. Direct rebroadcasting was common in the Dominions; Australia, New Zealand, South Africa, and Canada took a great proportion of BBC programmes all through the war. It even achieved considerable triumphs in the United States, which has the most highly organised competitive radio system in the world. For this very reason American rebroadcasting was considered to be most important, as American listeners with so much to listen to at the push of a button could hardly be expected to spend much time chasing distant stations. Great pains were taken to "groom" programmes to suit American needs, and special transmissions were used to send over programmes at the best reception times, to be recorded and rebroadcast by local stations at better listening times. The BBC in London and New York entered into close relations with the four big networks and with many smaller networks and independent stations, with the result that by 1942 items from the North American Service were being rebroadcast by 285 American stations for a total of 347 hours a week (there were 35 weekly rebroadcasts to be heard in New York alone), and on great occasions like D-Day and VE-Day more than 700 stations would look for some of their material to the BBC.

The hundred hours a day of broadcast to other countries produced an astonishing variety of programmes, in which a constant succession of exotic broadcasters took part. The European headquarters at Bush House and the overseas headquarters at Oxford Street were filled with talent of all nationalities: French wits, Indian musicians, Spanish philosophers, West Indian drummers, American air-crews, mingling with the British talkers whose names had become household words overseas . . . J.B. Priestley, Wickham Steed, Vernon Bartlett, and Howard Marshall amongst them. And behind their efforts was the constant work of engineers finding new networks, building new transmitters, studying short-wave

propagation and the probable behaviour of sun-spots, taking every possible means to ensure that the broadcasts found their goal.

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Whilst the BBC expanded its own overseas broadcasts, it had to supply more and more facilities to other broadcasters. From the first there had been the American correspondents in London, whose reports were not literally broadcast from here but were spoken over the Post Office radio-telephone, picked up in New York, and broadcast by their own networks. Before the war the BBC's part was confined to giving them the use of a studio in Broadcasting House and assistance with outside projects that they wished to put on. When war began the BBC's American Liaison unit had the delicate task of censoring the Americans' scripts. As neutrals talking to a country still at peace, where the tradition of free speech was especially strong, American broadcasters did not always take kindly to interference, but the networks' regular men in London (1) were co-operative, the BBC men were tactful, and "incidents" were rare.

There were occasional embarrassing situations when the American networks wished to put on speakers from London who would not have been allowed to broadcast on the BBC. The BBC had no power to stop them. At most it could refuse them the use of a studio, leaving the Americans to apply to the Post Office for facilities to speak from the Radio Terminal building through which their calls passed, or to start a studio of their own, a scheme that was several times proposed. As it was usually the Government rather than the BBC that objected to the proposed speaker, this would have made the situation even more embarrassing. These problems were largely solved when the United States entered the war, and set up a censorship that proved in some ways stricter than the British.

(1) At the beginning of the war they were Ed Murrow of Columbia Broadcasting System, Fred Bate of the National Broadcasting Company, and John Steele of Mutual Broadcasting System.

In 1940 and 1941 American interest in Britain rose to new heights and an increasing volume of broadcasts for American networks flowed through Broadcasting House, in addition to the BBC's own broadcasts to America, which were often rebroadcast by American stations. In the reverse direction the BBC broadcast more and more from the United States. Listeners to the Home Service heard President Roosevelt's talks, Mr. Churchill's speeches to Congress, weekly commentaries by Raymond Gram Swing, Ernest K. Lindley, Alistair Cooke, and other commentators, and actuality programmes describing the American war effort. The BBC's own office in New York, which was fast expanding its activities, arranged for numerous items to be sent over for inclusion in BBC home programmes, in the same way as American stations included British items in theirs. Well-known Americans like Robert Sherwood, John Gunther, Alexander Woollcott, and Dorothy Thompson visited England and broadcast to listeners here as well as back home. There were exchange programmes and joint productions, such as the "London-by-night" round-ups that began in the Blitz period, in which representatives of all three networks and the Canadian Broadcasting Corporation took part as well as those of the BBC, and these too were broadcast in all three countries (1).

Soon after Pearl Harbour the BBC was appealed to by the American government for help in getting its propaganda heard in Europe, and in February 1942 BBC stations began broadcasting "America Calling Europe", precursor of the Voice of America. The Americans became more and more interested in political broadcasting, and in April 1944 they finally began broadcasting from their own station in England . . . the American Broadcasting Station in Europe, familiarly known as ABSIE.

This was not the first breach in the BBC's monopoly of broadcasting in this country. When American troops began to arrive in great numbers, faced with a considerable stay

(1) Security censorship prevented listeners in Britain from hearing the most dramatic of them, when the sirens wailed whilst Ed Murrow was broadcasting from Trafalgar Square, and listeners across the Atlantic heard that ominous sound followed by the footfalls of Londoners on their way to shelter in the crypt of St. Martin-in-the-Fields.

here before the opening of the Second Front, their authorities thought it necessary for their morale that they should have their own radio. This was more than had been done for the Canadians or the Poles, who had been here for a longer time, and the BBC was very loth to consent, but the demand was backed by overwhelming military pressure and negotiated with the utmost tact by the civilians of the Office of War Information. The upshot was that the American Forces Network opened in July 1943, with a studio centre in London and low-power transmitters covering the chief American camps. London itself was not within range of an AFN station. As it became an American leave centre, with a floating population of thousands, and thousands more employed on headquarters jobs, there was repeated pressure for the AFN to be audible there, but this the BBC was able to resist, though the AFN programme was piped in to all the American canteens and Red Cross clubs.

The American Forces Network was the ideal programme for British teen-agers, for apart from a modest proportion of live programmes produced here it consisted of all the top-ranking band and comedy shows that American commercial radio could supply. These were recorded in Hollywood by the Armed Forces Radio Service, with their commercial announcements removed, and sent to American troop stations all over the world. The AFN thus brought listeners the best entertainment picked from four competing networks, with millions of advertisers' money behind it but without the advertisers' announcements, and practically free from serious items except for news; in fact a more or less continuous procession of swing music and gag shows. The merits of this sort of programme were pointed out by advocates of commercial radio for Britain, and it was often claimed that it was far better than the programmes of the BBC. But it was a programme that could not have been broadcast in peace-time, and materials for assessing its appeal were anyway lacking, as not more than 10% of the civilian population could ever hear the low-power transmitters of AFN.

Dealings with the Americans bulked largest in the BBC's relations with the allies but all through the war it had endless such negotiations on its hands. Canadian forces came to

Britain in numbers at a very early stage, and regular broadcasts for them were included in the BBC's Forces Programme, whilst the Canadian Broadcasting Corporation's own unit here broadcast back to Canada more assiduously even than the Americans. Their contributions, however, were mostly genuine broadcasts sent out in the BBC's overseas service rather than radio-telephone conversations, so direct listeners to the BBC's North American Service heard them as well as listeners to CBC.

When Hitler's swoop across Europe began and London became the home of exiled Governments, a new sort of collaboration arose. General de Gaulle's historic broadcast from England on June 18, 1940, fired the spirit of resistance in stricken France and began a campaign that was to last through the war. For anti-Nazis in the occupied countries from Norway to France, the BBC's broadcasts were the only gleam of light coming through the curtain of Nazi propaganda and Nazi news. They were heard in secret, copied, circulated, used as the basis of illegal newspapers, and at a later stage they were looked to for instructions on resistance methods and co-operation with secret agents of the allies.

Except for its technical side, the European Service was largely isolated from the rest of the BBC. Its staff consisted in great part of refugees, who could call Kings and Queens and Prime Ministers of provisional governments to their microphones, and the provisional governments had a lively concern in what was broadcast to the countries to which they hoped to return. Several of them indeed ran broadcasts of their own in what was known in the BBC as "free time": that is to say, the BBC provided the studios and transmitters but had no part in deciding what was to be broadcast except by the same sort of negative censorship, for security and policy, that was applied to any broadcaster using BBC facilities. It was often the BBC's job to keep the patriotic fervour of the exiles within the bounds of policy as laid down by the Political Warfare Executive, and to do this without impairing the effectiveness of the broadcasts.

The story of war-time broadcasts to occupied Europe is indeed the most thrilling in the whole history of broadcasting. As penalties for listening to the BBC became more and more

stringent, so broadcasters found new techniques of propaganda, new ways of penetrating enemy jamming, and listeners developed increasing adroitness at building and operating sets without discovery. There were features of the BBC's broadcasts to Europe that became household words amongst the free-minded and a gadfly on the flanks of occupiers and collaborators. The V sign in particular became symbolical of resistance throughout captive Europe. This device was first suggested in a broadcast by Victor Delaveleye, a former Belgian Minister who was in charge of the BBC's broadcasts to Belgium, in January 1941, and it swept the country. Everybody who hated the Nazi occupation began chalking up V signs, and the idea spread.

The V was turned into sound, by using the opening notes of Beethoven's Fifth Symphony, and everywhere people tapped them out. Although the slogan was officially regarded as having come too early, since there was yet no prospect of liberation, it had a tremendous effect on morale. The muffled throb of the V notes became the signature tune of the BBC's European Service, introducing its regular stream of up-to-the-minute news, replies to Hitler's speeches, dialogues, parodies, speeches by well-known exiles, and Colonel Britton's (1) eagerly-awaited exhortations to the V army, most of whom listened literally at the risk of their lives.

In the background to all this was the work of the Freedom Stations. The technique of the "underground" station opposing the Government from inside the country had been begun in Germany as early as 1937, and it was widely copied. Most of the subversive stations were not really inside the country but exploited all the local knowledge they could pick up so as to give the impression that they were, and so encourage opponents of the regime with the feeling that they had friends close at hand. The activities of these "black" stations were naturally wrapped in deepest secrecy, but they formed one more strand in the skein of broadcasting in Britain during the war. And it was no secret that the European

(1) The legendary Colonel, who became one of the best-known broadcasters in Europe, was Douglas Ritchie, chairman of the V Committee that planned the campaign. He is now in charge of publicity for the BBC.

service itself broadcast code messages to secret agents and resistance groups. Many people in Britain listened to the strings of meaningless personal messages broadcast, for instance, in French, wondering which of them could be decoded into instructions to meet a submarine or an aeroplane some moonless night in some desolate corner of France.

These broadcasts to secret listeners could of course expect no regular check on results. The broadcasters could not be in touch with their audience by any such obvious means as Listener Research; they had to seek their response in news filtering through the curtain, in messages smuggled out, in reports from individuals who had escaped to Britain, as people were escaping from France almost every day. They took satisfaction also in replies by the German radio as the surest sign that their propaganda was having its effect.

With all these new tasks on hand, broadcasting had widened its scope in a way not foreseen in its first fifteen years. Much had been learnt on the technical side: how to forecast the state of the upper atmosphere so as to choose the best short-waves to reach round the globe every day of the year, how to penetrate deliberate jamming (1) by enemy stations, how to rig up studios and build enormous transmitters at short notice in the midst of bombing and under threat of invasion. The men in charge of news and programmes for the BBC had learnt new speed and slickness. With an audience somewhere at every hour of the twenty-four, they had found the importance of up-to-the-second news, of on-the-spot recordings, of replies to an enemy speech or proclamation within minutes of the time it was made. And the use of radio for propaganda had advanced even more. It was no longer merely a question of broadcasting speeches by leaders or commentaries by experts. Every word broadcast, almost every note of music, could have its effect on the attitude of listeners . . . whether

(1) "Jamming" means interfering with a broadcast by transmitting an unpleasant noise on the same wavelength, which makes it impossible to listen without discomfort or, if the jamming station is very close to the listener or very powerful, to listen at all. The BBC did not retaliate by trying to jam enemy broadcasts. A station that is jamming another cannot broadcast a programme itself, and the BBC kept all its transmitters for positive work.

you called it propaganda (when it was done by the enemy) or morale (when it was done by your own side).

The classic example of almost unintentional propaganda was the success of the German song "Lili Marlene". This haunting, sentimental ballad of the girl waiting under the lamp-post for a soldier far away might easily have been rejected by a psychologist as being too sentimental to improve the morale of German troops in action abroad, but few could have foretold that it would become the favourite song of the British who were opposing them in the deserts of North Africa. To hear its husky-voiced singer they tuned in to German stations and thus of course became liable to hear German news and propaganda, which their authorities did not want them to do. Every effort was made to counter the appeal of the song; the BBC even induced one of the most popular singers in England to record it in rivalry to the German singer, and broadcast it frequently. The troops themselves settled the issue. "Lili Marlene" became the theme song of the Eighth Army, whistled and sung everywhere from Cairo to Anzio, and having appropriated it from the Germans they remained unscathed by the pill that the jam enshrined.

Conscious propaganda had its effects even in the small things of life. Whilst the BBC's Home Service was exhorting its listeners to save fuel, ration their bath-water, avoid careless talk, and above all work harder, the European Service was urging listeners in occupied countries to sabotage, go-slow, be slovenly in their work, make difficulties . . . even to the point of advising workers to go to the wash-room as often as possible and stay there as long as they could. These lessons were quickly learnt and not always so easily forgotten. People who for years had made a virtue of doing their work as badly as they dared could not always reverse their ideas on the day of liberation and revert to the maxims of Samuel Smiles.

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Broadcasting in Britain in the years after 1940 had a meaning that it never had in time of peace. It was a necessity, a

means of communication, an arm of government, a weapon of war. It linked people and countries who had no other way of keeping in touch. It brought hope to outlaws in Europe, it fed great newspapers and illegal broadsheets, linked troops all over the world, seamen on the sea and airmen in the air, with home and their people at home.

In those years London was the main focus of all these activities. More radio traffic passed through London than through any other centre, even when the war in the Pacific was at its height. Broadcasts came in to London from every part of the world and went out again all over the world, and the flow never ceased, night or day. Thousands of people worked in radio, people of every nationality speaking every tongue. The task and scope of broadcasting had changed immeasurably since the first stations began to send out their programmes in 1922.

