Radio Production

Robert McLeish

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Third Edition

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A manual for broadcasters
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Preface to the third edition

The world of radio — indeed, the world itself — has changed considerably since the second edition of this book in 1988. The purpose, shape and style of programmes is affected as much by the politics and economics of broadcasting as by its technologies. Increasing deregulation and greater competition, within much tighter financial constraints and accountabilities, has led to demands for more cost-effective programming created by multi-skilled producers capable of writing, presenting, interviewing, operating equipment, and managing the budget. Where radio and television are co-sited these skills have been extended to genuine bi-media working so that radio reporters are able to do a piece to camera and edit the pictures for transmission.

Digital technology has made broadcasting equipment smaller, lighter and faster. It has revolutionised music recording and editing of all kinds. Compact discs have superseded pressed vinyl in many stations and computers are programmed to tell us what to play. Broadcasting itself has become digital; high quality bit-streams coming directly from satellites into the home or via cable are capable of covering huge areas at a time.

The institutions of broadcasting change. In Britain the Radio Authority has come into being, exercising jurisdiction over the independent sector of the industry including national, local, cable and satellite services, as well as hospital and campus radio. There are new watchdogs in the Broadcasting Standards Council and the Broadcasting Complaints Commission. The once self-contained BBC now contracts out some of its programming to independent producers. The broadcasting business continues to change; worldwide, new freedoms, and in some cases new limitations, affect the broadcaster–listener relationship.

Sadly though, uprising and war is never far away. From Tiananmen Square to Somalia, from Kuwait to Bosnia, radio news is increasingly called upon to report in conditions of ambiguity and confusion. There are fewer clear 'front lines'. There are often huge questions surrounding the motives, even the identity, of the opposing sides. The situation of the reporter as well as the means of reporting is undergoing a sustained change.

These developments in broadcasting's structure and technology, the need for a more detailed evaluation of programmes, and the pressures on

radio journalism, are reflected in this new edition as an integral part of the production process. Yet the essential core of the business remains the same: how can I best tell this story — fact or fiction — in such a way that my listener will fully understand? And what is my own motive for wanting to do that? Is it to persuade, to propagandise? To entertain, to inform? The motive for communication is crucial and I have sought to encourage the producer to seek these reasons out for himself or herself. Incidentally I have mostly used the 'he' form rather than 'he or she' but both genders are included in the meaning if not always in the construction.

The book still needs a soundtrack — one day perhaps it will get one in the form of a digital disk. Chapter by chapter we shall want to imagine things in their radio state — to hear the smile in the voice of the presenter, or the correct level of crowd noise behind commentary. We shall need to judge the length of pause after a formal introduction, and get the inflection just right in a spoken sentence. By listening more carefully we shall not only pick up points of programme-making technique but we will come to know the difference between adequacy and excellence — and the reason for each.

More broadcasters than ever have contributed to these pages. My own experience comes mostly from the BBC's networked services and local stations — and I remain indebted to the hundreds of managers and producers included in that wealth of talent. I have also drawn on my visits to stations from Australia to the United States. Stations like Radio Lumière in Haiti, DZXL News and Living Rock in the Philippines, AWR Russia, FEBA Radio in the Seychelles. In the UK, Three Counties Radio and Classic FM. I am particularly grateful to the ILR stations which responded to my questionnaire on operational data. Through all of this there appears to be an exciting widening diversity of practice — where once there was one way of doing something, there are now four or five.

In personal terms I must express my gratitude to Frank Gillard for his encouragement and advice with the original draft as well as all those whose comments have led to this new edition. Dave Wilkinson produced ideas for many of the illustrations, Jeff Link of BBC Training has been invaluable as always in the updating process, and Chris Rees has consistently forced me to answer questions about the moralities as well as the technicalities of radio. My colleagues on the international Cambridge Radio Course — Phill Butler, Walt Winters and Ross James — speak words of remembered wisdom, as so often do the students. Dr Graham Mytton of the BBC's World Service ran a helpfully critical eye over the section on audience evaluation — and I must thank too the copyright owners whose work is attributed in these pages.

Revising and updating a book is far more difficult than writing one from scratch. Producers will know that the challenge of a blank sheet is more exciting, and often easier to deal with, than altering an existing page of words. I must therefore finally thank my wife for working with me through this process. Her clear, not to say blunt, advice has been what all producers need in their times of doubt — the voice of the listener.

Robert McLeish

Characteristics of the medium

From its first tentative experiments and the early days of wireless, radio has expanded into an almost universal medium of communication. It leaps around the word on short waves linking the continents in a fraction of a second. It jumps to high satellites to put its footprint across a quarter of the globe. It brings that world to those who cannot read and helps maintain a contact for those who cannot see.

It is used by armies in war and by amateurs for fun. It controls the air lanes and directs the taxi. It is the enabler of business and commerce, the essential for fire brigades and police, the commonplace of the mobile phone. Broadcasters pour out thousands of words every minute in an effort to inform, educate and entertain, propagandise and persuade; music fills the air. Community radio makes broadcasters out of listeners and the Citizen Band gives transmitter power to the individual.

Whatever else can be said of the medium, it is plentiful. It has lost the sense of awe which attended its early years, becoming instead a very ordinary and 'unspecial' method of communication. To use it well we may have to adapt the formal 'written' language which we learnt at school and rediscover our oral traditions. How the world might have been different had Guglielmo Marconi lived before Johann Gutenberg.

To succeed in a highly competitive marketplace where television, lifestyle magazines, newspapers, cinema, theatre, videos and CDs jostle for the attention of a media-conscious public the radio producer must first understand the strengths and weaknesses of his medium.

Radio makes pictures

It is a blind medium but one which can stimulate the imagination so that as soon as a voice comes out of the loudspeaker, the listener attempts to visualise what he hears and to create in the mind's eye the owner of the voice. What pictures are created when the voice carries an emotional content — an interview with wives gathering at a pit head after news of a

mining accident — the halting joy of relatives on opposite sides of the world linked by a DJ programme.

Unlike television where the pictures are limited by the size of the screen, radio's pictures are any size you care to make them. For the writer of radio drama it is easy to involve us in a battle between goblins and giants, or to have our spaceship land on a strange and distant planet. Created by appropriate sound effects and supported by the right music virtually any situation can be brought to us. As the schoolboy said when asked about television drama, 'I prefer radio, the scenery is so much better'.

But is it more accurate? Naturally, a visual medium has an advantage when demonstrating a procedure or technique, and a simple graph is worth many words of explanation. In reporting an event there is much to be said for seeing film of say a public demonstration rather than leaving it to our imagination. Both sound and vision are liable to the distortions of selectivity, and in news reporting it is up to the integrity of the individual on the spot to produce as fair, honest and factual an account as possible. In the case of radio, its great strength of appealing directly to the imagination must not become the weakness of allowing individual interpretation of a factual event, let alone the deliberate exaggeration of that event by the broadcaster. The radio writer and commentator chooses his words so that they create appropriate pictures in the listener's mind, and by so doing he makes his subject understood and its occasion memorable.

Radio speaks to millions

Radio is one of the mass media. The very term broadcasting indicates a wide scattering of the output covering every home, village, town, city, and country within the range of the transmitter. Its *potential* for communication therefore is very great but the *actual* effect may be quite small. The difference between potential and actual will depend on matters to which this book is dedicated — programme relevance, excellence and creativity, operational competence, technical reliability, and consistency of the received signal. It will also be affected by the size and strength of the competition in its many forms. Broadcasters sometimes forget that people do have other things to do — life is not all about listening to radio and watching television.

Audience researchers talk about *share* and *reach*. Audience share is the amount of time spent listening to a particular station, expressed as a percentage of the total radio listening in its area. Audience reach is the number of people who *do* listen to something from the station over the period of a day or week, expressed as a percentage of the total population who *could* listen. Both figures are significant. A station in a highly competitive environment may have quite a small share of the total listening, but if it manages to build a substantial following to even one of its programmes, let alone the aggregate of several minorities, it will enjoy a large reach. The mass media should always be interested in reach.

Radio speaks to the individual

Unlike television where the viewer is observing something coming out of a box 'over there', the sights and sounds of radio are created within us, and can have greater impact and involvement. Radio on headphones happens literally inside your head. Television is in general watched by small groups of people and the reaction to a programme is often affected by the reaction between individuals. Radio is much more a personal thing, coming direct to the listener. There are obvious exceptions: in the rural areas of less developed countries a whole village will gather round the set. However even here, the transistor revolution has made a radio an everyday personal item.

The broadcaster should not abuse this directness of the medium by regarding the microphone as an input to a public address system, but rather a means of talking directly to the individual listener. If the programme is transmitted 'live', then the broadcaster has the further advantage of an immediate link with the individual and with thousands like him. The recorded programme introduces a shift in time and, like a newspaper, is capable of being out of date. The *medium* however is one to one, and 'now'.

The speed of radio

Technically uncumbersome, the medium is enormously flexible and is often at its best in the totally immediate 'live' situation. No processing of film, no waiting for the presses. A report from a correspondent overseas, a listener talking on the phone, the radio car in the suburbs, a sports result from the local stadium, a concert from the capital, are all examples of the immediacy of radio. This ability to move about geographically generates its own excitement. This facility of course is long since regarded as a commonplace, both for television and radio. Pictures and sounds are bounced around the world, bringing any event anywhere to our immediate notice. Radio speeds up the dissemination of information so that everyone — the leaders and the led — knows of the same news event, the same political idea, declaration or threat. If knowledge is power, radio gives power to us all whether we exercise authority or not.