CHAPTER THIRTEEN

THE END OF THE WAR

FROM 1941 to 1944 listeners at home listened assiduously to the radio, although they were aware of no more than a fraction of the activity that was going on in the country: the submerged tenth of the iceberg, as it were. They heard grim news from scattered fronts: the fall of Singapore, naval disasters, triumphs and reverses in Africa and Greece, a long tale of German successes in Russia. Then came the first turn of the tide with Stalingrad and Alamein, the conquest of Africa and the invasion of Italy, and all the time increasingly gruesome news of raids on Germany by the R.A.F. and the American Air Force, until everything seemed to be held in suspense in expectation of the Second Front.

The news they heard was more vivid than it used to be, for more of it was first-hand. Except on the Russian front the BBC had observers with all the armies and they became more and more skilful at getting their reports back from the scene of the fighting. In January 1943, for instance, it was a thrill to hear Richard Dimbleby describe his experiences on returning from a bombing raid on Berlin, but it was a far bigger thrill to hear in September a recording made by Wynford Vaughan Thomas actually in the plane; to hear the crew talking and the shout of "Bombs away" interrupting Vaughan Thomas's awesome description of the shells coming up and the fiery inferno raging below.

By the beginning of 1944 the Home and Forces programmes had become as familiar as the pre-war National and Regional. Unlike these, they were contrasting programmes, Home more serious, Forces more entertaining, though since the B.E.F. came back from Dunkirk it had ceased to be planned for canteen listening. "Forces" had become little more than a name, and the listener research figures showed that at the end of 1942 the civilian audience to the Forces

programme was half as great again as that to Home.

Between the two, listeners in Britain had a great variety of programmes to enjoy. Itma continued to be top favourite, and in 1942 it had been honoured with a Command performance on Princess Elizabeth's sixteenth birthday, but it had a host of rivals, including the Bob Hope and Jack Benny shows, which were recorded in America and sent over, free of commercial announcements, for use by the BBC. American stars were beginning to come over to entertain their own forces here, and Ben Lyon and Bebe Daniels, Americans who had made good here before the Blitz and stayed on through it, had teamed up with Vic Oliver in an American-style comedy series called Hi Gang. There were still plenty of typically British shows like Music-Hall and Old Town Hall. Vera Lynn, the Forces' sweetheart, headed the list of popular singers. And the Brains Trust went on proving that there was no need to bring in bands and script-writers to make a broadcast that ordinary people would talk about for the rest of the week.

The serious side of broadcasting was never allowed to lapse. There were still symphony concerts: in 1942 the BBC Symphony Orchestra went on tour and its concerts were broadcast from provincial towns, and in 1943 Yehudi Menuhin came from America and made his first broadcast for the BBC. The Proms were broadcast again, from the Albert Hall now that their historic home at Queen's Hall had been destroyed. There were church services and schools broadcasts and talks for discussion groups, now planned in collaboration with ABCA (the Army Bureau of Current Affairs); the Week's Good Cause, religious talks by the Radio Padre, Ronald Selby Wright, talks by Sir Max Beerbohm and Sir James Jeans. In December 1942 Sir William Beveridge, now Lord Beveridge, broadcast on his great report on social insurance the day after the report appeared.

Music While You Work and Workers' Playtime were broadcast with the blessing of the Ministry of Supply; the latter, in which the BBC took variety artists to works canteens, was sometimes broadcast during the night shift, to be heard live by listeners in North America, and recorded for the home audience next day. BBC observers reported from

the fronts, and weekly features like Marching On and Into Battle provided stimulus during an arduous and often boring phase of the war.

The Home and Forces alternatives lasted from early in 1940 until early in 1944, when there was a drastic change. Ever since the B.E.F. came back from France the British forces overseas had been listening to a BBC of their own. They got their broadcasts from the Overseas Service on short-wave, and by this time they had a programme designed entirely for them, quite distinct from the specialised broadcasts to citizens of the Dominions, Colonies, and United States. This was the General Overseas programme, a round-the-clock service for all parts of the world, which carried some items from home broadcasting but many more of its own. It was known that the troops would have liked to feel that they were listening to the same broadcasts as their people at home, but it did not seem possible to use either of the home programmes in its entirety for short-wave broadcasting and canteen listening, which demanded a different production technique. And of course the troops, being scattered over the time zones of the world, could not anyway listen at the same times as people at home.

However, after a visit to Italy by W.J. Haley, the new Editor-in-Chief, the BBC came to a new decision. If troops abroad wanted to hear the same broadcasts as people at home, the only way to achieve it was to give people at home the programme designed for troops abroad. The Forces Programme, successor to the original B.E.F. Programme, was therefore abolished in February 1944, and its place as an alternative to the Home Service was taken by a modified version of a portion of the General Overseas Service. This was known officially as the General Forces Programme, or GFP, but listeners still talked about "Home and Forces", as they had done since 1940.

In fact few listeners were conscious of any drastic change. The changes were rather felt by the BBC, which got rid of a complete programme running for 16½ hours a day, thus saving not only money but programme resources and studio space which were becoming precious as D-Day approached; and possibly by troops overseas, whose programmes could not

fail to be modified by the demands of the more vocal audience at home. The new programme was still a lighter alternative to the Home Service, and it was probably more of a contrast because it was planned independently and often produced by separate programme departments. Also it was an Overseas Service, which brought to home listeners some of the regularity in scheduling and slickness in timing that the BBC had had to acquire in its broadcasts for distant countries, where there was no *Radio Times* to refer to, where listeners expected to find their favourite broadcasts at the same time one week as the next, and where stations that wished to pick up items for rebroadcasting could not be warned by telephone of underruns or substitutions, but counted on their programmes beginning at the time for which they had been announced.

Very few of the favourite items of the old Forces programme disappeared; those that were not suitable for canteen listening, like the Brains Trust, found shelter in the Home Service. But new series emerged from the hinterland of Overseas to capture the home audience, notably the variety programmes produced by the Overseas Entertainment unit. Whilst the main body of variety producers, under John Watt, moved from London to Bristol, Weston-super-Mare and Bangor, thence to launch Itma and Garrison Theatre and Old Town Hall, a smaller band, under Cecil Madden, took up their quarters at the Criterion Theatre in Piccadilly Circus, and there produced entertainment for the troops at all hours of the day and night. Notable successes of the General Forces Programme were Variety Bandbox and Merry-go-round ("Mediterranean Merry-go-round", as it was called when it began in the special programme for troops in the Middle East), and they were both typical productions of the Madden unit, almost incidental amongst the surge of band programmes and message programmes and variety of all kinds that went out from the Criterion to troops all over the world.

The General Forces Programme was not so popular with home listeners as the original Forces Programme had been. Whereas the Forces had had on the average 60% of the civilian listeners against Home's 40%, the GFP averaged only 40% against Home's 60%, probably because it had to confine itself to broadcasts that could be enjoyed by numbers

of men listening in canteens, and could not provide adequately for the more attentive listening of the home (1).

The new set-up had not been running long when the conditions of broadcasting from Britain took a war-like trend again. The air raids began again, shorter but sharper than those of 1940-1941, and the nights of February and March were filled with gunfire, rockets, flares, and bombs. All the old precautions had to be revived to make sure that broadcasting could go on during raids, and they were all the more necessary now that troops overseas were listening at the same time; it would have been disastrous to let them realise that whilst they listened their families were in danger at home. And between March and June expectation of the invasion of Europe was mounting to fever heat. Radio men, military and civilian, were pouring into London, determined to secure facilities for getting their broadcasts to their own countries, and the BBC was trying to meet all their needs without overlooking its own.

Not that the BBC had a monopoly of broadcasting from this country: this had been considerably whittled away by the war. The Post Office had its radio-telephone, which though not literally a broadcasting transmitter enabled Americans and Australians to get their reports back to their own radio stations in their own voices. The Foreign Office owned one of the biggest transmitters in the country, though its operation was left to the BBC. The American Army had installed a transmitter to broadcast back to the United States. But when it came to the point most of the demands fell on the BBC. It had the studios, the recording gear, the organisation (including the censors), and a range of transmitters covering all parts of the world at the best times for reception and for listening, which were not always the same. By this time its engineers had gained more mastery of short-wave broadcasting than anybody else, and even on the most difficult

(1) The total civilian audience to BBC broadcasts at good listening times was reckoned at about one-third of the adult civilian population. The nine o'clock news on week-days had an audience of between 43% and 50%. Interesting facts about war-time listening figures were given by R.J.E. Silvey, Listener Research Director, in the BBC Year Book for 1946.

circuit, that crossing the North Atlantic, their short-wave often gave better results than the radio-telephone.

Amongst all its dealing with Americans and Australians, with European allies, and with all the Government departments who wanted to use broadcasting as part of their invasion plans, the BBC was making extensive preparations to cover the invasion for its own listeners. War reporting had been a familiar activity from the time when Edward Ward reported from Finland in January 1940 to the time when Denis Johnston brought the first programme from Nazi-occupied territory (a recording of Yugoslav partisans singing their own version of "Tipperary") in March 1944, but home listeners had heard the results irregularly, mostly in the news. Now it was decided to do in the Home Service as the overseas services had already done: reserve a special daily period for these first-hand accounts from the war fronts. An elaborate organisation was set up in Broadcasting House to ensure that every broadcast from a war reporter was recorded, censored, and made available to the editors with the least possible delay.

This War Report unit was the last word in the BBC's D-Day effort on the home side. It was run jointly by Laurence Gilliam, who had made "features", or radio documentaries, into one of most important as well as popular forms of wartime broadcasting since he took control in 1941, and Donald Boyd, who had been in charge of news talks in the Home Service all through the war. The corps of BBC war correspondents, enlarged to cover the invasion, was commanded first by S.J. de Lotbinière, pre-war director of outside broadcasts, and later by Howard Marshall, one of the best-known broadcasters at home and overseas.

On June 5, 1944, came the first recorded broadcast from Rome, the fall of which had been reported in the midnight news of June 4. June 6 brought the long-awaited announcement of the invasion of France. All BBC transmitters were mustered to send General Eisenhower's message to Europe and the world. BBC men were with the invading forces and in the ships and planes that escorted them; special stations were ready along the coast to pick up the broadcasts and relay the records that they sent back; recording engineers,

studios, censors were waiting to deal at top speed with all that came in from BBC men, Americans, Australians, Canadians, and all the other allies, all of whom had agreed that on this occasion their stuff should be pooled and each could be used by all.

On the evening of D-Day the first War Report was broadcast in the Home Service after the nine o'clock news and the King. It set the standard for the new venture. Listeners heard not only reports from the air and the sea but a first-hand account of the beaches by Howard Marshall. People had become used to thrills, but there was a new sensation in hearing a man speaking from a London studio, who had only that day been on the French coast, which had for so long seemed like another world; the coast on which their own flesh and blood were even then risking their lives.

Whilst the Home Service broadcast War Report, the European and Overseas services of the BBC were working at full stretch (1). News of the invasion was being pumped into Europe in every language, breaking through the Nazi censorship, letting all the resisters and collaborators and waverers know that the long-awaited crisis had come. Instructions were being broadcast to resistance movements and allied agents, urging some on and holding others back. One use had been provided for radio to which it was never put. A BBC transmitter had been designated to give the signal that would recall the whole vast invasion fleet if weather or enemy opposition forced General Eisenhower to alter his plans, but the signal did not come through.

The Overseas Service headquarters were humming with activity. From 8 a.m. British time, when the news of the invasion was first given, every hour brought a new audience somewhere in the world, turning to British radio to hear the latest news of the great venture. As fast as first-hand stories came in they were rushed on to the air. There might just be time to catch the Pacific Service with a report by an Australian commentator before the audience in Australia stopped listening and went to bed, or the North American with

(1) At this time the BBC was using thirty-six short-wave transmitters and broadcasting in forty-five languages.

an American's story or a story about American troops before reception grew too bad for American stations to rebroadcast. The BBC's service to the United States on D-Day was conspicuous even amongst its many exploits on that day, and it was the culmination of years of effort in building up relations with American stations and discovering just how to get access to the American air. Although all the networks and many independent stations had their own correspondents in London and with the invasion troops, and the radio-telephone was working at double speed, 750 American stations rebroadcast BBC programmes during the day. And in Canada, Australia, New Zealand, South Africa, and all the Colonies where there was a radio station or a rediffusion system, the story was the same.

At dawn on the morning after D-Day a new enterprise was launched. This was the Allied Expeditionary Forces Programme, a radio service to the men of the invasion forces, British, American, and Canadian, drawing on all three nationalities for its programmes and its staff but controlled and transmitted by the BBC. In its inception this was not a BBC project; the BBC had planned to cover the invasion forces, British and Canadian, with its General Forces Programme, as the Americans had planned to extend the coverage of the American Forces Network to France. The idea that all three should share the same radio came from the Supreme Headquarters of the Allied Expeditionary Force, and was part of General Eisenhower's general policy of "integrating" the different nations under his command. SHAEF was quite willing to run the service itself, and the Government would not have refused it the use of transmitters, so the BBC undertook the project, assigned the Start Point transmitter, which covered almost exactly the area of the invasion, and ran the service with its customary technical success.

This programme ran until victory had come in Europe and occupation had set in, and succeeded to a great extent in achieving the "integration" at which General Eisenhower had aimed. It was a unique experiment amongst all the radio innovations of the war. The BBC provided a civilian director and a few civilian staff, but for the most part the programme was put out by uniformed men and women from the three

nations. Some were former BBC producers reclaimed from their military duties (often unwillingly) by SHAEF, some were Canadians assigned full-time, or Americans sent from AFN on a shift system, and there were some Americans sent over specially for the programme, like Broderick Crawford the film actor, Vick Knight the Hollywood script-writer, and Glenn Miller with his famous Air Service Corps band. The programme could call upon all the entertainment successes of American, British, and Canadian radio, besides many that it originated itself with the talent available in London, but it made a point of mixing nationalities as far as possible. Instead of the Home War Report or Overseas Radio Newsreel, which naturally concentrated on the exploits of British troops, it produced its own daily "Combat Diary", giving equal attention to all nationalities and all arms of the service, and as far as possible using American correspondents' accounts of British actions, Canadians' of American, and so on. In the same way all the news in the AEF Programme came from the overseas newsroom of the BBC, which was the only practicable source, but it was read by American, Canadian, and British voices in turn; which, it is true, resulted in a standard of news-reading probably more erratic than anything previously broadcast under the aegis of the BBC.

The last year of the war brought radio new problems and new triumphs. Within ten days of the invasion South-Eastern England began to be bombarded by flying bombs, and whereas the raids had come to be a night risk, these V weapons might strike at any time of the day. As they were pilotless it was all the more important to keep the enemy from knowing when and where they struck, and during this period the chimes and strike of Big Ben were broadcast from recording instead of live, which had never happened in the earlier stages of the war. Later the V1's were joined by the V2's, the rockets carrying a ton of high explosive, and great pains were also taken to keep any knowledge of them from the troops in France and Belgium, who were themselves well acquainted with flying bombs. These V weapons caused the abandonment of the season of broadcast Promenade Concerts in the Albert Hall that began on June 10, 1944. The concerts were moved to the BBC's war-time music base at Bedford, and

there their fiftieth anniversary was celebrated on August 10. Their founder, Sir Henry Wood, was too ill to conduct the jubilee performance, and on August 19 he died.

Hardened by five years of war, British broadcasting continued through these new and unexpected hazards. The war in Europe brought thrilling broadcasts to listeners all over the world. There was the liberation of Paris, followed by the sensational attack on General de Gaulle at the thanksgiving service in Notre-Dame, described by a BBC observer who recorded whilst the bullets flew; the liberation of Brussels; then the tragedy of Arnhem, when the BBC's Stanley Maxted dropped with the paratroops and he and his recording gear were trapped in that deadly siege, until some days later listeners heard him and Guy Byam, exhausted but safe, talking from a studio in Broadcasting House. And all the time there was an increasing number of broadcasts from the other front, where the Japanese flood was being pushed back all the way from Burma to the Pacific islands, and British, Australian, and American radio men were as close to the fighting line as their opposite numbers on the Western front, though they found much more difficulty in getting their broadcasts back.

The winter of 1944 brought two forecasts of a return to peace-time broadcasting. In November the BBC's Director-General, W.J. Haley, announced that after the war the BBC would not only restore the Regions' programmes but would provide three national services instead of two. In December the Hankey Committee, appointed by the Government to inquire into the future of television, recommended that the BBC should run a post-war service on the same technical standards as the pre-war. But the war was far from over. The Germans were counter-attacking and Rundstedt had broken through in the Ardennes, the V2 rockets had revived the possibility that London might become uninhabitable, and it was impossible to see when the war in the Pacific would end. Television especially seemed a dream of the far future, and the Government not unnaturally was in no hurry to deal with the Hankey Report.

Yet broadcasting was constantly evoking echoes of peace-time conditions. The fear of invasion had gone, church bells

could be rung without turning out the Home Guard, and the sound of Bow Bells had been filling intervals in the Home Service since the summer of 1943 (1). Radio links with the Continent were slowly being restored. At first broadcasts were recorded there and sent back to be transmitted here, or sent back by small mobile transmitters and recorded on this side, but as early as July 4, 1944, by using Army transmitters, the AEF Programme carried out a three-way live broadcast between Normandy, London, and the United States, and by Christmas it was able to use trunk lines to broadcast a two-way band show between Paris and London. On March 1, 1945, Sir Adrian Boult conducted the Orchestre National in the first serious concert to be relayed from Paris since the fall of France.

Except for the mobile transmitters, there was not much possibility of getting broadcasts off the air from stations in France and Belgium. All through the war both sides had shown reluctance to start bombing each other's radio stations; although BBC studio centres were bombed, the only damage done to a transmitter was when an enemy aircraft flew into one of the Daventry aerials by mistake. But in their withdrawal the Germans had sabotaged the main transmitters, so Paris and Brussels were left with great studio centres but no transmitter capable of covering more than a few miles. The high-power station at Luxemburg was saved by good luck and the enterprise of one engineer, and despite being almost recaptured in the Rundstedt break-through it was the main centre for propaganda broadcasts to enemy troops.

As one country after another was liberated the task of the BBC's European services changed. During the German occupation they had criticized and commented on affairs in the occupied countries with freedom and asperity, often with malicious wit, but as provisional governments were set up they withdrew from interference in the internal affairs of allies. Many broadcasters left the Bush House headquarters to return to their own countries; for instance, Victor Dela-

(1) The real bells had been destroyed when the church of St. Mary-le-Bow was bombed and burnt in the Blitz, but the BBC's recording of them was still used.

veleye, inventor of the V sign, went back to Belgium as Minister of Education in September 1944, and in October Jacques Duchesne wound up the series "Les Français parlent aux Français", which had run for four and a half years, and became again the distinguished theatrical producer Michel St. Denis. But the BBC cooperated with Radiodiffusion française by relaying its programmes for French audiences until its own transmitters were restored.

During 1945 warlike and peaceful events mingled in the history of British broadcasting. In February and March delegates from the broadcasting organisations of the four Dominions and India met at Broadcasting House in the first Commonwealth Broadcasting Conference, and between watching rocket-bursts and viewing bomb damage they got through an immense amount of useful work. Experience was pooled on the common problems of broadcasting, both technical and administrative . . . such detailed matters as copyright and royalty payments, as well as methods of continuing in the future the world-wide cooperation that had grown up with the war. In March the Hankey Report on television was published, still to await Government action. The war reporters described the crossing of the Rhine, the rescue of the captives of Belsen and Buchenwald, the final collapse of the Nazi machine. The BBC seemed to have closed its war-time chapter on May 4, when the news-readers ceased to announce their names and relapsed into anonymity, but it was not until May 8 that Mr. Churchill broadcast to the nation and the Commonwealth the news that the war in Europe was over.

VE-Day was the signal for the BBC to start its plans for post-war broadcasting, and the new scheme was put through without waiting for victory in the Pacific, which came, earlier than most people had expected, on August 15, after the first two atomic bombs. These post-war plans were far more than a mere reversion to the pre-war system, and they were put into effect with surprising speed, considering the extent to which resources had been strained and broadcasters themselves exhausted by the steadily mounting efforts of the last six years.

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The end of the war in Europe left broadcasting more important than it had ever been. It had given final proof of its power to penetrate censorships and blockades, span oceans, enter into fortresses, fox-holes, and prison camps, to bring news and orders, encouragement and menace, to influence opinion, build morale, or spread doubt and despair. It had been used in every form from the most solemn to the most trivial, employing every means from the most powerful stations ever built to the mobile transmitter dropped by parachute to a secret agent, from beamed radio-telephone to the little spool of magnetised wire that enabled you to put an hour's entertainment in your pocket. It had gained in technical flexibility and programme resourcefulness through constantly meeting new needs. Many things that had been thought luxuries had become recognised as necessary, but it had been shown that many other things formerly thought necessary could be dispensed with when it came to the pinch.

So far as British broadcasting is concerned, it ended the war with resources vastly superior to those that it had possessed in 1939. The BBC had lost some of its studios, premises, and reference libraries during the raids, and Britain's position as the island stronghold off the coast of Hitler's Europe had caused the BBC to give more aid to the allies than it received in return, but it had become far richer in experience, resources, and prestige. On the last count alone, it would be a long time before British listeners lost their lively feeling of gratitude to the institution that had brought them the voices of the King and the Prime Minister and the news of their men at the front, whilst in the rest of the world the BBC's name stood high, and in the liberated countries of Europe there was a magic in the very letters BBC.

With its home audience the BBC had had less competition than it had before the war. For long periods the home audience had had little diversion but the radio. Black-out, closing of theatres and cinemas, the exigencies of ARP, fire-watching, and shift work, the lack of paper for books and periodicals, had all cut down the alternatives whilst the

radio was always there. It had an even stronger hold over the millions of men and women who had been on service overseas and were now to return to civilian life. In camps and ships and air-fields all over the world, the radio had been not only the sole diversion but the main link with home.

Few of these service listeners had ever been exposed to any other broadcasts that they could understand. In Africa and the East the local stations were usually unintelligible unless they were relaying the BBC; only the limited number of men who trained for air crew in the United States and Canada had listened habitually to local broadcasts, and to them they were merely part of an exiled and unnatural phase of life. The influence of American programmes had probably been stronger at home. Apart from the American Forces Network, there were the Hope and Benny shows on the BBC, and their successors, which became highly popular though never more so than the best British shows; there were exchange programmes with America, like "Atlantic Spotlight" and "Transatlantic Call"; American radio stars came over to perform in their own style; and the AEF Programme, though screened from England so as to have greater coverage in France, was more widely audible than the AFN, and its procession of recorded shows studded with personal appearances by idols like Bing Crosby, Dinah Shore, and Glenn Miller's Band brought many young listeners their ideal of Hollywood-style entertainment broken only by news.

The AFN and AEF programmes were used as talking-points by the interests who were anxious to see commercial radio established in Europe after the war, regardless of the fact that neither programme would have been possible on commercial terms. There was considerable jockeying for position in the post-war market, which however never materialised. The BBC survived the war; the occupied countress, having regained possession of their own radio, had no desire to part with it to advertising agencies; the Americans did not introduce commercial radio to their zone of Germany; and only Luxemburg reverted to the sponsored fold.

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The BBC that faced the task of post-war broadcasting was a much bigger, stronger, more vigorous concern than the BBC of 1939. It had faced and overcome its gravest challenges, learnt speed, efficiency, big thinking and the habit of changing its ideas. It had entered the war with a staff of 4,233 and 23 transmitters with a total power of 1,620 kw., broadcasting for 50 hours a day. It entered the peace with a staff of 11,417 and 138 transmitters with a total power of 5,250 kw., broadcasting for 150 hours a day (1). And these material increases were reflected in its all-round development to meet new and vital demands.

In detail, methods had changed greatly since 1939. Most spectacular was the speeding-up of news and first-hand reporting, the latter closely associated with the new mastery of the use of recordings. This skill in using recordings was indeed the BBC's great contribution to the art of broadcasting, and one in which it out-distanced American radio, which had a traditional objection to recordings and preferred a live broadcast from a base to a recording from the front line, until the exigencies of war forced it to change its views. The BBC did not only use recordings singly, as inserts in a news broadcast; it developed a technique of building them into complete programmes or mingling them with live narration, dramatised scenes, music, and effects, to give reality a sharper edge than a straight report would have.

At the same time the method of pre-recording was more and more widely used purely for convenience, as it had been by the commercial agencies in London before the war. Whole shows were recorded beforehand so that their performance on the air could not be interrupted by bombs; variety bills were pre-recorded act by act so as to bring together at a good listening time artists who would be appearing in half-a-dozen theatres when the broadcast went out; even straight-

(1) The corresponding figures for the end of 1950 were 12,195 staff and 86 transmitters with a total power of 4,800 kw., broadcasting for 130 hours a day.

forward talks were pre-recorded, to meet the convenience of the talker, or the producer, or sometimes merely from a feeling that it prevented any possible hitches to have the broadcast safely and manageably on a disc.

The audience show, another stand-by of pre-war commercial radio, also had a vogue during the war. Some BBC broadcasts had always had a studio audience, like the Music-Hall shows held in St. George's Hall, but with the war-time broadcasts from works canteens and converted church halls the audience became a standard accessory, and comedians almost lost the habit of being funny unless they could get laughs from people they could see and hear. This of course was in keeping with the custom in American shows, where every joke was greeted with well-disciplined laughter, and every song with well-coached applause.

"Request programmes" had become the fashion too. Before the war there had been occasions when listeners were invited to choose their own programme items, as in the Request Weeks in the Children's Hour, but these had been special events. Sandy Macpherson, the BBC's indefatigable theatre organist, began the request system when he chose his tunes from his postbag in the early days of the war, and mentioned the names of people who had asked for them, with the result that his mail soon reached embarrassing proportions. The same system was used by the overseas announcers in making up record programmes, and Forces Favourites became one of the most popular items of the General Forces Programme.

These request programmes caused a great deal of heart-burning among people who could not understand why their requests were overlooked, not realising how many thousands of requests there were and how arbitrary the selection had to be. Nor did they result in unusual programmes, for the items played would have been little different if there had been no requests at all. But it was evident that the ordinary listener enjoyed hearing the same records more if each had the name of some real person attached to it, especially when there was the sentimental value of hearing a record chosen by a wife or mother for a soldier serving abroad.

Slick presentation was another war-time lesson learnt by

the BBC. The pre-war National and Regional had been as leisurely as a three-day cricket match; intervals and pauses had been taken for granted, and each announcer had seemed to be concerned only with the one programme item that he announced and innocent of any knowledge of what had gone before or what was to come. In war-time gaps became alarming, and in June 1942 the Home Service introduced a "continuity" system by which one announcer remained in touch with the whole of an evening's programme and became, as it were, the voice of the station to keep listeners in touch with what was going on.

This system had already been highly developed in the Overseas Services, which also insisted on far greater accuracy in timing than was customary at home. This was especially true of the North American Service, which had to deal with an audience used to commercial radio, and seek re-broadcasts by stations for whom split-second timing was an ordinary business routine. The General Forces Programme, which was part of the Overseas Services, brought to the home air some of this slickness, coupled with the habit of timing most programmes for an even hour or half-hour, and putting on the same items at the same time every week.

This regularity of scheduling was spreading in the Home Service too. More and more items besides the news were having a time and day ear-marked for a run that might last for months. The reason was that the lessons of listener research were being taken to heart, and the evidence of the figures showed that regularity brought a growing audience. It was this that brought radio drama back into the race for popularity. The series called "Saturday-Night Theatre", in which stage successes of all descriptions were adapted for radio, became a landmark in the Home Service, and people soon realised that every Saturday would bring them a really popular full-length play. Coupled with the excellent thriller series, "Appointment with Fear", this doubled the size of the audience to drama, according to the research figures, in 1944.