Radio has no boundaries

Books and magazines can be stopped at national frontiers but radio is no respecter of territorial limits. Its signals clear mountain barriers and cross ocean deeps. Radio can bring together those separated by geography or nationality — it can help to close other distances of culture, learning or status. The programmes of political propagandists or of Christian mission-aries can be sent in one country and heard in another. Sometimes met with hostile jamming, sometimes welcomed as a life-sustaining truth, program-mes have a liberty independent of lines on a map. Obeying the rules of transmitter power, sunspot activity, channel interference and receiver

sensitivity, radio can bring freedom to the oppressed and enlightenment to those in darkness.

The simplicity of radio

The basic unit comprises one person with a tape recorder rather than a crew with camera, lights and sound recorder. This makes it easier for the non-professional to take part, thereby creating a greater possibility for public access to the medium. In any case, sound is better understood than vision, with cassette players and stereo equipment found in most schools and homes. It is also probably true that whereas with television or print any loss of technical standards becomes immediately obvious and unaccept-able, with radio there is a recognisable margin between the excellent and the adequate. This is not to say that one should not continually strive for the highest possible radio standards.

For the broadcaster, radio's comparative simplicity means a flexibility in its scheduling. Items within programmes, or even whole programmes, can be dropped to be replaced at short notice by something more urgent.

Radio is cheap

Relative to the other media, both its capital cost and its running expenses are small. As broadcasters round the world have discovered, the main difficulty in setting up a station is often not financial but lies in obtaining a transmission frequency. Such frequencies are safeguarded by governments as signatories to international agreements and are not easily assigned.

Radio stations are financed in various ways including public licence, commercial advertising, government grant, private capital, public subscrip-tion, or any of these methods in combination.

Because the medium is cheap to use and can attract a substantial audience the cost per hour — or more significantly the cost per listener hour — is low. Such figures have to be provided for advertisers, sponsors, supporters and accountants. But it is also important for the producer as well as the executive manager to know what a programme costs relative to its audience. This is not to say that cost-effectiveness is the only measure of worth — it most certainly is not — but it is one of the factors which inform scheduling decisions.

The relatively low cost once again means that the medium is ideal for use by the non-professional. Because time is not so expensive or so rare, radio stations are encouraged to take a few gambles in programming. Radio is a commodity which cannot be hoarded, neither is it so special that it cannot be used by anyone with something interesting to say. Through all sorts of methods of listener participation, the medium is capable of offering a role as a two-way communicator, particularly in the area of community broadcasting.

Radio is also cheap for the listener. The development of printed circuit boards and solid state technology allows sets to be mass produced at a cost which enables their virtual total distribution. More affordable than a set of

books, good radio brings its own 'library' which is of especial value to those who cannot read — the illiterate, the blind, the person who for whatever reason is deprived of literature in his own language. The broadcaster should never forget that while he may regard his own installations (studios, transmitters, etc.) as expensive, the greater part of the total capital cost of any broadcasting system is borne directly by the public in buying receivers.

The transient nature of radio

It is a very ephemeral medium and if the listener is not in time for the news bulletin, it is gone and he has to wait for the next. Unlike the newspaper which he can put down, come back to or pass round, broadcasting imposes a strict discipline of having to be there at the right time. The radio producer must recognise that while he may store his programme in tape archives, his work is only short-lived for the listener. This is not to say that it may not be memorable, but the memory is fallible and without a written record it is easy to be misquoted or taken out of context. For this reason it is often advisable for the broadcaster to have some form of audio or written log as a check on what was said, and by whom. In some cases this may be a statutory requirement of a radio station as part of its public accountability. Where this is not so, lawyers have been known to argue that it is better to have no record of what was said — for example in a public phone-in. Practice would suggest however that the keeping of a tape of the transmission is a useful safeguard against allegations of malpractice, particularly from complainants who missed the broadcast and who heard about it at second-hand.

The transitory nature of the medium also means that the listener must not only hear the programme at the time of its broadcast, but must also udnerstand it then. The impact and intelligibility of the spoken word should occur on hearing it — there is seldom a second chance. The producer must therefore strive for the utmost logic and order in the presentation of his ideas, and the use of clearly understood language.

Radio as background

Radio allows a more tenuous link with its user than that insisted upon by television or print. The medium is less demanding in that it permits us to do other things at the same time, programmes become an accompaniment to something else. We read with music on, eat to a news magazine, or hang wallpaper while listening to a play. Radio suffers from its own generosity — it is easily interruptable. Television is more complete, taking our whole attention, 'spoonfeeding' without demanding effort or response, and tending to be compulsive at a far lower level of interest than radio requires of its audience.

Because radio is so often used as background, it frequently results in a low level of commitment on the part of the listener. If the broadcaster really wants the listener to *do* something — to act — then radio should be used in conjunction with another medium. Educational broadcasting for

example needs printed fact-sheets, booklet material, and tutor hot-lines involving schools or universities. Radio evangelism has to be linked with follow-up correspondence and involve local churches or on-the-ground missionaries. Advertising requires appropriate recall and point of sale material. While radio can claim some spectacular individual action results, in general producers have to work very hard to retain their part-share of the listener's attention.

Radio is selective

There is a different kind of responsibility on the broadcaster from that of the newspaper editor in that the radio producer selects exactly what is to be received by his consumer. In print, a large number of news stories, articles and other features are set out across several pages. Each one is headlined or identified in some way to make for easy selection. The reader scans the pages choosing to read those items which interest him — he is using his own judgement. With radio this is not possible. The selection process takes place in the studio and the listener is presented with a single thread of material, it is a linear medium. Choice for the listener exists only in the mental switching-off which occurs during an item which fails to maintain his interest, or when he tunes to another station. In this respect a channel of radio or television is rather more autocratic than a newspaper.

Radio lacks space

A newspaper may carry 30 or 40 columns of news copy — a 10 minute radio bulletin is equivalent to a mere column and a half. Again, the selection and shaping of the spoken material has to be tighter and more logical. Papers can devote large amounts of space to advertisements, particularly to the 'small ads', and personal announcements such as births, deaths and marriages. This is ideal scanning material but it is not possible to provide such detailed coverage in a radio programme.

A newspaper is able to give an important item additional impact simply by using more space. The big story is run using large headlines — the picture is blown up and splashed across the front page. The equivalent in a radio bulletin is to lead with the story and to illustrate it with a voice report or interview. There is a tendency for everything in the broadcast media to come out of the set the same size. An item may be run longer but this is not necessarily the same as 'bigger'. Coverage described as 'in depth' may only be 'at length'. There is limited scope for indicating the differing importance of an economic crisis, a religious item, a murder, the arrival of a pop group, the market prices and the weather forecast. It could be argued that the press is more likely to use this ability to emphasise certain stories to impose its own value judgements on the consumer. This naturally depends on the policy of the individual newspaper editor. The radio producer is denied the same freedom of manoeuvre and this can lead to the feeling that all subjects are treated in the same way, a criticism of bland superficiality not infrequently heard. On the other hand this characteristic of radio

perhaps restores the balance of democracy, imposing less on the listener and allowing him to make up his own mind as to what is important.

The personality of radio

A great advantage of an aural medium over print lies in the sound of the human voice — the warmth, the compassion, the anger, the pain and the laughter. A voice is capable of conveying much more than reported speech. It has inflection and accent, hesitation and pause, a variety of emphasis and speed. The information which a speaker imparts is to do with the style of presentation as much as the content of what is said. The vitality of radio depends on the diversity of voices which it uses and the extent to which it allows the colourful turn of phrase and the local idiom.

It is important that all kinds of voices are heard and not just those of professional broadcasters, power holders and articulate spokesmen. The technicalities of the medium must not deter people in all walks of life from expressing themselves with a naturalness and sincerity which reflects their true personalities. Here radio, uncluttered by the pictures which accompany the talk of television, is capable of great sensitivity, and of engendering great trust.

Radio teaches

Radio works particularly well in the world of ideas. As a medium of education it excels with concepts as well as facts. From dramatically illustrating an event in history, to pursuing current political thought it has a capability with any subject that can be discussed, taking the learner at a predetermined pace through a given body of knowledge. With musical appreciation and language teaching it is totally at home. Of course it lacks television's ability to demonstrate and show, it does not have charts and graphs — as a medium it is more literate than numerate — but backed up by a teacher's notes even these limitations can be overcome and a booklet helps to give memory to the understanding. Add the correspondence element and you have the two-way questioning process which is at the heart of all personal learning.

From Australia's 'School of the Air' to the UK's 'Open University', radio effectively reaches out to meet the formal and informal learning needs of people who want to grow.

Radio has music

Here are the Beethoven symphonies, the top 40, tunes of our childhood, jazz, opera, rock and favourite shows. From the best on CD to a quite passable local church organist, radio provides the pleasantness of an unobtrusive background or the focus of our total absorption. It relaxes and stimulates inducing pleasure, nostalgia, excitement, or curiosity. The range of music is wider than the coverage of the most comprehensive record

library and can therefore give the listener a chance to discover new or unfamiliar forms of music.

Radio can surprise

Unlike the record we play or the book we pick up at home, selected to match our taste and feelings of the moment, music and speech on radio is chosen for us and may, if we let it, change our mood and take us out of ourselves. We can be presented with something new and enjoy a chance encounter with the unexpected. Radio should surprise. Broadcasters are tempted to think in terms of format radio where the content lies precisely between narrowly defined limits. This gives consistency and enables the listener to hear what he expects to hear, which is probably why he switched on in the first place. But radio can also provide the opportunity for innovation and experiment — a risk which producers must take if the medium is to surprise us in a way which is both creative and stimulating.

Radio can suffer from interference

While a newspaper or magazine is normally received in exactly the form in which it was published, radio has no such automatic guarantee. Short-wave transmission is obviously subject to deep fading and co-channel inter- ference. Medium wave too, especially at night, may suffer from the intrusion of other stations. The quality of the sound received is likely to be very different in its dynamic or frequency range from the carefully produced balance heard in the studio. Even FM which can be temperamental is liable to a range of distortions, from the flutter caused by a passing aeroplane to ignition interference from cars and other electrical equipment.

Reception in a moving vehicle can also be difficult as the signal strength varies. Digital transmission and direct broadcasting by satellite overcome most of these problems — at a cost — but it is as well for the producer to remember that what leaves the studio is not necessarily what is heard in the possibly noisy environment of the listener. Difficult reception conditions require compelling programmes in order to retain a faithful audience.

Given the basic characteristics of the medium, how is radio to be used? What are its possibilities? Details vary across the world but broadly it can be said to function in two main ways — it serves the individual, and operates on behalf of society as a whole.

Radio for the individual

- It diverts people from their problems and anxieties, providing relaxation and entertainment. It reduces feelings of loneliness creating a sense of companionship.
- It helps to solve problems by acting as a source of information and advice. It can do this either through direct personal access to the programme or in a general way by indicating sources of further help.

- It enlarges personal 'experience', stimulating interest in previously unknown topics, events, or people. It promotes creativity and can point towards new personal activity. It meets individual needs for formal and informal education.
- It contributes to self-knowledge and awareness, offering security and support. It enables us to see ourselves in relation to others, and links individuals with leaders and 'experts'.
- It guides social behaviour, setting standards and offering role models with which to identify.
- It aids personal contacts by providing topics of conversation through shared experience, 'did you hear the programme last night?'
- It enables individuals to exercise choice, to make decisions and act as citizens, especially in a democracy through the unbiased dissemination of news and information.

Radio for society

- It acts as a multiplier of change, speeding up the process of informing a population.
- It provides information about jobs, goods and services and so helps to shape markets by providing incentives for earning and spending.
- It acts as a watch-dog on power holders, providing contact between them and the public.
- It helps to develop agreed objectives and political choice, it enables social and political debate, exposing issues and options for action.
- It contributes to the artistic and intellectual culture providing opportunities for new and established performers of all kinds.
- It disseminates ideas. These may be radical, leading to new beliefs and values, so promoting diversity and change — or they may reinforce traditional values so helping to maintain social order through the status quo.
- It enables individuals and groups to speak to each other, developing an awareness of a common membership of society.
- It mobilises public and private resources for personal or community ends, particularly in an emergency.

Some of these functions are in mutual conflict, some are applicable more to a local rather than a national community, and some apply fully only in conditions of crisis. However the programme producer should be clear about what it is he or she is trying to achieve. Lack of clarity about a programme's purpose leads to a fuzzy, ineffective end product — it also leads to arguments in the studio over what should and should not be included. We shall return to the point, but it is not enough for the producer to want to make an excellent programme — he might as well want merely to modulate the transmitter. The question is why? What is to be its effect — on the listener that is? Before looking at some possible personal motivations for making programmes at all, we should examine the meaning of the much used phrase — broadcasting as a public service.

The Public Servant

Public Service broadcasting is sometimes regarded as an alternative to commercial radio. The terms are not mutually exclusive however; it is possible to run commercial radio as a public service, especially in near-monopoly conditions or where there is little competition for the available advertising. It is a matter of where the radio managers see their first loyalty. To put this in perspective here are the main attributes of service, using the analogy of the perfect domestic servant. He or she:

- is loyal to the employer and does not try to serve other interests or use his position of privilege for his own ends;
- understands the nuances and foibles of the family he serves, and in accepting them is himself fully accepted;
- is available when needed, and for whoever in the family requires help, the young and the old as well as the head of the house;
- is actually useful, meeting stated requirements and anticipating needs and problems;
- is well-informed, offers good advice and is able to relate unpalatable truth;
- is hard-working, technically expert and efficient. Does not waste resources but is honest and accountable;
- is witty and companionable, courteous and punctual;
- is affordable.

Each of these characteristics of service has its equivalent in broadcasting, but there is an immediate dilemma — such perfection may be too expensive. As in everything else we get the level of service we pay for and it may not be possible to afford a 24 hours a day, seven days a week output catering for all needs. Live concerts, stereo drama and world news are expensive commodities and radio managers need to make judgements about what can be provided at an acceptable price. However the hallmarks of public service broadcasting can be drawn from our ideas of what a servant is and does. Such a station is certainly not arrogant, setting itself up as a power in its own right. It is responsive to need, making itself available for everyone — not simply the rich and powerful; indeed its universality makes a point of including the disadvantaged. It is wide-ranging in its appeal, competent and reliable, entertaining and informative. Its programmes for minorities are not to be hidden away in the small hours but are part of the diversity available at prime time. It is popular in that over a period of time it reaches a significant proportion of the population. It does not 'import' its programmes but is culturally in tune with its audience, producing most of the output itself. It provides useful and necessary things — things of the quality asked for, but also unexpected pleasures. Above all, it is editorially free from interference by political, commercial or other interests, serving only one master to whom it remains essentially accountable — its public.

The concept works well for a service that is adequately paid for by its listeners — by public licence or by subscription. But if this is not the case, can a Public Service station do deals with third parties to raise additional

revenue? Can a government, commercial or religious station be run as a genuine public service? Yes it can, but the difficulties are obvious.

First, a publicly funded service which makes arrangements with commercial interests is putting its first loyalty, its editorial integrity, at risk. Any producer making a programme as a co-production, or acting under special rules, must say so — not as part of some pay-off, but to meet the requirements of his public service accountability.

Second, there is a strong tendency for 'piper payers' to want to call the tune. A Government does not like to hear criticism of its policy on a station which it regards as its own. Authority in general does not wish to be challenged — as from time to time political interviewers must. Ministries and Departments are highly sensitive to items which 'in the public interest' they would rather not have broadcast. Officials will avoid or delay 'bad news', however true. Similarly, a commercial station often needs to maximise its audience in order to justify the rates, so pushing sectional interests to one side to satisfy the advertisers' desire for mass popularity. A Christian fund-raising constituency may press for the gospel *it* wants to hear, forgetting the need to serve people in a multiplicity of ways. The need to survive in a harsh political climate, or in a fiercely competitive one, exacerbates these pressures. The fact is that a station dedicated to public service but controlled or funded by a third party having its own interests to consider is almost certain to weaken in its commitment.

'Outside' pressures

No radio station — and therefore no producer — exists in a vacuum. It has a context of connections, each one useful and necessary but also representing a source of potential pressure which can inhibit a single-minded commitment to the ideal of public service. Figure 1.1 illustrates some of these, each linked by two directional arrows. It is an important exercise for broadcasters to know in their own situation what these arrows represent. What are the expectations and transactions in each direction? To what extent are they fulfilled? For the individual producer the compromises and strictures of his own management are difficult enough; additional obligations to interests outside broadcasting can be extremely tiresome. Nevertheless, as a background to programme-making it is necessary to be aware of everyone else who has a stake in the process.

Personal motivations

So what is our purpose in being in radio? Is it because it has some appearance of power — able to sway public opinion and make people do things? If so, it has to be said that this is very rare and most unlikely to be achieved by this medium alone. Is it to be the protagonist mouthpiece of someone else — or are there reasons which meet my own needs?

It is as well for the producer to understand what some of these personal motivations are:
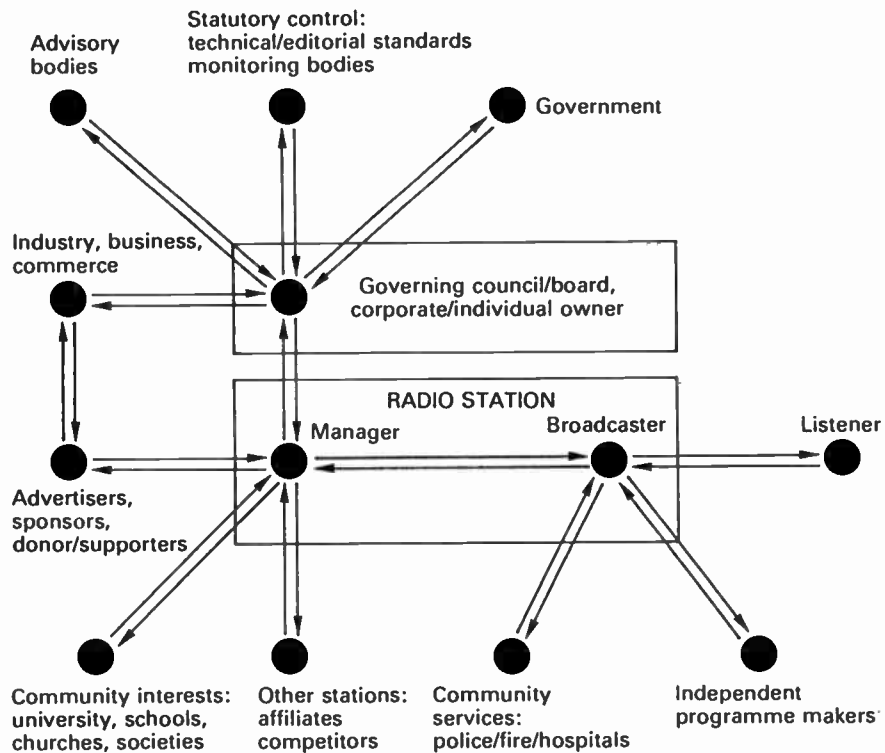
Fig. 1.1. The context of a radio station — typical links and pressure points.