Feature programmes, now departmentally separated from drama, had probably learnt more than any other department from the war. Apart from the big Christmas round-ups

they had tended to be a little arty, "radiogenic" rather than vital, but the needs of war-time brought them down to earth and they became the most flexible and resourceful vehicle for ideas, using actuality live and recorded as skilfully as original music and dramatic scenes. The regular flow of weekly features like "Marching On" and "Into Battle" was varied by big productions like Cecil McGivern's "Junction X" and "The Harbour called Mulberry", by the ambitious weekly "Britain to America" broadcasts, produced in 1942 (1), and by special short-notice features inspired by great events such as the final victory in Africa, the liberation of Paris, and the death of President Roosevelt. Before the war ended, "features" had become the BBC's chief means of dealing with public affairs in such a way that ordinary people would both listen and understand.

In one way or another most BBC departments learnt from their experience in the war, especially since listener research now gave them some indication of the extent to which their programmes appealed to listeners. Most of them owed a good deal to war-time staff who came in with new ideas, to work in the home services as well as to overseas, and the general atmosphere of adaptation to new circumstances evoked new techniques all round. On the engineering side, for instance, the need to fit up new studios quickly in unlikely places caused a reaction from the elaborate methods of Broadcasting House, and the multiple-studio system with remote control by engineers and producers far away from their performers was largely replaced by single-studio productions with everybody in sight of each other. The simple, semi-portable equipment formerly used for outside broadcasts became standard in the new studios, in Broadcasting House as well as outside, and remained so until some time after the war.

(1) This series was specially produced by the BBC for rebroadcasting in America by NBC. At the same time Norman Corwin, the distinguished founder of the Columbia Workshop, was in England producing his weekly *American in England* programmes for CBS, which were also heard by listeners here. These were followed in 1943 by *Transatlantic Call*, in which weekly programmes were exchanged between BBC and CBS, giving listeners on both sides an interesting contrast in styles.

So the BBC girded its loins to embark on post-war broadcasting, in the knowledge that its Charter was due to expire at the end of 1946, and its finances would soon have to become to some extent self-supporting again. The last years of a Charter have always been an anxious time for the BBC. By 1945 there was increasing talk of commercial radio, and although it was doubtful how much real weight there was behind the demand, it is never possible to be sure what will emerge from an enquiry such as had been held before the 1937 Charter was granted. The BBC had reason to think that its great achievement during the war would entitle it to a vote of confidence and a renewal for ten years, but it did not rest on its past record. The scheme for peace-time broadcasting, with its three contrasted programmes, was a bold bid, going one better than anything the BBC had done before.

In this crucial period the BBC was strongly led. The new Director-General, W.J. Haley, had soon mastered his job and had the confidence of the Board of Governors, still headed by Sir Allan Powell. He was incomparably the strongest Chief Executive that the BBC had had since Lord Reith, without the force of personality that his predecessor had but with similar resolution, tenacity, and negotiating ability. He was the right man for the task of consolidating the gains that the chartered monopoly had made during the war.

CHAPTER FOURTEEN

AFTER THE WAR

THE END of the war did not bring back broadcasting as it had been in 1939. There were many changes in the organisation of radio within countries and in their broadcasts to each other. Despite acute shortage of all the materials for broadcasting, from studio equipment to receiving sets, the habit of listening retained its hold, and radio became more than ever an arm of government, deeply involved in the "Cold War" that soon spread its icy fingers over the world. At the same time the listening habit began to see its very basis challenged by television, which at last outgrew its novelty stage and unmasked its power to break the spell of sound.

In Europe there was the new phenomenon of "occupation radio". In each zone of Germany and Austria the occupying powers controlled the radio and ran stations both for the natives and for their own troops. The British zone of Germany, for instance, had two radio systems with headquarters in Hamburg. One was the civilian station, run by the Military Government on the lines of "psychological warfare" that had become so familiar in the last five years, and the other fed the British Forces Network serving the British Army of the Rhine.

Radio Hamburg, the civilian station, was directed by officials of the Military Government but staffed largely by German civilians. The degree of British control diminished until the station was finally handed over to the Northwest German Broadcasting Corporation in 1948. The British Forces Network was a successor to the mobile stations that had gone out to France with the invading troops to relay the AEF Programme and add items of local interest, which grew in proportion as the advance went on and the British, American, and Canadian forces diverged towards their different objectives. As soon as Hamburg fell the Army

broadcasters established themselves there, and by the autumn of 1945 they had set up a studio centre in the former Concert Hall feeding transmitters at Norden and near Dusseldorf, soon to be augmented by one in Berlin. The staff of soldier-broadcasters put out 17 hours a day of programmes for the troops, drawn mainly from the BBC's Light Programme but including also local items and transcriptions from the BBC, the Canadian Broadcasting Corporation, and the American Armed Forces Radio Service. From the first it co-operated closely with the Light Programme, and many relays from Hamburg were heard by listeners at home.

Countries that owned their own radio were more than ever conscious of its power, and propaganda rather than advertising was their aim. More nations than ever wanted to broadcast to each other: France, for instance, began a short-wave service to America, which it had never done before, and the end of the war found Canada, in the other direction, broadcasting to Europe from a most efficient new high-power station. But the great newcomers to international broadcasting since 1939 were Russia and the United States. The Soviets broadcast in all languages from Russia itself and its occupied countries, and although American domestic broadcasting remained commercial and competitive, the United States government did not abandon its war-time activity of organising broadcasts to other countries. With Britain, whose world broadcasts continued on rather less than their war-time scale, these radio giants filled the air with a diligence that even Goebbels could hardly have out-done.

There were changes in the British Commonwealth too. South African radio grew isolationist after the accession in 1948 of the Malan government, which early announced its intention of ceasing to rebroadcast BBC news as soon as it could set up a news service of its own, and went on to establish commercial broadcasting in the Union as an alternative to the programmes of the South African Broadcasting Corporation, a public-service body modelled on the BBC. India began expanding All-India Radio when it became independent, and Pakistan set about building up a radio organisation of its own. Broadcasting was growing fast in the Colonies, where both governments and private enterprise

had realised how vast a need was to be met. Private enterprise worked largely through rediffusion and relay systems, and gained a strong hold especially in the West Indies. Governments looked to colonial radio not only for news and entertainment but for "fundamental education", or teaching the people how to live, but their resources were mostly small and the technical problem of reaching remote and scattered villages was very big. A great step in the process of bringing radio to Africa was made in 1949 with the production by a British manufacturer of the "saucepan set", a battery receiving-set cheaper and simpler than anything previously known, which enabled Africans to buy a radio of their own and listen at home instead of gathering on great occasions outside the chief's palace or headman's hut.

Africa and Asia are indeed the territories in which radio still has most to do, where it can make its plans without the uneasy consciousness, which it has in Europe and America, that television is fast treading on its heels.

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In Britain, the BBC launched its peace-time broadcasting within 90 days of VE-Day, as it had engaged itself to do. On July 29, 1945, the AEF Programme ended and the General Forces Programme became again an overseas service not to be heard here; the Home Service was joined by the six Regions, and the Light Programme began.

The post-war scheme was not complete until the addition of the Third Programme, which was delayed until September 1946, but it already presented an interesting contrast with the Reithian plan that prevailed before the war. Physically it was much the same. Listeners to the Regional stations heard the "basic Home Service" from London for most of the time as they had previously heard the main Regional Programme, with the individual Regions inserting their own contributions to the extent that their allocations of money, staff, and resources allowed. The Light Programme was entirely controlled from London and broadcast on the same wavelengths as the National Programme had been. But these alternative programmes were independently planned

and were professedly different in kind. Listeners in search of entertainment not involving too much thought were specifically directed to the Light Programme, which thus carried on the tradition of the Forces and General Forces Programmes during the war.

When the Third Programme came into existence the new basis of British broadcasting was even more sharply defined. Serious listeners who wanted culture, experiment, and food for thought found the Third their natural diet and seldom listened to anything else. The Home Service and to some extent the Light Programme continued to carry a number of items of some cultural value, but the Third was a world apart. The ordinary man's opinion of it was well shown by the poster that appeared outside the Victoria Palace during one of the Crazy Gang shows: "Nervo and Knox . . . Never Heard on the Third."

The new system thus finally parted from the BBC's original idea that culture and edification must be interwoven through the whole texture of broadcasting so that the ordinary man was always apt to come across them unawares. The new system was rationalised by the argument that the three programmes constituted a "pyramid of taste", and the listener who began by being satisfied with the Light would progress to the level of Home and might finally rise to the heights of Third. This process was impeded by the fact that many of the individual programmes on Home were at least as insubstantial as those on Light and that it was by no means easy to get good reception of the Third. But, rationalisation and anomalies apart, the three-fold system apparently supplied popular demand better than any previous efforts of the BBC.

Another innovation, which proved short-lived, was "internal competition", with which the BBC sought to evade some of the dangers of monopoly by making the Home and Light programmes compete with each other. Each programme was given a head who was entirely responsible for it and each had a listening figure to aim at. But the same producing departments supplied programmes and auditioned artists for them both; the over-all interests of the BBC could always be invoked when competition became too keen, and

the experiment had more or less faded away before a reorganisation in 1947 put all three programmes under one head.

The emphasis on results was another indication of the extent to which the BBC had changed. There was no longer any pretence that it was not its business to give listeners what they liked; "counting of heads" had won the day. The Third Programme, it is true, was not involved in the struggle; the BBC was satisfied with its prestige value and the way it canalised the requirements of cultured listeners, who are often politically influential, and was happy to run it although its average audience was well below one per cent. But the Light Programme had the specific task of obtaining 60% of listeners to the Home Service's 40%, and to succeed in this was the first duty of those in charge. The Home Service naturally clung to the audience it had gained in the last year of the war, so both sets of planners pored anxiously over the daily listening figures, and the experts of Listener Research were consulted on new projects and looked to for the final check on results.

Both were considerably handicapped by starting so soon after the end of the war in Europe, before the war in the Far East was over and long before conditions returned to anything like normal. Many radio men were still in the Forces, and there was a grave shortage of internal resources—studios, recording gear, staff of all kinds, to face the increased demand raised by the new programme scheme. For the General Forces Programme, though no longer heard at home, was still broadcast on short waves for 24 hours a day, whilst the Light Programme broadcast for an additional 17 at home. Also the Regional headquarters, which had been a ready source of programmes for the London planners during the war, were now primarily concerned with their own contributions to their own Home Services, and facing similar difficulties of their own.

There were technical difficulties too. The main transmission of the Light Programme was on long waves from one high-power station, and as long waves had not been used for home broadcasting since 1939 many listeners found that they were unable to hear it. Some of the BBC's medium wavelengths were still being used for the European service,

and there were not enough left to go round; the North of England and Northern Ireland had to share a wavelength in order to cover Newcastle and the north-east coast. The BBC engineers were experimenting with frequency-modulation transmission on very high frequencies (or ultra-short wavelengths), an entirely new system that had come into use in America during the war. VHF transmission could solve the congestion on the medium wavelengths, but in 1945 Britain had no regular service on this system, and no FM sets were to be had (1).

At home some of the best-known names had disappeared from the programmes. Amongst those who had died during the war were Sir Henry Wood, the founder and father of the proms; Sir Walford Davies, who had done more than anybody else to bring listeners understanding of the music they heard; A.J. Alan, the master story-teller; Romany, one of the favourites of the Children's Hour; and John Hilton, whose uncanny mastery of the microphone, combined with deep sincerity, had made his "Can I help you?" talks a real consolation to thousands of ordinary people. And the war was barely over before listeners heard of the sudden death of C.H. Middleton, the beloved gardener, whose lugubrious good humour had cheered innumerable Sunday afternoons.

The end of the war found Britain's entertainment resources at a low ebb. The war-time flow of American stars coming here to entertain their troops had dried up without yet being replaced by the normal peace-time incursion of international artists. Music was the first branch of broadcasting to recover its international flavour. Pau Casals, the world-famous cellist who had retired from the concert platform when the Nazis occupied France, returned to broadcast with the BBC Symphony Orchestra on June 27, 1945; in November the Société des Concerts du Conservatoire, of Paris, became the first foreign orchestra to visit England since the war; and thereafter foreign orchestras and foreign conductors became as prominent as they had been in pre-war years, though there were still artists of international fame whose war-time collaboration with the enemy caused them to be barred.

(1) The position is the same in 1950. See Chapter Sixteen.

Post-war listeners had to do without the recorded American shows that had become so familiar in the Forces programme and the GFP. The BBC could still have used these, in versions from which the commercial announcements had been edited out—"de-loused" versions, to use the Americans' own term—but there was still commercial money behind them, and in view of the possibility of commercial broadcasting's re-establishment in Europe, the BBC was probably well advised to drop them from its home services. But until British variety got going again, they left a noticeable gap.

Altogether, it was more difficult than ever to produce good broadcasts, and the public, reacting after the excitements of two victories and a General Election, was probably harder to please. One help to broadcasters was that there was no return to the "Sunday policy" of 1939. The Home Service was still under certain restrictions as to what it could broadcast on the Sabbath, but the Light Programme was free, and listeners soon learnt to look to it for a Sunday's listening full of the most popular variety programmes and bands.

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Despite the various difficulties, the new system established itself. The listener research machinery now made it possible to estimate what proportion of listeners in every part of the country listened to their own Region, to other Regions, or to the Light Programme, and this last was not long in overhauling the Home Service as it was meant to do. By November it had reached a 50-50 balance, and its audience increased until it went well beyond the 60-40 ratio originally laid down.

This Light Programme provided the novelty element in the BBC's post-war plan, and for its first five years it was directed by people who had come from the Overseas Services and had not acquired the traditional outlook of Broadcasting House. It introduced methods better known to listeners overseas than here, such as the daily dramatic serial, which had become a standby of American and Austalian radio but was unknown in Britain. Ever since 1941 the BBC's Overseas Services had been running a serial telling the daily adventures

of a typical British family, the Robinsons (1), which had built up a keen following in many parts of the world, and when it was brought into the new Light Programme it proved just as popular here. It was the forerunner of two other daily serials, Dick Barton and Mrs. Dale's Diary, both of which have become household words and attained the notoriety of mentions in Parliament and the Courts.