- to inform people — the role of the media journalist;
- to educate — enabling people to acquire knowledge or skill;
- to entertain — making people laugh, relax or pass the time agreeably;
- to reassure — providing supportive companionship;
- to shock — the sensation station;
- to make money — a means of earning a living;
- to enjoy oneself — a means of artistic expression;
- to create change — crusading for a new society;
- to preserve the status quo — returning to established values;
- to convert to one's own belief — proselytising a faith;
- to present options — allowing the listener to exercise choice.

    Each programme-maker must decide for himself why he is in broadcasting. It may be in order to earn a living, or because he or she has something to say. It may be out of a genuine desire to serve one's fellow men and women — to provide options for action by opening up possibilities, making them better informed.
    In the end, radio is about a relationship. Much more than on television, the presenter, DJ or newsreader establishes a sense of rapport with the

listener. The successful station is more than the sum of its programmes, it understands the nature of this friendship and its role as both leader and servant.

2
Operational techniques

Books on the technical and operational aspects of broadcasting are listed under Further Reading and the subject is not dealt with in detail here. However to omit it altogether might appear to indicate a separation of programme production from its functional base. This can never be so. The listener is after all dependent on sound alone and he must be able to hear clearly and accurately. Any sounds which are distorted, confused or poorly assembled are tiring to the listener and will not retain his interest.

The quality of the end product depends directly on the engineering and operational standards. It scarcely matters how good the ideas are, how brilliant the production, how polished the presentation, because all will founder on poor operational technique. Whether the broadcaster is using other operational staff, or is in the 'self-operational' mode, a basic familiarity with the studio equipment is essential — it must be 'second nature'.

Taking the analogy of driving a car, the good driver is not preoccupied with how to change gear, or with which foot pedal does what — he is more concerned with road sense, i.e. the position of his car on the road in relation to other vehicles. So it is with the broadcaster. His use of the tools of the trade — microphones, tape recorders, the studio mixer, the radio car, CD players, computer — these must all be at the command of the producer. He can then concentrate on what broadcasting is really about, the communication of ideas in music and speech.

Good technique comes first, and having been mastered, it should not then be allowed to obtrude into the programme. The technicalities of broadcasting — editing, fading, control of levels, sound quality and so on, should be so good that they do not show. By not being obvious they allow the programme content to come through.

In common with other performing arts such as film, theatre and television, the hallmark of the good communicator is that his means are not always apparent. Basic craft skills are seldom discernible except to the professional who recognises in their unobtrusiveness a mastery of the medium.

There are programme producers who declare themselves uninterested in technical things, they will leave the jackfield or mixer operation to others

so that they can concentrate on 'higher' things. Unfortunately if you do not know what is technically possible, then you cannot fully realise the potential of the medium. Without knowing the limitations either, there can be no attempt to overcome them, you simply suffer the frustrations of always having to depend on someone else who does understand.

The studio desk (mixer, control panel, or control board)

This is essentially a device for mixing together the various programme sources to form the broadcast output. It contains three types of circuit function:

(1) *Programme circuits:* a series of channels, their individual volume levels controlled by separate slider or rotary faders.
(2) *Monitoring circuits:* a visual (meter) and aural (loudspeaker or headphone) means of measuring and hearing the individual sources as well as the final mixed output.
(3) *Control circuits:* provision of communication with studios or outside broadcasts by means of 'talkback' or telephone line.
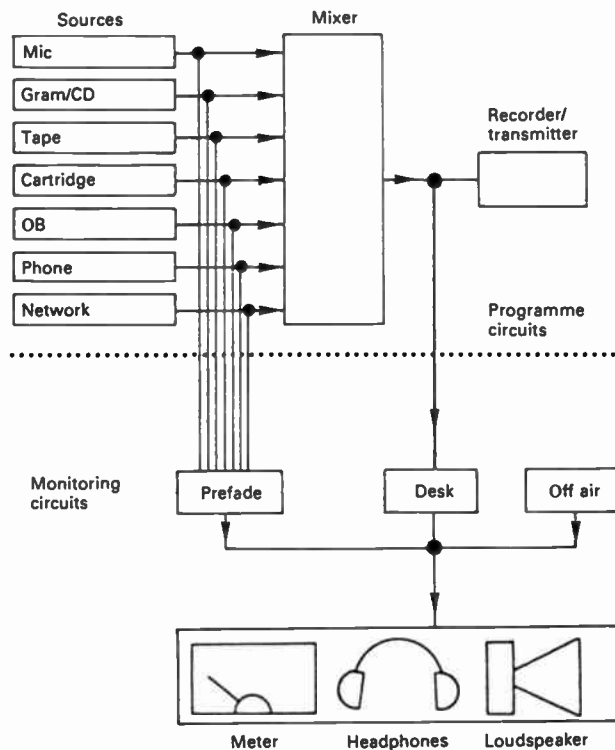
Fig. 2.1. Studio control panel or board: typical programme and monitoring circuits.
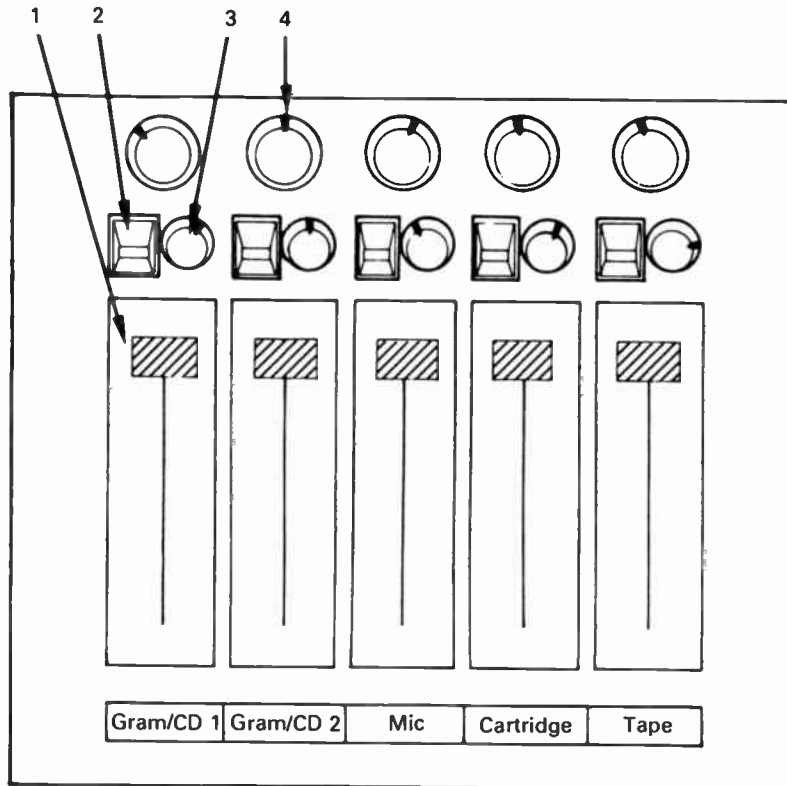
Fig. 2.2. Simple 5-channel mixing unit for self-operation. 1. Channel fader. 2. Prefade key. 3. Prefade volume control. 4. Pan-pot for placing the source in a 'stereo' picture. Practice varies: some desks fade up by moving the fader towards the operator, but many use the near position as closed. Moving the fader off its backstop will switch on the red 'on-air' light, mute the loudspeaker, or operate 'remote start' equipment.

In learning to operate the mixer panel there is little substitute for first understanding the principles of the individual equipment, then practising until its operation becomes second nature. The following are some operational points for the beginner.

The operator must be comfortable. The correct chair height and easy access to all necessary equipment is important for fluent operation.

The first function to be considered is the *monitoring* of the programme. Nothing on a panel, which might possibly be on the air, should be touched until the question has been answered — What am I listening to? The loudspeaker is normally required to carry the direct output of the desk, as for example in the case of a rehearsal or recording. In transmission conditions it will normally take its programme 'off-air', although it may not be feasible to listen via a receiver when transmitting on a short-wave service. As far as is possible, the programme should be monitored as it will be heard by the listener, not simply as it leaves the studio.

The volume of the monitoring loudspeaker should be adjusted to a comfortable level and then left alone. It is impossible to make subjective assessments of relative loudness within the programme if the volume of the loudspeaker is constantly being changed. If the loudspeaker is required to be turned down, for instance, so that a conversation can take place on the telephone, it should be done with a single key operation so that the original volume is easily restored afterwards.

In *mixing* sources together — mics, disc players, tape, cartridge, etc. — the general rule is to bring the 'new' fader in before taking the 'old' one out. This avoids the loss of atmosphere between the various sources which will occur when all the faders are closed. A slow mix from one sound source to another is the 'crossfade'.

In assessing the relative *sound* levels of one programme source against another, either in a mix, or in juxtaposition, the most important devices are
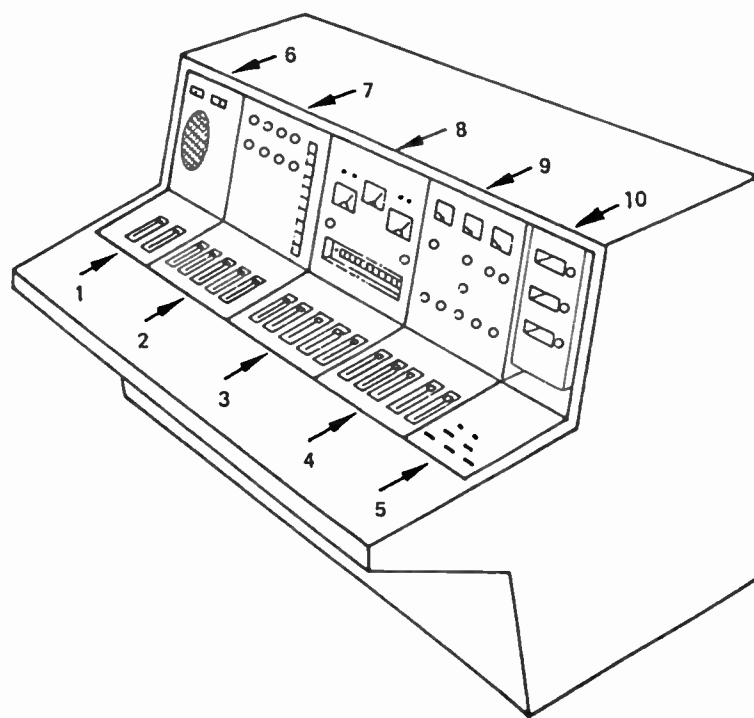
Fig 2.3. Studio control console based on BBC Local Radio MK3 desk. 1. Gram/CD faders. 2. Outside source faders. 3. Microphone faders controlling two microphones in the adjacent studio plus two associated with the desk for 'self-op' work. Also 'echo return' fader. 4. Two tape and three cartridge channel faders. 5. Talkback and radio car calling keys. 6. Intercom loudspeaker. 7. Outside source selection. 8. Output and prefade monitoring meters. Transmission selector. 9. Loudspeaker and headphone monitoring controls. Voice-over and limiter keys. Tape recorder input selection and remote start facilities. 10. Three-stack cartridge machine. (Courtesy BBC Engineering Information Department.)

the operator's own ears. The question of how loud speech should be against music depends on a variety of factors, including the nature of the programme and the probable listening conditions of the audience, as well as the type of music and the voice characteristics of the speech. There will certainly be a maximum level which can be sent to the line feeding the transmitter, and this represents the upper limit against which everything else is judged. Obviously for the orchestral concert, music needs to be louder than speech. However, the reverse is the case where the speech is of predominant importance or where the music is already dynamically compressed, as it is with pop records. This 'speech louder than music' characteristic is general for most sequence programmes or when the music is designed for background listening. It is particularly important when the listening conditions are likely to be noisy, for example at busy domestic times or in the car.

However it is also true, and is especially prevalent in a situation of fiercely competing transmitters, that maximum signal penetration is obtained by sacrificing dynamic subtlety. The sound levels of all sources are kept as high as possible and the transmitter is given a large dose of compression. It is as well for the producer to know about this otherwise he may spend a good deal of time obtaining a certain kind of effect or perfecting his fades only to have them overruled by an uncomprehending transmitter!

Probably the most important aspect of panel operation is *self-organisation*. It is essential to have a system for handling the physical items: that is the running order, scripts, cue sheets, CDs, records, tapes, etc. The material which has been used should be put out of the way, and new material brought forward as it is needed. The good operator is always one step ahead. He knows what he is going to do next, and having done it he sets up the next step.

Microphones

The good microphone converts acoustic energy into electrical energy very precisely. It reacts quickly to the sudden onset of sound — its transient response; it reacts equally to all levels of pitch — its frequency response; and it operates appropriately to sounds of different loudness — its sensitivity and dynamic response. It should be sensitive to the quietest sounds, yet not so delicate as to be easily broken or susceptible to vibration through its mounting. It should not generate noise of its own. Add to these factors desirable qualities in terms of size, weight, appearance, good handling, ease of use, reliability and low cost and microphone design becomes a highly specialised scientific art.

To the producer the most useful characteristic of a microphone is probably its directional property. It may be sensitive to sounds arriving from all directions — omni-directional — and such a microphone is useful for location recording and interviewing, audience reaction, and talkback purposes. Alternatively a directional mic is essential in most types of music balance, quiz shows, and where there is any form of public address system.
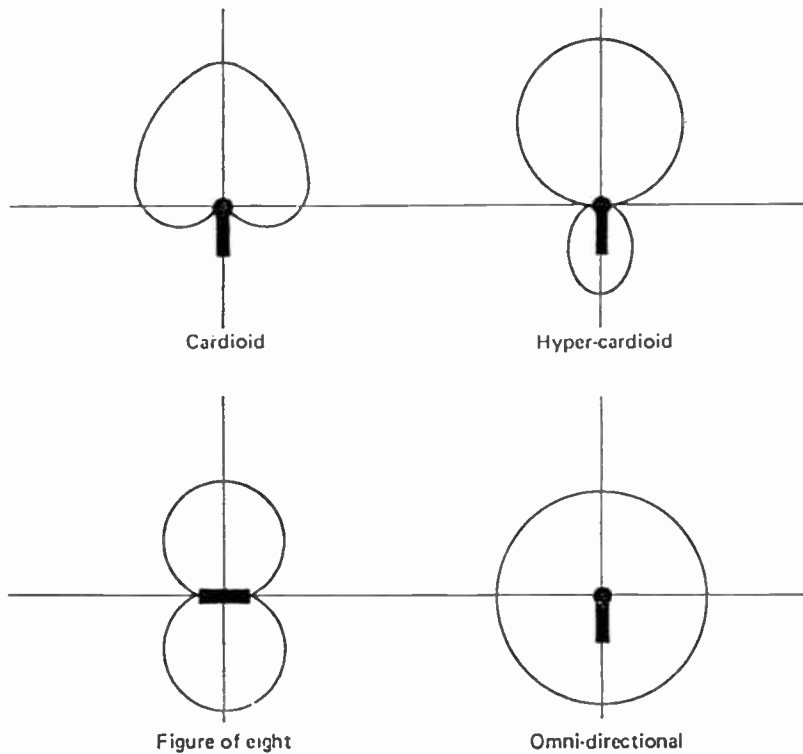
Fig. 2.4. Microphone polar diagrams or directivity patterns. A microphone is sensitive to sounds within its area of pick-up but in selecting one for a particular purpose consideration must also be given to how well it will reject unwanted sounds from another direction.

The choice of mic for a particular job requires some thought and although it may be possible to rely on the expertise of a technician, it will pay a producer to become familiar with the advantages and limitations of each type available. For example, some mics include on/off switches, or a switch to start a portable recorder. Some incorporate an optional bass-cut facility. Some require a mains unit or battery pack, or have a directivity pattern that can be changed while in use. Some operate better out of doors than others, some will make a presenter sound good when working close to it, others just distort. Producers should have views about whether a radio mic is necessary, when clip-on personal mics are appropriate, or if a highly-directional 'rifle' mic is required. The more one knows about the right use of the right equipment, the more the technicalities of programme-making become properly subservient to the editorial decisions.

Stereo

Simply stated, the stereo microphone gives two electrical outputs instead of one. These relate to sounds arriving from its left and its right. This

'positional information' is carried through the entire system via two transmission channels arriving at the stereo receiver to be heard on left and right loudspeakers. The left channel is generally referred to as the 'A' (red) output and the right channel is the 'B' (green) output. The meter monitoring the electrical levels has two needles — red and green. The signal sent to a mono transmitter — the 'M' signal — is the *combination* of both left and right, i.e. A + B, while the stereo information — the 'S' signal — consists of the *differences* between what is happening on the left and on the right, i.e. 'A − B'. Sometimes a second monitoring meter is available to look at the 'M' and 'S' signals. Again, it has two needles conventionally coloured respectively white and yellow. Vertical columns of LEDs are an alternative way of indicating the signal level. What does the producer need to know about all this?

First, that if a programme is to be carried by both monaural and stereo transmitters some thought has to be given to the question of compatibility. Material designed for stereo can sound pointless in mono, or even technically bad. For example, speech and music together can be distinguished in stereo purely because of their *positional* difference; in mono the same mix may be unacceptable since a difference in *level* is needed. The producer must make the programme for his primary audience — it is unlikely to be totally right for both. It is all too easy to fall in love with the stereo sound in the studio and forget the needs of the mono listener.

Second, that stereo microphones are fairly uncommon and it is not necessary to use one to generate a stereo signal. Two directional mono mics — or 'co-incident pair' — connected to a stereo mixer in such a way as to simulate left and right signals, for example through 'pan-pots', will give excellent results. This technique is useful in an interview or phone-in when the voices can be given some additional separation for the stereo listener.
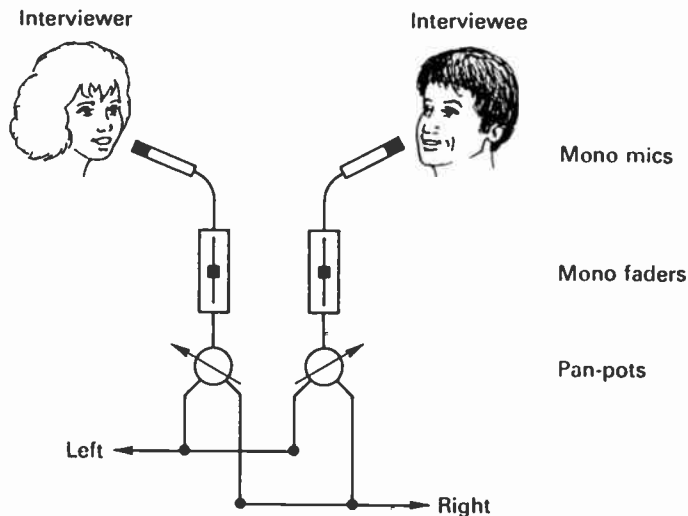
Fig. 2.5. Mono mics and faders create a stereo effect when their pan-pots are set to give a left and right placing to each sound source.