"Transatlantic Quiz" was another newcomer to British audiences, though it had been running in the BBC's North American service and rebroadcast by an American network for more than a year. This display of wit, erudition, and good guessing between teams in London and New York became to post-war broadcasting what the original Brains Trust had been during the war, and when dollar shortage cut it off the transatlantic circuit it left Lionel Hale as question-master and Denis Brogan as star guesser firmly entrenched in the Round-Britain Quiz, which was still running in 1950.

Quiz programmes of all kinds flourished. They had come into favour during the war, when cash prizes were first given in "Merry-go-round", and after the war they multiplied, though the prizes never became so important a factor as they did in the "give-away" programmes of American radio. As the ordinary quiz formula wore threadbare new parlour games were invented, and provided both sound radio and television with some of their most popular shows.

Request programmes reached a new peak. The war-time success "Forces Favourites" was continued in the Light Programme under the name "Family Favourites", so anybody could write in, and the first week's mail amounted to 17,000 letters. As soon as technical facilities permitted, this became a two-way programme with BFN Hamburg, in which a BBC announcer and an Army announcer alternately presented records chosen by their own listeners. A later innovation was "Housewives' Choice", another request programme of gramophone records, and both these were still being broadcast in 1950. These request programmes provide

(1) It was originally called *Front-Line Family*, and when it began in 1941 Alan Melville, the revue-writer, accomplished an unheard-of feat by writing and producing it single-handed. Later, like other daily serials, it became the work of a team.

the BBC with one of its cheapest ways of getting a good audience, and the chief limit on their use is the restriction on the total weekly hours devoted to gramophone records, imposed by the gramophone companies at the demand of the artists' associations (1).

In the field of conventional entertainment broadcasting was slow to produce anything new. The war-time favourites held the field: Home's Itma, Music-Hall, Saturday Night Theatre, and Light's Variety Bandbox and Merry-go-round. This last finally split into three, its Navy, Army and Air Force versions becoming three new successes on their own, with Eric Barker, Charlie Chester, and Richard Murdoch and Kenneth Horne.

"Merry-go-round" provided an early proof of the change in listening habits since the war. For six years it had seemed that the nine o'clock news was the fixed listening peak of the day, but by the autumn of 1945 the research figures showed that when "Merry-go-round" was broadcast at 9 p.m. the majority preferred to listen to it and to get their news at the end. It was no longer possible to feel that practically the whole of the nation was gathered together by the solemn strokes of Big Ben.

Broadcast news showed no disposition to revert to its pre-war limitations. There were eleven news broadcasts in the Home and Light programmes during the day, beginning at 7 a.m., and plans were already being made to bring to the home audience another form of newscast that had been developed, like so many things, in the Overseas Service. This was Radio Newsreel, a half-hour programme of news, expert comment, first-hand reporting, and recorded actuality, produced daily and dealing with everything that had happened up to the time it went on the air. In 1945 Radio Newsreel was five years old, was running five editions daily and being widely rebroadcast in the Dominions and Colonies and the

(1) This applies to commercial records such as anybody could buy, but not of course to recordings specially made by the BBC itself, either of shows already broadcast (recordings from transmission) or of shows recorded for subsequent broadcasting (pre-recordings). In 1949 these accounted for 42% of the total broadcasting time filled by all services of the BBC.

United States, but it was not until November 1947 that the news machinery of the BBC succeeded in adding an edition for the home listener, which has since been broadcast in the Light Programme every night.

In the changed conditions that followed the war, broadcasting in Britain met with little outside opposition and few bans: these were reserved for the television service that was to reopen in 1946. Broadcasting was the key to success, and everybody wanted to have the handling of it. There was only one notable set-back. The Royal Variety performance was revived in 1945 and the Light Programme broadcast the whole of it, the listener research figures showing that practically half the adult population listened throughout the two hours. The BBC paid £1,000 to the Variety Artists' Benevolent Fund, for which the performance is held, but loud protests came from the cinema managers, who complained that on that night their customers had stayed at home. Whatever the ethics of the argument might be, the Royal Variety Performance has not been broadcast since.

Nor was there the expected threat from advertising stations overseas. Far from launching commercial radio in Europe, the Americans seemed to be primarily concerned with radio as a means of propaganda, and there was even a prospect that the Luxemburg station, spear-head of British advertising programmes before the war, might become permanently an allied propaganda station. The European governments themselves were in no hurry to let their radio pass out of their own hands, and, worst of all from the advertiser's viewpoint, the great gap in the BBC's defences left by pre-war "Sunday policy" had now been closed. With a string of popular programmes following each other on the Light and attracting the biggest audiences of the week, the target at which advertisers had once aimed their blandishments was almost entirely whittled away.

Professional competition with the BBC in employing artists and producers came rather from the post-war growth of commercial transcriptions. The use of complete programmes produced on records had spread during the war and continued after it. Stations in the Dominions were offered a wide choice of American programmes issued by commercial

firms, and British competition came not only from the BBC Transcription Service but from independent sources, notably Towers of London, an enterprising concern which frequently booked artists of the eminence of Sir Thomas Beecham and Gracie Fields for series of transcriptions which were then sold at comparatively low cost to stations overseas.

These programmes contained no advertising and found customers among public-service systems as well as commercial stations. The BBC did not use them itself and made some attempt to limit them by putting barring clauses in its own contracts with artists. A similar situation grew up in the television field. Short films were being made in England, primarily for American television stations, and some of the most popular BBC items such as Muffin the Mule and Café Continental were filmed in this way.

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Meanwhile the BBC continued its external activities, though not quite at war-time strength. A number of transmissions became unnecessary as normal broadcasting came back in Europe and other parts of the world, but by 1946 the BBC was still broadcasting in 45 languages, of which the European service accounted for 24 (including Russian, which began in March).

The most gratifying feature of immediate post-war broadcasting to Europe was the response from listeners once they could write freely to the BBC. Successive stages of liberation had already revealed the value that had been attached to the broadcasts from London by patriots and anti-Nazis everywhere from France to Norway, and the fervent goodwill that greeted any appearance of the name BBC. Once Germany was reached the long-delayed results of six years of broadcasts began to come in. In 1945 and 1946 the BBC was receiving letters from German listeners at the rate of 1,000 a week, and in 1947 an outside estimate put the number of regular listeners to London in the British zone at 172,000, with a further million and a quarter who heard the broadcasts from time to time.

1946 brought great developments. The post-war television service opened on June 7, the Third Programme on September

29, and during the year the BBC was assured of a new Charter. In addition the listener's licence fee was doubled without checking the sale of licences or uprooting the listening habit which had become so solid during the war.

The Third Programme completed the BBC's three-pronged scheme for home broadcasting. Its purpose was to provide for the culture-loving minorities: those who wanted to hear nothing but great music, or great plays, or experiments in the use of radio as an art form, or talks by experts that would exercise their minds. For this purpose the Third was exempted from most of the conditions placed on the other programmes. It did not have to contain news, weather forecasts, or any such "service broadcasts", nor even party political broadcasts by politicians. It had no fixed timings. It was under no obligation to attract an audience, and it was free to disregard most of the BBC's "policy" considerations and take risks that the other programmes could not take. For instance, one of its first and most successful productions was Sartre's "Huis Clos", which could not be publicly performed on the stage.

The Third Programme was thus a luxury, the sort of service that many a broadcaster must have dreamed of finding, where none of the hard conditions of the workaday world applied. It also acted as a safety-valve for the BBC, enabling it to do many things that demonstrated its culture, enlightenment, and breadth of mind, without annoying the bulk of listeners, who never tuned to the Third after the first few days. It was expensive in money, resources, and wavelengths (1), although it ran only from 6 p.m. to midnight, but it was a godsend to the minority of listeners who shrank from encounter with the frequent vulgarity and triviality of the programmes that the majority heard and enjoyed.

It was easy to make fun of the new programme, with its

(1) It occupied two medium wavelengths, and even so was not audible to more than 50% of the population. This was partly because the main coverage was intended to be on 514 metres, a wavelength that the BBC had used for the AEF programme in 1944-1945. By the pre-war plan this wavelength was shared by two low-power stations, one of which was Radio Latvia, and when this station heard that the BBC intended to use the wavelength for a high-power station it put up its own power and thus forced the BBC to alter its plans. By 1950 the coverage was raised to 70%.

strange plays, long concerts of "difficult" music, talks by erudite and unintelligible speakers, and "austere" presentation, which might leave silent intervals of as long as four minutes between items. But the people for whom it was meant recognised that it was edited with knowledge, taste, and enterprise, and especially on the side of music (to which it devoted half its time) it performed a task that was beyond the powers of popular broadcasting in the current style. It brought pleasure to sections of the people who had been most resistant to broadcasting, and it conferred immense prestige on the BBC.

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The ambitious plan for post-war broadcasting, coming on top of the BBC's many-sided achievements in the war, was no doubt instrumental in securing a renewal of the BBC's Charter without an enquiry. Moreover, war-time experience had convinced both the parties in the Coalition Government that it was convenient to deal with one Corporation for all aspects of broadcasting, and there is little reason to suppose that the result would have been different if Mr. Churchill rather than Mr. Attlee had been in power in 1946.

In February of that year the Prime Minister announced the Government's decision that "no independent investigation is necessary before the Charter is renewed", and in July a White Paper was published setting out the Government's proposals for giving the BBC another five years' lease. Debates in both Houses of Parliament were concerned with the need for an inquiry rather than with the basis of broadcasting, and in the Commons the issue was considerably confused by the hint dropped by the Lord President, Mr. Herbert Morrison, that the Government might think an inquiry into the Press more necessary than an inquiry into broadcasting. The Government's case for continuing the existing system rested largely on the limited number of wavelengths available and on the "programme balance" achieved by unified control, but it is noticeable that in the discussions in Press and Parliament there was more opposition to the idea of monopoly than there had been in 1936.

This opposition was based mostly on the belief that it was undemocratic to entrust a medium of information and ideas to a monopoly, for few of the disputants were sufficiently conversant with technicalities to question the argument from limitation of wavelengths on which the Government so largely relied. The number of medium wavelengths was certainly limited, but ultra-short wavelengths were capable of vastly extending the number of stations and programmes that could be provided in this country, and their use had been suggested by technicians as early as 1943. The wired wireless system was also capable of being more widely developed, and this was mentioned in the Commons debate (1). But to the ordinary listener, probably, the chief issue settled in 1946 was that Britain was not to have commercial broadcasting, and in fact the Government announced that it would do all in its power to restrain foreign commercial broadcasts from being heard here, though it was not obvious what it could do.

The new Charter and Licence, which came into operation on January 1, 1947, confirmed the BBC in all its activities, and strengthened its position in some respects. It was not completely returned to the fold of the Postmaster General, from which it had been trying to escape for so long; that Minister remained responsible for the technical side of broadcasting but on questions of major policy the Lord President of the Council was to answer in Parliament, as the Minister of Information had done during the war. The Post Office still collected the licence fees and retained 6% of the total for its trouble, but of the remainder the BBC was to receive 85% for each of the years 1947, 1948, and 1949, instead of having to bargain with the Treasury each time.

Further, the listener's licence fee had been raised from 10s. to £1 in June 1946, and it no longer covered television; a combined radio and television licence cost £2. Nevertheless, the total number of licences stood at 10,770,000 by the end of 1946. And finally, this licence revenue had only to pay for home broadcasting and television. All external services,

(1) The discussions in Parliament and Press are well summarised by R.H. Coase in *British Broadcasting, a Study in Monopoly*, as well as the various war-time suggestions for changing the broadcasting system.

including monitoring, were paid for by Grant-in-Aid voted separately by Parliament, though control of the programmes remained with the BBC. As the BBC's annual accounts showed, there was a good deal more money available for broadcasting under the new set-up than there had been during the war.

1947 was a jubilee year for the BBC, which had been founded as a private company twenty-five years earlier, and it was a year of triumph. There was one depressing interlude early in the year, when the fuel crisis following the hard winter caused television and the Third Programme to be suspended and Home and Light combined and curtailed. Apart from this all went well. At home all three programmes had got into their full post-war stride, and television was setting up new land-marks every day. Abroad, both European and Overseas services continued to project Britain and appeal to local listeners with everything from commentaries on the royal tour of South Africa to the popular lessons in "English by Radio", from the French Brains Trust "Six autour d'un Micro" to "West Indian Diary", from a weekly selection from the Third Programme for India to a feature programme on Oxford University to be rebroadcast by station WOR in New York.

The BBC was broadcasting from nearly 100 transmitters : 53 for the three home programmes, of which 20 were high-power, and 40 for overseas, of which 38 were short-wave. In addition it sent many programmes overseas on records for local stations to broadcast. This Transcription Service, which had grown up during the war, was able to expand freely now that communications were restored, and many stations preferred to broadcast non-topical items from records rather than to pick them up off the air, with all the risks of interference, bad quality, and possible failure to come through at all.

The BBC's Silver Jubilee occurred in November 1947, and it was celebrated with all the more gusto because the twenty-first anniversary had passed comparatively unnoticed in the tense days of 1943. As was proper, the spotlight was shared by Lord Reith, the architect of the BBC's independence and power. The BBC's lasting innovation to mark its jubilee was

the institution of a series of Reith Lectures which were to take the place of the National Lectures that Reith himself had founded in 1929. The Reith Lectures, which were inaugurated by Bertrand Russell in December 1948, consisted of series of broadcasts commissioned from eminent philosophers and scientists, each series communicating the results of original research, and this plan produced more valuable as well as more attractive broadcasts than the National Lectures, which occurred in isolation and then lasted for an hour.

Lord Reith, incidentally, had had a recent *rapprochement* with the BBC. During previous regimes he had remained aloof, except for the dealings that he had to have during his short stay at the Ministry of Information, but by 1947 he had resumed relations with the latest Director-General, who was known to have a great admiration for him and to have adopted many of his ideas on the status of broadcasting and the constitutional position of the BBC. It was not to be thought, however, that Lord Reith approved of many things in the post-war set-up, such as the segregation of culture, the popularisation of Sunday programmes and the importance attached to listener research.