Third, that a pan-pot can give a mono source both size and position. For example a mono recording of a sound effect can be placed across part, or all, of the sound picture. Two mono recordings, for example of rain, can give a convincing stereo picture if one is panned to the left and the other to the right, with some overlap in the middle. When recording music special effects can be obtained by the deliberate mislocation of a particular source — hence the piano 10 metres wide at the front of the orchestra, or the trumpeter whose fanfare flies around the sound stage simply by the twirl of his pan-pot!

Fourth, that stereo working requires a higher standard of studio cleanliness and equipment maintenance. Dusty records for example are much more obvious on the air; every speck which affects one channel more than the other shows up as a noticeable stereo click.

And fifth, that working in stereo is a challenge to the producer's creativity. To establish distance and effect movement in something as simple as a station promo gives it impact. To play three records simultaneously — one left, one centre, and one right — as a 'guess the title' competition is intriguing. A spatial round-table discussion which really separates the speakers has a much more live feel than its mono counterpart. The drama — or commercial — in which voices can be made to appear from anywhere, dart around or 'float', literally adds another dimension. For the listener, a stereo station should do more than keep his stereo indicator light on.

For the really adventurous, there is binaural stereo. Using a dummy head, or a head-sized perspex disc in the 'front to back' plane, two omni-directional microphones are used where the ears would be. The action takes place around this device and the result recorded on two-track stereo in the normal way. For the listener on headphones, the dramatic effect is quite uncanny.
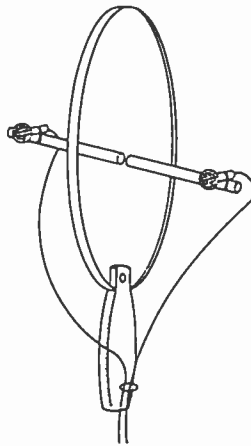
Fig. 2.6. A 'dummy head' for binaural stereo. Two omni-directional tie-clip mics, representing the two ears, are fixed some 9 cm from the centre of a Perspex disc 20 cm in diameter.
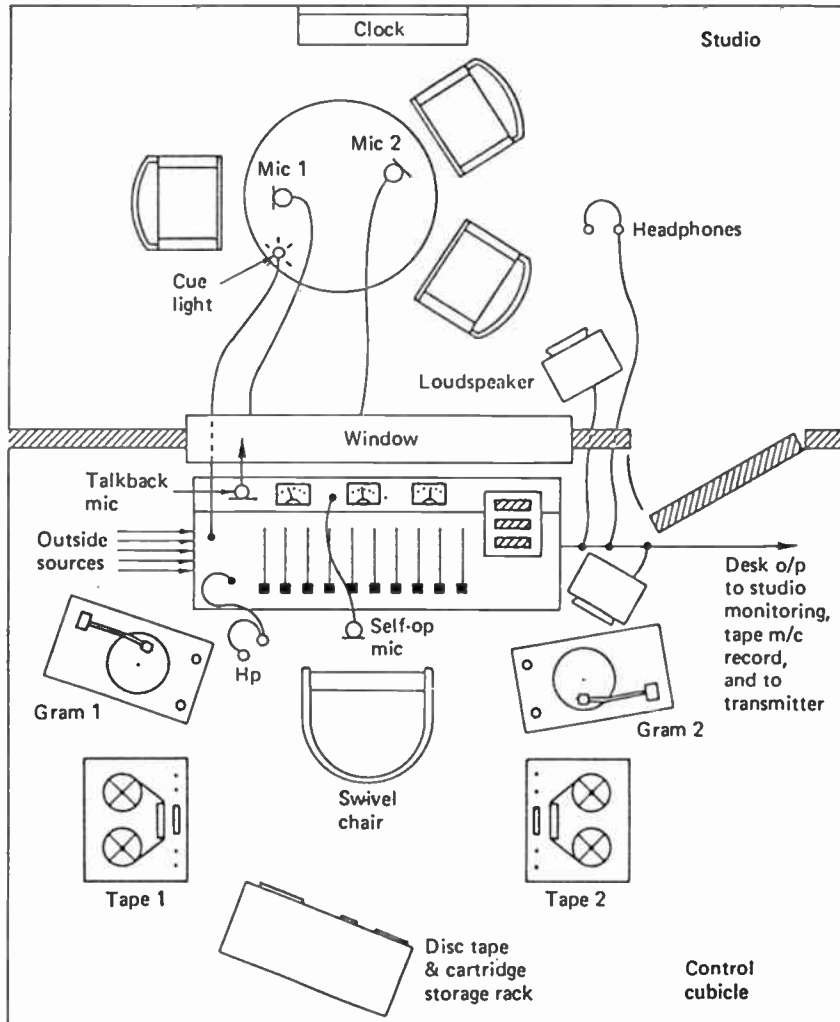
Fig. 2.7. A small broadcasting studio. The studio area consists only of a table and chairs with two or more microphones for interviewing, narration or simple drama. Monitoring is by loudspeaker or, when the mic channels are open, by headphones to each person as required. The monitoring normally carries the output of the mixing desk, but it may be arranged to take any programme feed. The headphones also carry talkback from the cubicle. The cubicle contains the mixing desk, with as many channels as programme complexity demands, in this case 10. They may be laid out as the operator/presenter requires, e.g. gram 1, tape 1, mic 1, mic 2, self-op mic, outside sources, cartridge m/c, tape 2, gram 2. For a self-op disc show, the presenter uses the two 'end' channels, his own mic, plus tapes and carts as needed. A three-stack cartridge m/c can be routed through three separate channels. The outside sources may include: telephone, radio car, OB lines and other remotes, studios, off-air receiver, networks, etc. Some presenters prefer both grams on the same side, with the tape machines on the other. There may be more than one cubicle mic, to allow for self-op interviews. The connection of all sources by a jackfield patch panel or switching matrix makes for infinite variation. On some equipment, the meter for measuring electrical level is superseded by a vertical row of light emitting diodes. The LED indicator is more reliable, cheaper, and responds faster. The colour changes at peak levels, making it easier to read and so avoid the onset of distortion.

Compact discs and records

Music, like speech, comes in sentences and paragraphs. It would be nonsensical to finish a voice piece other than at the end of a sentence, and similarly it is wrong to fade a piece of music arbitrarily. A great deal of work has gone into its production and it should not be treated like water out of a tap, to be turned off and on at will — not unless the broadcaster is prepared to accept the degradation of music into simply a plastic filler material. The good operator therefore will develop an 'ear' for fade points. The 'talk-over' — an accurately timed announcement which exactly fits the non-vocal introduction to a song — provides a satisfying example of paying attention to such detail. Music handled *with respect to its phrasing* provides listening pleasure for everyone. The presenter must accept the responsibility when music and speech are mixed through an automatic voice-over unit or 'ducker' so that whenever he utters, the music is hurled into the background. It has its uses in particular types of high-speed DJ programme, but to use music as a semi-fluid sealant universally applied, seems to imply that the programme has cracks which have to be frantically filled!

The rapid rise of the CD at the expense of the pressed vinyl record has led to a wide variation in operational practice. Some stations use only album material, other studios being based entirely on the CD format. Many of course use a mixture of both, but each medium has its own characteristic foibles.

The broadcaster's attitude to music is often typified by his care in the treatment of CDs, cassettes and records. They are worth looking after. This includes an up-to-date library cataloguing system and proper arrangements for withdrawal and return; thus avoiding their being left lying around in the studio or production offices. CDs and albums should be held so that the fingers do not touch the playing surface, kept clean and free of dust and cigarette ash, played with correctly adjusted equipment and replaced in the CD case or sleeve as soon as possible after playing. Very many broadcasters who play music professionally have domestic stereo equipment over which they take meticulous care. However, only too often is it possible to see in a radio station naked records ground together under a pile of coffee cups, melting on a radiator or gently warping in the sun. The inevitable result is '. . . sorry Mrs. Jones, we don't seem to have that one . . .'

In playing a disc, most control desks have a 'prefade', 'pre-hear' or 'audition' facility which enables the operator to listen to the track and adjust its volume before setting it up to play on the air. This provides the opportunity of checking that it is the right piece of music, but listening only to the beginning may give a false idea of its volume throughout. With a record, a glance at the grooves will often be sufficient to indicate whether there is a wide variation in dynamic range — grey grooves are loud, black ones are quieter — unfortunately this is not possible with a CD.

Mistakes will occur and sooner or later a record goes on at the wrong speed. (This should have been apparent at the setting-up stage but just this once there was insufficient time to listen to it.) The best course generally is to do what is simplest and most natural — to fade out, apologise, change
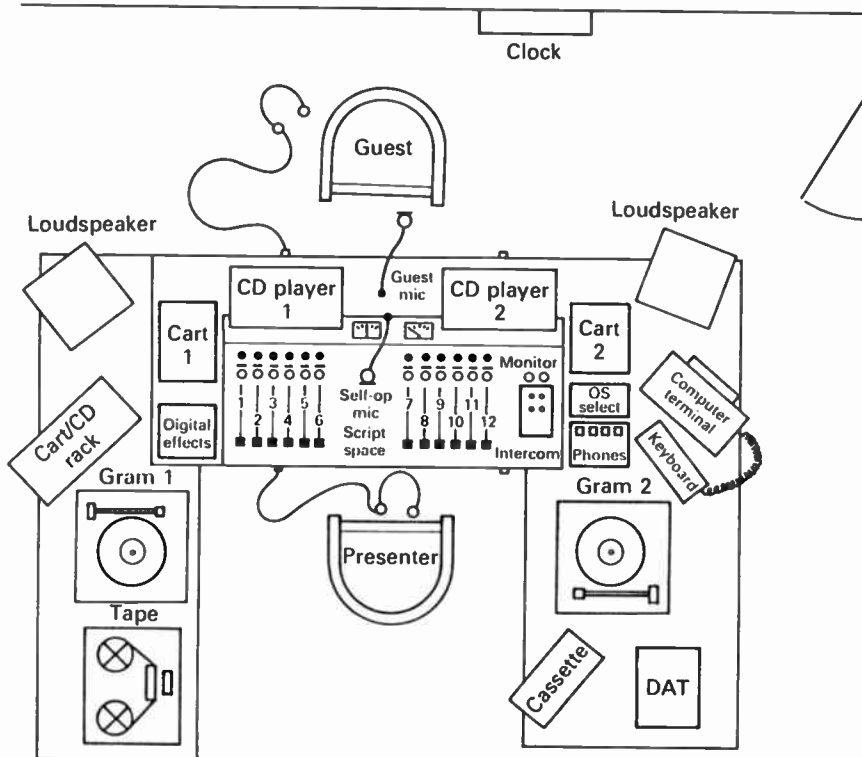
Fig. 2.8. A 12-channel mixer layout, typical of a traditional self-op studio changing to digital technology. The faders in this case are:

1. Gram 1/CD 1
2. Gram 2/CD 2
3. Cart 1
4. Cart 2
5. Newsroom
6. Mic 1 (Presenter)
7. Mic 2 (Guest)
8. Telephone
9. Outside source
10. DAT — record or replay
11. Cassette
12. Tape

Each channel has its own prefade facility and pan-pot. The digital effects unit is switchable to any channel. The outside source selector can select from predetermined internal or external sources including any sustaining programme feed.
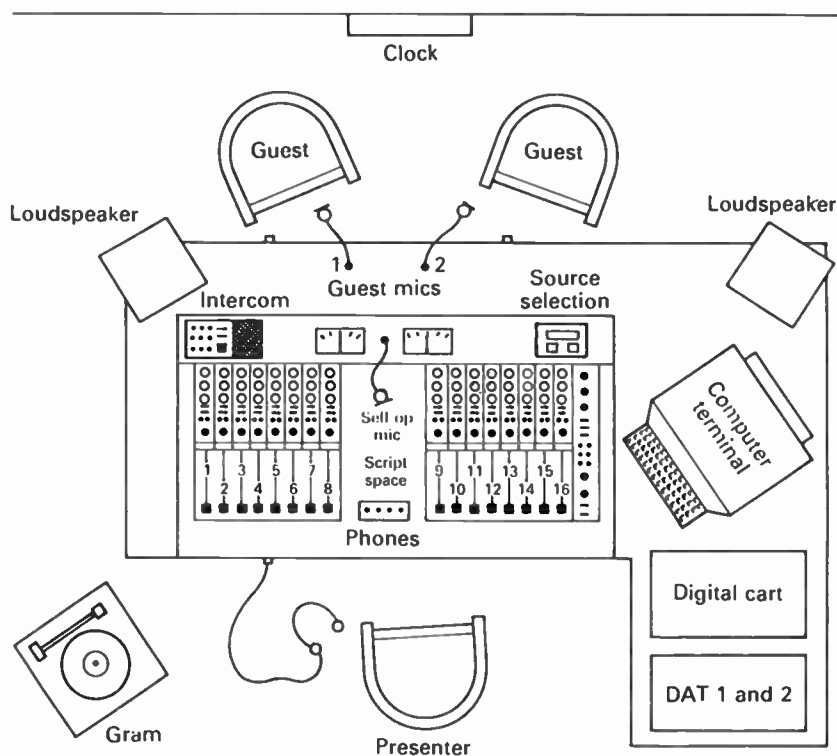
Fig. 2.9. A 16-channel self-op studio. A computer hard disk is available to play
commercials, jingles, station idents, promos and other short items such as news inserts.
Music CDs are played from a remote jukebox. Each channel provides frequency
control–EQ–echo, and a pan-pot, as well as prefade facility. They are labelled by source
and the faders given distinguishing colours. A typical layout is as follows:

1.	Spare	9.	Guest mic 1
2.	News booth	10.	Guest mic 2
3.	Cart	11.	CD 1 (Remote jukebox)
4.	Computer hard disk 1	12.	CD 2 (Remote jukebox)
5.	Computer hard disk 2	13.	Outside source 1
6.	Telephone 1	14.	Outside source 2
7.	Telephone 2	15.	DAT 1
8.	Presenter's mic	16.	DAT 2
			Monitoring controls

The computer screen may display information relating to the music running order, the
commercial log, control of the hard disk system, availability of the remote jukebox. etc.

The source selection can pick up any station or external source on channels 13/14. The
studio is fully digital; the gram is used for back-up only. This desk can be used by one
person self-op, for interviewing a guest, or for 'driving' a non-operational presenter seated
at a guest mic.
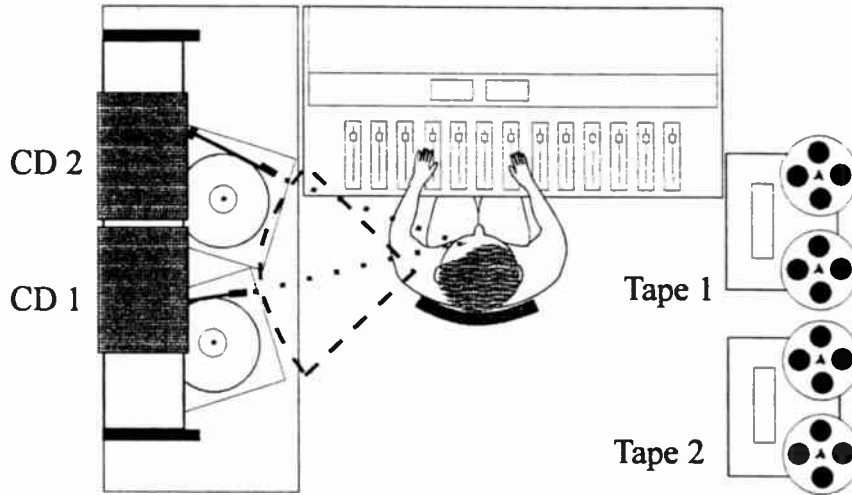
Fig. 2.10   Operator position relative to gramophone turntables or CD players. The operational controls should be on the same radius from the operator's shoulder and lie on his sightline for easy 'setting up' at the start of the disc. This type of control desk offers full programme facilities and is relatively large. Smaller DJ desks often arrange turntables to be sited left and right of the operator.

speed and re-start. It may throw the timing out but that is another problem.

Of course, such error is eliminated with compact discs. CD players have several important advantages:

- superb reproduction, perfectly suited to FM stereo transmission;
- easy automatic track location, with track number indicated;
- precision starting, at the beginning of a track or mid-point, e.g. on a vocal;
- visual readout of 'time played' and 'time remaining';
- fast forward and fast backward 'audible search' facility to find a particular cue;
- long playing time, its one side able to play up to 70 minutes;
- more robust than vinyl record, more able to withstand mishandling, although care is still required;
- reduced storage requirement.

CDs should be cleaned with a soft non-fluffy cloth, not round and round concentrically since this has a potentially damaging effect, but radially from the centre outwards.

Instead of individual CD players, some stations use a form of CD carousel or jukebox holding perhaps 100 discs representing up to 2000 tracks. This avoids the need for the presenter to handle discs, thereby overcoming several problems. Discs do not get lost, stolen, or mislaid, and the playing surface is kept in perfect condition with no finger marks — the main cause of track skipping. The jukebox, which may not be in the studio
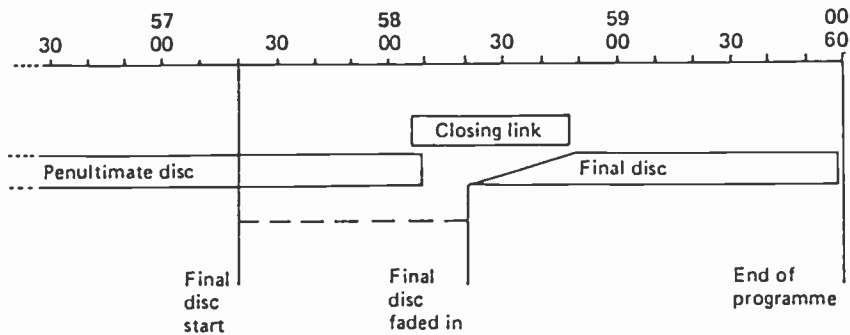
Fig. 2.11. Prefading to time. This is the most usual method of ensuring that programmes run to time. In this example, the final disc (or tape) is 2'40" long. It is therefore started at 57'20" but not faded up until it is wanted as the closing link finishes. It runs for a further 1'10" and brings the programme to an end on the hour.

but in a separate control room, is accessed through a music selector system, for example a touch-screen computer. The system can be expanded by linking jukeboxes in tandem and is clearly ideal for a station where track availability at any one time is determined centrally as a matter of policy.

An argument against the remote operation of CDs is that presenters prefer to feel in control of their programme through physical contact with their discs. A compromise is to put each CD in its own protective carrier which opens to reveal its playing surface when placed in the player. The disadvantage here is that the disk is then separated from its inlay notes. However, this information can always be made available from a data store, brought up on a computer screen as required.

Stations able to record their own CDs can of course store a wealth of material on their 99 possible tracks, from commercials and station jingles to individual presenter idents and programme inserts. Compilation CDs can be made to collect together the currently favoured music tracks, as well as being the ideal medium for the station archives.