The BBC also celebrated its Silver Jubilee by carrying out another of its internal reorganisations. This introduced a new Board of Management consisting of the Director-General and five Directors, who were set over the existing Controllers. The provinces for which the five Directors were responsible were Technical Services, Home Broadcasting, External Services, Administration, and the Spoken Word. The new system was designed to streamline the organisation and relieve the Director-General from an undue amount of personal responsibility, but from the point of view of the staff engaged in production it seemed to add one more layer to the hierarchy, make the BBC still more top-heavy, and put a greater distance between the people who took the decisions and those who were doing the practical work.

The new board did not include a spokesman for television, which was now classed as a sub-division of home broadcasting. But by 1947 the new medium was already beginning to assert its individuality and its distinctive powers.

CHAPTER FIFTEEN

THE VIEWING HABIT

WHILST SOUND broadcasting settled down to consolidate its war-time gains, television began again from nowhere and suddenly revealed itself as a power to be reckoned with. Between 1945 and 1950 it passed from being a scientific achievement, a futuristic novelty, into being a successful rival to the older medium as a source of entertainment for the modern home. The clash was most marked in the United States, where domestic broadcasting had been most firmly entrenched. Soon after the end of the war, experienced American radio men were predicting that television would kill sound broadcasting within a few years. Before 1950 was over, talking about "radio" in the United States meant talking about television. The future had changed hands.

The fact was that people wanted to look as well as listen. A quarter-century spent in acquiring the convention of transmitting and receiving impressions by the ear alone had not trained mankind to dispense with the eye. As soon as it was possible to see for yourself instead of being told, people leapt at the opportunity. They preferred seeing a weak programme on television to hearing a better programme on sound. Many of the early television programmes were indeed very bad, but they still gained by their novelty value. The question was, could the quality improve before the supply of new viewers, and therefore the novelty value, ran out?

The path of the television pioneers was far harder than that of the radio pioneers of the nineteen-twenties. As has been mentioned before, transmitting television is a more complex and elaborate process than broadcasting sound, more expensive, more limited, and more apt to go wrong. In the same way, viewing is harder than listening. You cannot enjoy television whilst you are washing up, darning socks,

doing home-work, playing bridge, or driving a car. You have to stop doing anything else and watch the screen as well as listen to the loudspeaker. Nowadays there is no need to draw the curtains and put out the lights, but the set has to be where the whole family can see it, and this usually means arranging a room round it, and keeping the room solely for television when anybody wants to watch; this at a time when living-space generally is more limited than it has ever been.

Further, television reception is more difficult than reception of sound broadcasts. The most expensive set, the most elaborate aerial, will not always ensure against interference even when the set is quite close to the station. At different distances a hospital using diathermy treatment, a main road carrying a stream of motor traffic, an air-lane overhead, may all interfere with the picture, and the eye is less tolerant of distortion than the ear.

These drawbacks might well hold up the growth of the viewing habit anywhere. In the United States, where the mainspring of radio has always been the profit motive, the dice might seem to be unduly weighted against a new, expensive, and uncertain enterprise competing with the vast profits of sound radio. Yet in the United States, where alone it has had a fair chance to compete, the new medium has been winning all along the line.

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The end of the war found television suspended everywhere. In Britain the BBC service had been closed down since 1939. In the United States new developments had been lacking since 1941. The Germans had been running television from Berlin and Paris, where they were building elaborate new studios and transmitting from the Eiffel Tower, unaware that their transmissions were being picked up by the RAF from a station on the South Coast (1). But by 1945 the war

(1) In *Adventure in Vision* John Swift describes how the Paris transmissions were watched for over two years at a special receiving station on Beachy Head, and valuable information about bomb damage in France was obtained from newsreels that the German station put out.

in Europe had swept away all such activities, and no television screen on this side of the Atlantic was alive.

In Britain the first sign of revival came in October 1945, when the Government accepted the report of the Hankey Committee that had been set up in 1943. This meant that the BBC was commissioned to resume its pre-war service from its pre-war station, and the decision had far-reaching results.

First, it meant that the BBC was again entrusted with the monopoly of television as well as of sound broadcasting, to run it as a public service without commercial programmes. Secondly, it meant that despite ten years of technical progress there would be no change in technical standards; the post-war service would still be in black-and-white on a definition of 405 lines. Thirdly, this in turn meant that the return of television would be speedy. In the conditions that developed in Britain after the war there would have been little chance of building a new transmitter on a new system for several years.

Whilst ruling out any possibility of divorcing television from the sound monopoly, the Hankey Report did however stress the need for immediate research into higher standards of definition (it mentioned 1,000 lines to give definition comparable to that of the cinema screen) as well as colour and stereoscopy. The prospect of technical changes therefore remained to perturb both manufacturers and purchasers but in the meantime British television embarked on its post-war career on standards which have often been defended as the best compromise between efficiency and economy, but are nevertheless the lowest to be adopted anywhere since the war.

The lengthy business of reconditioning a station that had stood idle since 1939, and reassembling a staff that had been serving all over the world, was finished in time for the post-war service to televise the Victory Procession on June 8, 1946 (1). This was a resounding success, and it was followed by further triumphs in every field of programmes, both studio productions and outside broadcasts such as that of Ascot races, which had previously been thought to be out of range. Like sound broadcasting, television suffered in the fuel crisis of 1947, when for some weeks the station was entirely

(1) The formal opening of the service was on the previous day.

off the air, but apart from this interlude the BBC retained its pre-war distinction of giving not only the best television programmes, but the only regular twice-daily service to be found anywhere in the world.

This service was however produced under increasing difficulties. The Alexandra Palace station had a unique collection of experienced staff and commanded unrivalled "production know-how", but its physical resources were those that had been out-dated by 1939. Its studios were too small for the work they had to do, and its technical equipment in particular was pre-war in manufacture as well as design. The effects were especially marked in outside broadcasts, where war-time developments in electronics now made it possible to produce gear that was more sensitive, more mobile, and more robust. Such gear was already in use in America, and the contrasting obsolescence of the British equipment had become positively painful before the first new cameras were taken into service in the summer of 1948.

In Britain, too, television was enjoyed by no more than a minute fraction of the population. There was only the one station, but the area it served had a population of some 11 million, so the pre-war estimate of some 20,000 set-owners showed how little hold television had got. It was not known how many sets there were when the service reopened, including those that had been in use before the war and those that had been made before and sold since, but in June 1947, after a year's operation, the total number of television licences was only 21,000.

This was not because people did not want television after the war but because they could not get it. There were no sets. There was no such thing as "sales resistance" in those early years; every dealer had waiting-lists and every set that left the manufacturers found its way into a home, but the supply fell far short of the demand. The British radio industry had done a tremendous war-time job, mostly on radar equipment, and when the war was over it had first to re-convert itself to peace-time purposes. When it set out to make television sets it was handicapped by shortage of glass for cathode-ray tubes and timber for cabinets, as well as the persistent shortage of skilled men.

For a long time the television licence figures kept step with the total number of sets made. It was only in 1948 that the production lines really got to work. Early in that year the total production since the war was 40,000 sets, and the licence figure stood at 41,392. During the year 95,000 more sets were made, and the licences totalled 92,000. Production was beginning to get ahead. By the end of 1949 the industry was turning out sets as the rate of a thousand a day, and licences were selling at the same pace. By this time there was a second station at work, and the licence figures went from less than quarter of a million at the beginning of 1950 to more than half a million at the end.

In 1946 and 1947 the torrent was yet no more than a trickle But there were enough sets out to demonstrate that people who had once had television in their homes would never again be satisfied with sound broadcasting, just as people who had got used to talkies would never go back to silent films.

The programmes themselves were enterprising and often very skilful, but they too were handicapped, not only by primitive production conditions but by bans. The resumption of television aroused hostility from most sections of the entertainment interests, and even before the service reopened it had encountered a complete boycott from the British film business. Producers, distributors, and exhibitors combined to deny television the use of any of their films (1). Within a week of the opening the music-halls joined in; the three circuits that controlled all the big halls forbade artists to appear in television under penalty of suspension for anything from 16 to 40 weeks, thus ensuring that no top-liners should be televised. After one or two successful television relays from theatres the West End theatre managers put on their ban. The Epsom Grandstand Association refused to have the Derby televised, the Football League refused their championship matches (though the Football Association continued to allow the Cup ties and internationals), the British Boxing

(1) Television was however allowed to show the Walt Disney cartoons that it had stored during the war, until they were withdrawn owing to a ban on television by the American Federation of Musicians. After this it had access only to revivals of foreign classics and a variety of old films which had no box-office value in the cinemas.

Board of Control refused professional boxing, which had been one of the biggest attractions before the war. There was a further difficulty over the use of popular music, much of which was American, because the English publishers were uncertain whether they had acquired the television rights.

To a large extent television was thus repeating the early experience of sound broadcasting, and the bans were not peculiar to Britain. American television encountered an even more crippling handicap when it was denied the use of any musicians, and was reduced to such shifts as having a singer mime her song in front of the cameras whilst it was really played, with band accompaniment, from a record on the turntable next door. But there were complicating factors in Britain which lessened the likelihood that the bans would fade as the new medium showed its power. One was the restriction of television fees to the scale that the BBC was accustomed to pay for sound broadcasts, which removed any financial incentive for promoters to have their events televised. A fight promoter, for instance, paying out thousands of pounds in purse-money was not likely to be tempted by the BBC's offer of a television fee of £250, nor a football club by the chance of making a few shillings more for each player and a few pounds for the club.

But the chief be-devilling factor was the fear of cinema television coupled with the lack of copyright in anything televised. Sports promoters especially were haunted by the fear that their big events might appear on a cinema screen without their permission and spectators' money might go into the cinema's box-office instead of their gate. As a matter of fact no cinemas were equipped to show television after the war, but there was constant talk of big-screen developments, and the Rank Organisation wanted to set up its own television station and transmit its own programmes to its own cinemas independently of the BBC, which the Postmaster General refused to allow.

Instead, he gave BBC television the protection that copyright law did not provide, by inserting a clause in the viewer's licence making it inapplicable to any place where people paid to go in. But this further embittered the film industry and ruled out the possibility that big fights might be televised

as they were before the war, with the promoters looking to the cinemas for their payments rather than to the BBC. After five years of deadlock, the Beveridge report of 1951 finally recommended that cinemas should be allowed to transmit and receive their own programmes, but under conditions that seemed likely to be unacceptable, one of them being that the pictures should be available to the BBC on terms approved by the Postmaster General.

In the United States things had followed a different course. Hollywood refused its films but British films were offered to American stations, and numerous new companies began making films specially for television. As for sport, the question was solved as soon as advertisers' money came into television in a big way. Enormous fees were paid for television rights; at the end of 1950, for instance, rights in the World Series baseball games were sold to a sponsor on a six years' contract at a price of £357,000 a year. The sponsor was able to send his programmes out over a far-reaching network of stations, and the promoter, with a fee of this size in his pocket, was willing to face the risk that fans might stay at home and watch television instead of paying to see the game (1).

It is interesting to notice that the BBC never retaliated on the entertainment interests by denying them the use of sound broadcasting, which could do as much for them as they could have done for television. The film people in particular, who were the most relentless opponents of BBC television, continued to profit not only by sound broadcasts based on current films, which had a known financial value to the cinemas where the films were shown, but by incidental appearances of their stars as guests and interviewees in countless BBC programmes, with unfailing mention of the films in which they were then concerned. The Television Service itself, though unable to get films, has constantly presented film personalities in the "publicity appearances" that are so important a part of the promotion of films.

Most of the external relations of British television found their way to the Television Advisory Committee, a per-

(1) As television expanded, promoters again grew nervous, and in 1951 several big fights were televised to cinemas in other big towns, but not to home viewers and not in the town where the fight was staged.

manent body set up in 1945, in accordance with the recommendations of the Hankey Report, to advise the Government on major developments—such matters as change of standards, research, pooling of patents, television in cinemas. It consisted of nominees of Government departments and the BBC, but not of the radio industry, and it accomplished nothing whatever. Questions referred to it vanished into a limbo of adjourned meetings and inconclusive interviews, and it had no effect on the development of television in Britain or of the export trade. In November 1949, when the Beveridge Committee on the future of broadcasting had begun to sit, it was announced that the task of the Television Advisory Committee would in future be merely "to advise the Postmaster General on current development problems of the BBC's television service", and after one more meeting with the Committee the Radio Industry Council declared that it saw no purpose in dealing with it on those terms.

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Meanwhile the Television Service continued to achieve numerous programme successes and to delight its small audience. Despite the difficulties and the bans, it contrived to exploit many of the possibilities of visual entertainment for the home. Plays were produced on an increasingly ambitious scale, variety acts were imported from the Continent to replace the talent that was banned here, the television film unit was enlarged to cover special events like the Royal tour of South Africa in 1947, and a newsreel specially taken for television was started at the beginning of 1948. Outside events continued to provide the most convincing proof that sound broadcasting had had its day. Although so many events were unavailable, television showed Test matches at Lord's and the Oval, championship tennis at Wimbledon, the F.A. Cup Final, Rugby internationals, and spectacles like the Lord Mayor's Show, the Cenotaph service on Armistice Day, and the wedding procession of Princess Elizabeth in November 1947, though on this occasion the television cameras were not allowed inside the Abbey and the ceremony itself had to be filmed.

The Royal wedding was also the first occasion on which the BBC used television cameras of post-war design, such as were being used habitually in America and France. After emerging from the laboratories for this occasion the new cameras vanished again until the Olympic Games in the summer of 1948, which gave viewers a fortnight of spectacular relays from the Wembley Stadium and Pool. Another step forward was taken with the Boat Race of 1949, when modern equipment borrowed from the manufacturers made it possible for the first time to follow the race from start to finish by mounting a camera on a launch and sending its signals by radio link to receiving stations on the bank. The day was good, the race exceptionally close, and the broadcast a resounding success.

In the same year there were more developments that the television interests had long thought overdue. The BBC began to make regular use of television recordings (or film taken from the television screen) which had first been used experimentally in November 1947. It finally acquired the White City site in West London and announced that more than half its 13 acres would be used for a new television centre to replace the crowded studios at Alexandra Palace, the lease of which was due to expire in 1956 and could not be renewed.

All this time television had been broadcast only to one corner of England, but a second station, in the Birmingham area, was at last opened on December 17, 1949. The new station, at Sutton Coldfield, was more modern, more powerful, and equipped with a higher aerial mast than Alexandra Palace, and it brought television within the range of several million more households in the Midlands and on the borders of Lancashire, where its novelty value had the full impact that it had had in London in 1936. The Birmingham station was supplied with its programmes by radio link from London, this being the BBC's plan for future provincial stations. Technically it was possible to send programmes in the reverse direction, and in fact the opening of the station was relayed from Sutton Coldfield itself, but no provision was yet made for regular programmes from the Midlands, and the outside broadcast units visited it only twice, for boxing and swimming events, in the first year.

During 1950 British television made further steps forward, mostly on the technical side. Disused film studios at Lime Grove, Shepherds Bush, were acquired to add to the production space available, equipped with modern cameras, and put into use with record speed. By using micro-wave radio links television began to venture further afield; a relay from Southend in May was followed by one from Calais in August, the first cross-Channel television in history. But at the same time the quality of the ordinary programmes was coming more and more under fire, and there was an increasing disposition to question the continued control of television by the BBC.

The Cinderella service had indeed become a considerable embarrassment to its parents and sisters. Before the post-war service had been running long, the old rift developed between Alexandra Palace and Broadcasting House. People who worked in television, and radio manufacturers who were keen to see it develop, again became suspicious that the controlling powers in the BBC did not want television to present too abrupt a challenge to sound broadcasting and were well content to see its progress delayed. With the Beveridge Committee sitting, both sides intensified their activities. The BBC developed its theory that sound and vision were partners, not rivals, and promoted the marriage between the two by interlocking television more securely with the general organisation of the BBC. Television was given a seat on the Board of Management, but at the same time heads of programme departments in sound broadcasting were assuming responsibility for television programmes, and the finances of the two services remained inextricably tangled in the published accounts. On the other hand there were strong pleas for the separation of the new medium from the old monopoly, and amongst those making them were the first two post-war Controllers of the Television Service, whose sudden resignations from the BBC in 1947 and 1950 caused considerable comment.

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All this time television had been advancing by giant strides in the United States. Without a rich monopoly to finance it,

the new medium had had a hard passage in the first years after the war. The advertisers, who provide the financial motive force for American radio, hung back until there was a known market, and the radio networks were in no hurry to destroy their own vested interests in sound broadcasting. An additional complication was the prospect of colour television, which made everybody reluctant to sink money in black-and-white. The chief advocates of colour were the Columbia Broadcasting System, one of the four national radio networks, whose engineers had produced a remarkably effective colour system depending on a spinning disc such as the Baird system had used. These doubts were temporarily dispelled in April 1947, when after prolonged consideration the Federal Communications Commission refused to set commercial standards for colour, arguing that a practicable system had not yet been produced.

American television had already made great technical advances since the war. Sensitive cameras enabled it to operate in lighting conditions that would previously have been hopeless, and relays both by cable and radio link had progressed beyond British dreams. In June 1946, shortly after the BBC service re-opened, the Louis-Conn fight for the world heavyweight championship was televised by ordinary ring lighting with cameras 135 feet from the ring, and the pictures were sent instantaneously by land-line from New York to Washington, 200 miles away. Mobile equipment and relay links were waiting for the boom that began when the FCC put its veto on colour and thus assured the immediate future of black-and-white, on the accepted standard of 525 lines.

The first radio network to put real money into television was the National Broadcasting Company, which is a subsidiary of the great manufacturing concern, the Radio Corporation of America, makers of television cameras, transmitters, and sets. David Sarnoff, who ruled RCA, had been the first man to see the possibilities of radio, and now he was keen on television. In the autumn of 1947 he made it clear to all the hundreds of stations affiliated to NBC that the network was going into television seriously, and any stations that did not want to lose money had better get in too.

A great deal of money *was* lost in American television in the first years—NBC alone lost 3 million dollars in 1948—and it was easy to deride the programmes, which consisted largely of sports, and the audiences, who were to be found in saloons rather than in homes. Television did not seem to offer a serious challenge to the rooted appeal of radio programmes backed by enormous finance and based on painstaking research into listeners' habits and tastes. Nevertheless, the boom rolled on. New stations were built all over the country and networks to link them crept over the map; there were 2,000 miles of continuous network in January 1949, so that people in Boston could see programmes from Washington and St. Louis, and the coast-to-coast link was forging steadily on. By the end of 1949 there were 98 stations working (1), and some 3 million sets were in use. By the end of 1950 there were 9 million sets, and millions more were being made and sold. Cinemas were losing audiences, big business was putting its money into TV programmes, and radio stars were hurriedly trying to learn new tricks, just as stars of the silent screen tried to groom themselves for sound when the talkies came in.

Even in the United States the future of television is still not clear. Finance remains something of an enigma, and late in 1950 the colour controversy was revived. The FCC finally endorsed the Columbia colour system that they had turned down in 1947, but before CBS could start regular transmissions RCA and other manufacturers carried their opposition to the Courts.

But whatever headaches American television may bring to manufacturers and operators, there is no doubt that the American public wants it, and the new medium has had more impact on the people in the United States than anywhere else. The spectacle of television conquering a nation that was regarded as the headquarters of sound radio, where 94% of homes owned one radio set and 46% owned more than one, did more than anything else to spread the conviction that television was bound to come elsewhere.

(1) This number would have been greater but that the FCC had postponed further applications until the allocation of television frequencies had been finally worked out.

This dominance of American television made it hard for the British radio industry to capture export orders, despite the admitted technical excellence of British transmissions. From 1947 to 1950 there was keen controversy over the standards to be adopted for television in Europe and other parts of the world, and it became obvious that few countries were likely to be content with the British definition of 405 lines. There were many experiments and demonstrations, in which British, Continental, and American manufacturers competed, and the British attempted the difficult task of persuading customers that 405 lines was the most practical standard, but that if necessary they could provide higher definition abroad than at home. They did this with such success that British equipment found customers even in the Americas; e.g. in Canada, New York (for the United Nations headquarters) and Colombia.

There were other technical differences between British and American transmission—differences in modulation and polarisation (as well as in the shape of the picture, until the BBC changed its own picture shape from a 5:4 ratio to 4:3 in April 1950, thus coming into line) but the standard of definition was the most conspicuous point at issue. France startled technicians by deciding to adopt an 819-line standard, which was higher than anything yet transmitted, and this was used by the new station that opened at Lille in April 1950. In 1951 the Paris station was also transmitting on 819 lines, in parallel with its service on 441 lines, and there was talk of altering the latter to 405 lines so as to facilitate exchange of programmes with Britain. Denmark, Norway, and Sweden agreed to adopt 625 lines. Canada inevitably followed United States standards when it began to equip studios in Toronto and Montreal in 1950, though it ordered its equipment from a British firm.

These differences over technical standards seemed likely to obstruct the international exchange of programmes that was technically possible in the north-west corner of Europe, where four countries confront each other across a few miles of water, and London, Paris, Brussels and Amsterdam are all enclosed in a triangle with no side longer than 300 miles. Up to 1950 no television programmes had in fact been

exchanged (for the British relay from Calais was purely an "outside broadcast" by the BBC and was not broadcast to viewers in France), and indeed there were few to exchange. Despite all the test transmissions and the amount of station-building that was going on, the only regular television services in the world were still those in the United States, Britain, and France. There was also believed to be a regular service from several stations in Soviet Russia, though little was known of this last except when some accident raised a corner of the curtain; as it may have done in 1950, when an unusually large sun-spot played havoc with radio reception, and viewers in Reading thought they were seeing pictures from Leningrad on their television screens.

Apart from international relays, which might of course be effected either by cable or by radio link, there were developments in the direction of using lines to convey television over short distances, as the "wired wireless" exchanges had done with sound broadcasts. The advantages would be even greater with television, where interference is more damaging and an elaborate aerial installation with expert operation can have greater effect. Television relays began in a small way, mostly through landlords of blocks of flats providing an aerial installation and wiring rather than let their tenants erect separate aerials on the common roof; and in 1950 a London hotel announced that all its bedrooms had wired-in television sets installed. Wider relays could obviously be most useful in "fringe" areas where reception is difficult, and late in 1950 the Postmaster General gave the go-ahead to relay companies to set them up.

During the post-war years television advanced also in directions not concerned with broadcasts to the public. It began to be used as a tool in industry and science, as it had already been used in war. Hospitals began to install specially designed television cameras in their operating theatres so that operations could be seen as closely by interested spectators as they could by the surgeons performing them; and during 1950 this method was extended to the use of colour television, which could also be applied to a microscope to show, for instance, slides of blood samples to an indefinite number of people watching on wired-in television sets.

Television was used in industry for giving close-quarters views of dangerous processes; in America RCA launched a system of high-speed facsimile transmission by which print or pictures could be transmitted from a television station at a rate of a million words a minute and recorded on film; and in London a bank began experiments in televising confidential documents from one branch to another.

Such developments served to promote technical progress in advance of the requirements of ordinary public television, as also did the few experiments in the use of television in making films for showing on the cinema screen, for which recording of a definition of 800 lines or upwards would be required. Scientifically, there is no longer any miracle about transmitting television to the public on 405 or 525 lines The problems now are rather economic, practical, social, and æsthetic, and these have proved harder to solve.

CHAPTER SIXTEEN

END OF AN ERA

IN SOUND radio the last three years of the half-century brought little striking change. The period of post-war re-establishment was over, and there was a *fin-de-siècle* air about most of the developments, a feeling that all this had happened before.

In Britain new shows rose to popularity and fell again. The death of Tommy Handley in January 1949 brought the long run of Itma to an end and left the way open for new favourites. New names arose to challenge the old... Joy Nichols and Jimmy Edwards of "Take it from Here", Ted Ray of "Ray's a Laugh", Bernard Braden of a variety of shows. Nearest to a successor to Tommy Handley, probably, was Wilfred Pickles, who had broadcast in many capacities before he found his *métier* in bringing warmth and humanity to the well-worn quiz formula, and made his weekly "Have a Go" the most popular of shows. Another personality to leap into fame after years of broadcasting was the singer, Donald Peers. In a different field Fred Hoyle achieved surprising popularity with his talks on the new cosmology, which religion and orthodox science combined to attack.

But these were eddies on the surface of British broadcasting. The Light Programme went on including serious items without endangering its popularity, the Third remained wholeheartedly serious although it displayed increasing regard for timings, and the composite Home Service pursued with varying fortunes the difficult task of keeping a middle way between the two.

The one thing that could have made a radical change in the framework of British domestic broadcasting, if that had been desired, was Frequency Modulation or some other form of VHF transmission (1), which was capable not only

(1) "VHF" means transmission on very high frequencies, or ultra-short wavelengths, such as are already used in television. It can be either on Frequency Modulation or on Amplitude Modulation, the

of giving much better reception but of enabling far more separate programmes to be transmitted in one country. Ever since the war there had been some hundreds of FM stations in the United States, but the BBC, which has rarely accepted other people's experience, was still experimenting in 1950 as it had been in 1945. In any case it had no declared intention of using the new range of wavelengths to provide a new diversity of programmes for local communities or specialised interests. The only use that it had foreseen for VHF stations was to increase the coverage of the Third Programme by means of new transmitters in areas where the medium-wave transmissions did not reach.

VHF stations, giving good reception over small distances and enabling universities and small communities to have their own programmes, had made great progress in the United States although under their commercial system the new stations had a hard task in paying their way. Otherwise there had been few striking developments in sound radio abroad. The United States retained commercial radio, the countries of the Commonwealth varied between public-service and public-service combined with commercial, and in most other countries the Governments kept their radio more or less strictly under their own control. Radio Luxemburg had resumed its commercial broadcasts sponsored by British firms, but in the new conditions these were not nearly so great a challenge to the BBC as they had been before the war.

In the international field radio grew more active as the Cold War warmed up. In April 1949 the Russians launched a jamming campaign against British and American broadcasts, but with bases in Europe and Asia this was easier to counter than German war-time jamming had been. In the British colonies wire broadcasting spread, and the stage was being set for a battle between Governments and commercial interests for its control.

In most parts of the world sound broadcasting was as vigorous, as all-pervading, and as essential as it had ever been.

system used for transmission on long and medium waves, but the first stations to use this range of wavelengths were Frequency Modulation stations, and FM became practically a loose synonym for VHF.

But in Europe, America, and the Dominions there was the rising power of television to cast doubt over the future of sound, and threaten its position as prime purveyor of information and entertainment to the home.

By 1950 it had become an uneasy business planning developments in sound radio on the domestic side. It is now apparent that the range of things to which vision cannot add enjoyment is much smaller than the range of things that sound radio has made it its business to do. Often it has learnt to do them very well, but once television comes over the horizon, the techniques and conventions of sound radio begin to seem as arbitrary as these of the silent film.

Where television cannot replace sound radio is in long-distance transmission. Nobody has yet devised a way of making the waves used for television rebound from the upper atmosphere, regularly and reliably, as the waves used for sound broadcasting can be made to do, so the direct range of any station is still limited to something like a hundred miles. Beyond that distance the programme has to be relayed by another station, whether on the ground or in the air (1).

So international television will depend upon cooperation between nations more than international broadcasting has done. A television service cannot cross a frontier unless the station is close to it. Parts of Belgium may receive transmissions from Holland and France, a specially-built receiver on the South Downs may pick up television from the Eiffel Tower, and people in Toronto may watch programmes from Buffalo, but there is no equivalent to the long-range radio that can span the world from a transmitter in England direct to a receiver in San Francisco or Chungking. Wherever a television programme is produced, ordinary people will see it only from their own station, and unless their station chooses to relay it, they will not see it at all.

(1) The greatest distances can be achieved by siting stations on mountain-tops or by relaying television from high-flying planes. Switzerland is now building a station on the Jungfrau to relay television between France and Italy, and experiments have been made in America with relay stations in stratosphere planes, but this method of course involves all the ordinary hazards of flying weather as well as technical problems that have not yet been solved in regular practice.

In peace-time and between friendly nations, this limitation can be largely circumvented by the use of relays. But the need for cooperation at the receiving end means that television cannot be used for international propaganda as sound radio has been; it cannot break through the screen of censorship in peace, let alone in war. There will be no Lord Haw-Haw and no Colonel Britton of television, nor, in any future war, would a blockaded island be able to keep in touch with its overseas outposts and allies by television, as Britain did by short-wave radio during the last war.

Equally, television cannot solve the problem of communication in vast countries with scattered populations as sound radio can. In Asiatic Russia or in the great spaces of Africa, short-wave radio can be transmitted over long distances and heard by the poorest villagers on a communal set. Apart altogether from its expense, television is debarred from this role by its lack of range, so far as science can see today.

Sound radio may therefore find its fullest function in spanning distance, keeping the nations in touch with one another, linking outposts with the home country, and bringing information, education, and stimulus to backward and primitive communities. In more advanced countries with compact populations and high standards of living, it seems to be only a matter of time before television takes priority in the domestic field, leaving sound radio to fill the useful but subsidiary role of providing background listening for slack periods when the audience is low, and "service" broadcasts of specialised interest, such as weather forecasts and gale warnings for farmers and ships at sea.

Once the transition period is over, with its controversies and dislocations, there will be a clear field left for each medium, the new and the old. The danger for sound radio is that its gift of covering distance may drive it more and more into the field of international propaganda, whilst television, working within its smaller range, is left free to inform and entertain.

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This division of function has not yet begun to manifest itself in Britain. In homes with television sets the new

medium may already have largely replaced the old, but by the end of 1950 there were only half-a-million of them in a total of nearly 12 million licence-holders. Only one new station had been built since 1936. Television had neither covered the country nor penetrated extensively in the districts that it already served. It is therefore still left to sound broadcasting to provide the complete range of entertainment, information, and education that people have come to expect in their homes (1).

The whole British system of broadcasting came under review for the first time since 1935 when the Government set up a committee:

> To consider the constitution, control, finance, and other general aspects of the sound and television broadcasting services of the United Kingdom (excluding those aspects of the overseas services for which the BBC are not responsible) and to advise on the conditions under which these services and wire broadcasting should be conducted after 31st December 1951,

when the post-war Charter and Licence expired. This committee was appointed in May 1949 with Lord Radcliffe as chairman, but before it began its sittings in October he had been replaced by Lord Beveridge, by whose name the committee has been generally known.

Except for the policy of overseas broadcasts, which was excluded as being a concern of the Government rather than the BBC, the committee had the whole field to examine. It could recommend competitive broadcasting, commercial broadcasting, separate control of sound and television or of home and overseas, autonomy for the Regions (or at least for Scotland and Wales), freedom for VHF broadcasts or for the "wired wireless" services, or any other drastic change, and much evidence in favour of such changes was presented to it. But the monopoly had become so generally accepted as a feature of British life that the bulk of comment by Press

(1) During 1951 the BBC announced that it would open the Holme Moss TV station near Huddersfield, Yorkshire, in October, and the Kirk o' Shotts station in Scotland early in 1952. Television licences advanced rapidly; 915,200 had been taken out by July 1951, out of a total of 12,434,900.

and public merely regarded the inquiry as a means of improving the workings of the BBC.

The monopoly had attained enormous proportions. Its published accounts for 1949-1950 showed an income of over 15½ million, of which nearly 10 million represented the proceeds of radio and television licences, a million came from profit on publications, and over 4 million as grant-in-aid for overseas services. Its income for the next year would be larger, for from March 31, 1950, the Government was to hand over 100% of the net licence revenue instead of the previous 85%, though the Post Office rake-off for collecting it was raised from 6% to 7½% of the gross.

With this handsome income the BBC carried on a diversity of activities. It provided the home audience with three sound programmes, one of them "regionalised", and one television programme, visible from the north Midlands to the south-east coast. It conducted a great number of broadcasts to other countries, in English and more than 40 other languages, many of which were rebroadcast by local stations. Many stations overseas also received recorded programmes from the London Transcription Service, some of which they bought and some they received free of charge. It used a station in Ceylon and ran a station in Singapore, and often gave advice and sent experts to investigate problems of broadcasting in British Colonies. Its monitoring service was the chief source of information for Government departments on politically important broadcasts from abroad, and its training school taught the principles of broadcasting to members of Government services and foreign broadcasting organisations as well as to the staff of the BBC. It promoted concerts, and employed more permanent orchestras and engaged more musicians than any other agency. It co-operated with educational authorities in schools and in the Forces. In addition it ran a large publishing business, based on the profits of its 8-million-weekly programme journal, the *Radio Times*. Whether this vast agglomeration of functions had led to efficiency in all of them was a matter of opinion, but undoubtedly a formidable edifice had been reared on the slender foundation of the experimental monopoly created so casually in 1922.

The lines of development as seen by the BBC were already clear. None of its activities would be abandoned. External services would be run on the present basis by which the Government prescribes their extent and general character and pays for them, whilst responsibility for their content is entrusted to the BBC. Such ancillary services as monitoring, transcriptions, and staff training would continue, as would the profitable business of publishing, in which the emphasis would shift progressively from sound broadcasting to television as it is beginning to do now. As for domestic broadcasting, sound and television would develop harmoniously as partners rather than rivals, their "marriage" being ensured by careful planning of each new stage of television progress, and the activities of the new medium being firmly interlocked into the general machinery of the BBC.

In sound, the chief problem is to cover the country with three programmes, one of them having six Regional variations, with the wavelengths available under the latest international agreement, the Copenhagen Plan (1). According to BBC estimates, which in technical matters are usually conservative, this enables 95% of the population to listen to the Home and Light programmes and 70% to listen to the Third. The immediate need is therefore to increase the coverage of the Third (for although very few people may listen to it, those who want to may be in any part of the country) and to redress the long-standing anomaly of the North-East coast of England, which still shares a wavelength with Northern Ireland and thus fails to obtain the advantages of the Regional scheme.

This, it may be added, is only one of the anomalies of the the present Regional system that will presumably have to be corrected if Regional broadcasting is to survive. Britain is unlikely to get a greater number of long and medium wavelengths under any future international agreement, so the chief hope of improvement is by the use of VHF transmission,

(1) This agreement, which came into operation in March 1950, gave Britain one exclusive long-wave, two exclusive medium-waves, and eleven medium-waves shared with other countries. Two of the medium-waves are used for the European services and the remainder for domestic broadcasting.

and it is by no means certain that this will be restricted to relaying the Third Programme, as the BBC originally planned.

The BBC's plan for television is to bring 85% of the population within range of a station by the end of 1954. It reckons that this would necessitate ten stations, five high-power and five low, and as only five channels are available in the present range of frequencies this would involve synchronising different stations on the same wavelength, as was done with the National transmitters in the original twin-station scheme. All these stations would be linked with London, none would start operating until they could receive programmes from London, and it could be surmised that they would depend for their programmes almost entirely on London, as the first provincial station at Sutton Coldfield has done.

As for change of standards, adoption of higher definition or colour, there is no knowledge as to what the BBC plans. Any change would have to be considered in consultation with the radio manufacturers and the Government departments concerned with allocation of materials, for a change might involve extensive alterations in the design of transmitters and receiving sets. The BBC has promised to continue transmitting on the present standards even when higher definition or colour is introduced, so as to enable people to go on using their present sets for a reasonable time, and it is likely that it counts on continuing black-and-white transmissions on 405 lines until colour becomes practicable, thus avoiding a double change. It is known to be carrying out research into the fundamental problems of colour television, which may seem strange when so many methods of achieving colour have already been produced and demonstrated, but although the BBC has itself made so many technical innovations, it has shown itself distrustful of other people's innovations, especially since the war.

An orderly unprecipitate development on the present lines was clearly to be expected if the BBC's monopoly of radio and television was renewed. The approaching end of the Charter and the inquiry by the Beveridge Committee, however, revived visions of all the alternative systems that might be adopted, from commercial radio to separate Corporations for the Regions. Many schemes were suggested for

breaking down the enormous power, both cultural and economic, that the ever-widening monopoly had given to the rulers of the BBC. Some critics wanted to encourage free expression of opinion and bring lively controversy to the air; others, to free television from what they regarded as the dead hand of sound broadcasting; others, to see the Government shoulder responsibility for broadcasts to other countries. Some wished to see genuine local broadcasting revived, using VHF transmission to solve the shortage of medium wavelengths that had caused the original local stations to be abolished in favour of the Regional scheme; some, to start local television with local resources, without waiting for the link with London. Others were primarily concerned with the right of broadcasting and television staff to have their interests represented by their professional Trade Unions. Others again merely wanted more freedom and better terms for the people who actually supply the programmes, the actors and musicians who have spent the last quarter-century in hard bargaining with the BBC.

The Beveridge Committee finished its work in December 1950 and its report was published in the following month. It was a bulky document containing 100 recommendations, but few of them were of a nature to bring about much change in the conduct of broadcasting in Britain, or in the lines of development envisaged by the BBC. They were of course addressed to the Lord President of the Council and the Postmaster General, and it was for the Government to decide which of them it should adopt in framing a new Charter for submission to Parliament in the course of 1951.

The report recommended that the BBC's monopoly should be continued, not for ten years but indefinitely, with a further committee of enquiry every five years. (A minority report signed by one member recommended that the monopoly should be broken up, either by the introduction of commercial radio or by the creation of independent corporations.) It left the BBC its independence whilst suggesting new safeguards against abuse of its power. In most instances however it would in practice be left to the BBC itself to act on the advice to whatever extent it chose.

The more novel recommendations with regard to sound

broadcasting were that broadcasting Commissions should be set up for Scotland, Wales, and Northern Ireland, with Governors of the BBC as their chairmen, financial control remaining with the BBC; and that VHF transmission should be used for establishing new local stations, but that this task should be left in the first instance to the BBC.

With regard to television, the report recommended that the BBC Television Service should be financially self-supporting, any money derived from sound licences being ultimately repaid, and that the viewer's licence fee might be raised beyond the present £2. The most striking recommendation was that the Government should be prepared to allocate wavelengths for transmission of television to cinemas, provided that there was no interference with the BBC's service to homes and that "spectacles and sporting events" televised to cinemas should be available to the BBC service on terms approved by the Postmaster General.

This last recommendation, envisaging the broadcasting of television by a body other than the BBC, appeared at first sight to infringe the long-treasured monopoly, but the conditions attached to it were such that it might never come into effect.

In the main, the result of this long and exhaustive enquiry was to endorse the existing system of British broadcasting and advise the Government to perpetuate it. The final decision might make a great difference to what people in this country heard from their loudspeakers and saw on their television screens, and to the impact of British broadcasting on the outside world. But it was not likely to make much difference in the role that radio itself will play in the next fifty years.

People depend on the radio nowadays, whether it is controlled by a Government or a careful Corporation or a multitude of commercial competitors. They have come to look to it for their home entertainment, their common bond with their neighbours, their knowledge of affairs and their contact with the outside world. Children of today listen to the radio before they can read; they are taught by it at school, hear it in the factory and the canteen, grow up with it as an accepted and essential part of everyday life. Some of them join the minorities who look to it for culture, for inspiration,

for information beyond what they can gather from the quizzes and the news; many acquire tastes that they would not otherwise have had, and take up all sorts of new activities from pig-breeding to making music, from writing poetry to going to football matches or horse shows. Many acquire the habit of hearing it without listening to it, and feel vaguely uneasy when they find themselves bereft of the familiar background of noise.

This was the place of radio by the middle of the century in the countries that regarded themselves as the most highly civilised, and the differences between them were largely in the composition of what they heard, the proportion of ingredients from sheer entertainment at one end of the scale to Government propaganda at the other.

So far the chief threat to this dependence on radio has come from physical shortages, such as the lack of everything from microphones to receivers that faced Europe after the war. Now there is the threat of television, which seems bound to claim first place among the resources of the home. Its progress will be slow compared with the progress that sound radio made in its early days, but it is inexorable, and what people have sought from the invisible performers on the other side of the loudspeaker they will increasingly seek from the television screen. Radio will come to mean television; sight and sound will come together again, as they have done in the films. The modern citizen will still depend for much of his information and entertainment on invisible, inaudible vibrations of the ether, set in motion by a transmitting station that somebody else controls, but when they have passed through his receiving set, their appeal will be to eye and ear together rather than to the ear alone.

It is open to controversy whether the growth of the radio habit has been a benefit or an evil to mankind; whether the greater possibilities of obtaining information and entertainment have offset the encouragement of passivity, suggestibility, herd thinking, and dependence on second-hand experience, to which the present-day organisation of society is already increasingly prone. Equally, it is open to controversy whether the change from sound radio to television will be a social evil or a social good. Its critics see it as the

final stage in the process by which the individual has become more and more unwilling and unable to do anything for himself, even to provide his own recreations for his leisure hours. Its advocates see it as a way of enriching and diversifying lives that have hitherto been secluded from the world. The one conclusion that seems to be incontrovertible is that whether it is a good thing or a bad thing to sit at home and allow other people to occupy your mind, it is a more natural process to receive your impressions through two senses than through one.

Such criticisms of the effects of radio and television do not apply to the sort of audience that has been envisaged as the chief field for sound broadcasting in the next fifty years. Primitive communities who have not yet passed through the stage of cheap books, cheap newspapers, and ubiquitous organised entertainment are in no danger of losing their initiative because the radio comes into their lives. In the vast territories where life is hard and difficult, where communications are scanty and knowledge travels painfully as it did in Europe a thousand years ago, the voice from the loudspeaker can be an unmeasured boon, whether it brings instructions on care of health and the tilling of the soil, news from far-off parts of the world, or merely the songs of another village five hundred miles away.

At least, so we can still hope. Many of the first bright surmises about the influence of broadcasting faded when broadcasting found itself in a warring world, and we have learnt that it is easier to poison the air than to poison the soil. But if radio has anywhere a future in which the possibilities of good outweigh the possibilities of evil, it is to be found amongst the peoples who lag farthest behind the march of progress, and are in no danger of being demoralised by yet another amenity in their homes.

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