A fully digital station, using only CDs as a music source, is wise to keep at least one conventional turntable for vinyl records — even the occasional '78' can be brought in by a listener.

Tape reproduction

As with CDs and albums, tapes should be checked before transmission to ensure that the correct tape is played. This requires the words of the start of the tape to be matched against the information provided on the cue sheet. Recorded levels can vary considerably and the pre-transmission check is also used to adjust the replay volume to the existing programme level. Tape is used in the studio in four possible formats — open reels, cassettes, DAT and cartridges.

Reel to reel tape recorders use spools of 6 mm ($\frac{1}{4}$ inch) wide tape which vary in diameter from 12.5 cm (5 inches) to 25 cm (10 inches). Playing

speeds of professional tape machines are 9.5 cm/second ($3\frac{3}{4}$ inches/second) 19 cm/second ($7\frac{1}{2}$ inches/second), or 38 cm/second (15 inches/second). Stereo recordings are typically made at twice the tape speed of mono material (e.g. mono at 19 cm/second, stereo at 38 cm/second). It is

Open reel

Cine centre   NAB centre

Audio cassette   DAT cassette

Cartridge
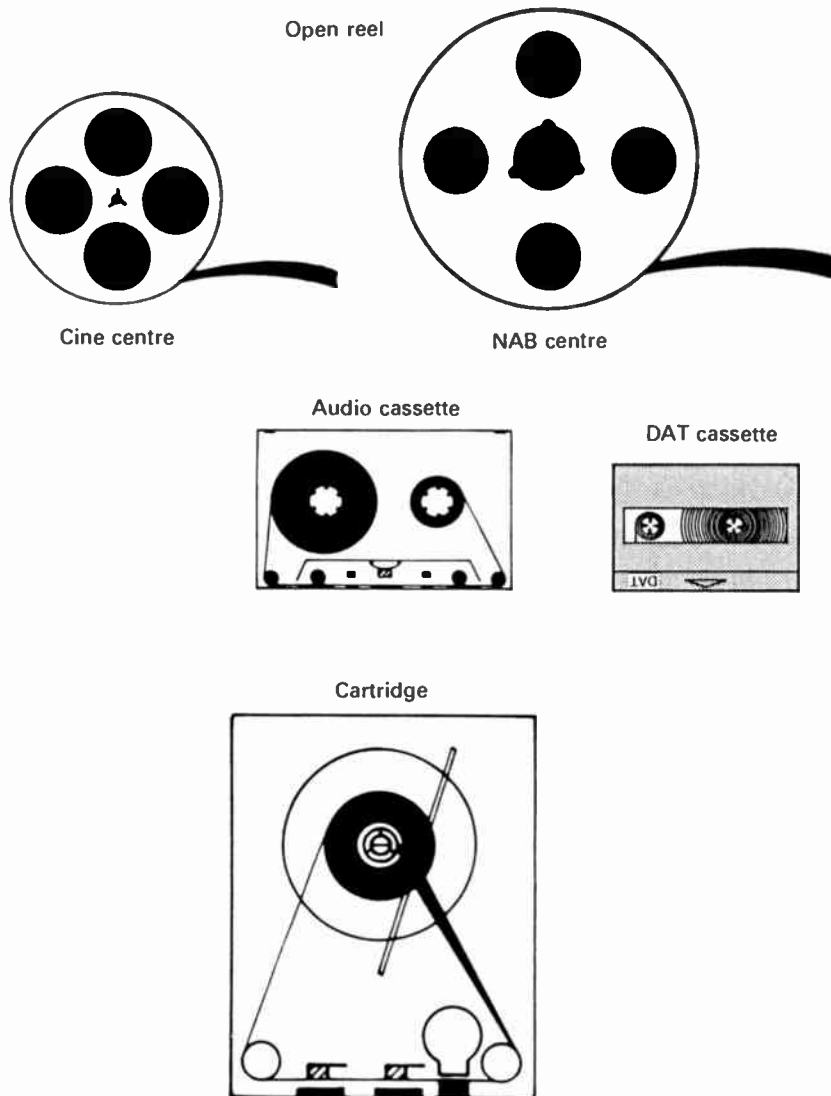
Fig 2.12. Tape formats. The most usual sizes for 'open' or 'reel to reel' spools are 12.5 cm (5 in) and 17.5 cm (7 in) for plastic spools with a cine centre, and 25 cm (10 in) for aluminium spools with a NAB centre. Tape is also used on one-sided spools or simply wound on a central 'former'. Audio cassettes are designated according to their total playing time — a C60 cassette has a 30 min duration for each side. The DAT cassette is closed, like a video cassette, and has 2 hours playing time. In the cartridge, tape is drawn from the inside of the reel and returned to the outside.

important that, as far as possible, all producers within a single system adopt common technical standards for tape reproduction. This applies to the thickness and type of tape used as well as the actual tape speed. If for example 'standard play' tape is adopted for general use, it would be unwise to assume that the thinner 'long play' tape would perform equally well. In this instance, applying the brakes while spooling at high speed is generally sufficient to reduce the tape to an unusable piece of 'stretched shoelace'. The adjustment of the brakes can be critical and producers should call for engineering advice if they suspect any kind of machine problem. Faulty equipment, or faulty operation, can quickly destroy pre-recorded programme material.

The cassette recorder uses a reel to reel device containing 3 mm ($\frac{1}{8}$ inch) wide tape of 10–120 minutes total duration at a tape speed of 4.7 cm/second ($1\frac{7}{8}$ inches/second). Cassettes were originally developed for the domestic market but have steadily improved in quality so that they now have a number of applications in broadcasting. The professional 'walkman' cassette recorder is easily carried and unobtrusive in operation; it is this ease of handling which is the key to its popularity. However, it is wise to remember that because the mechanical tolerances on such small, relatively slow speed devices are fairly critical, there is no absolute guarantee that a

Recording head

Full (single) track

Half track

Half track stereo

Quarter track stereo

Cassette quarter track stereo
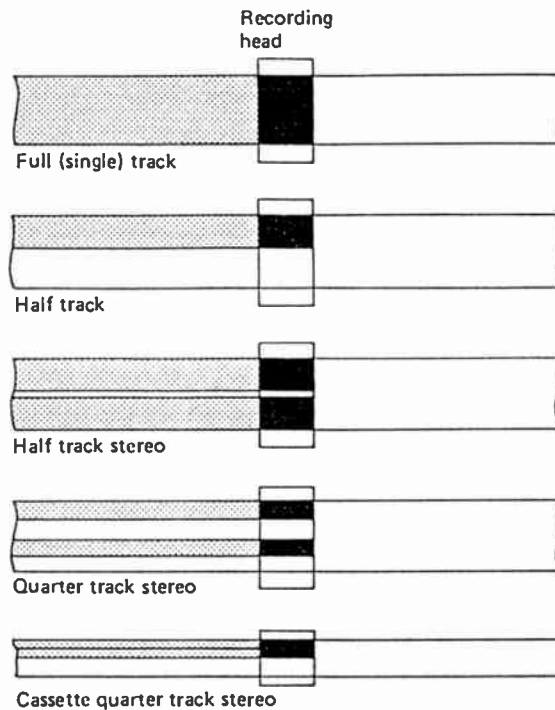
Fig. 2.13. Tape track systems. Monophonically recorded cassette tape uses all the top half of the tape to ensure compatibility of playback with the stereo system. A recording system using only part of the tape enables a second signal to be recorded by 'turning the tape over', but results in a lower signal to noise ratio, i.e. greater tape hiss.

Table 2.1 Running times of recording tape in hours and minutes

Tape length	Speed, cm/second (in/second)				
	38 (15)	19 ($7\frac{1}{2}$)	9.5 ($3\frac{3}{4}$)	4.7 ($1\frac{7}{8}$)	2.3 ($\frac{15}{16}$)
180 metres (600 ft)	8 min	16 min	32 min	1 h 4 min	2 h 8 min
365 metres (1200 ft)	16 min	32 min	1 h 4 min	2 h 8 min	4 h 16 min
730 metres (2400 ft)	32 min	1 h 4 min	2 h 8 min	4 h 16 min	8 h 32 min

cassette recorded on one machine will replay perfectly on another. The physical editing process requires that the cassette is first copied on to an 'open' reel tape. Alternatively, the required parts of cassette recordings are easily dubbed together as a general method of editing, at least for speech material.
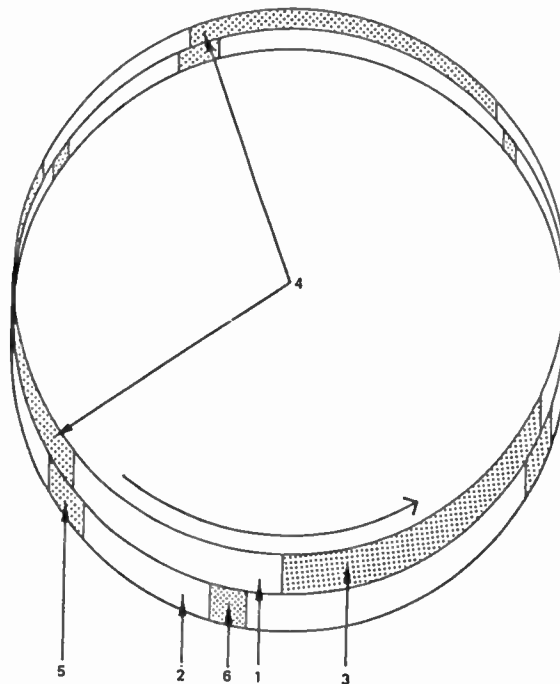
Fig. 2.14. Cartridge tape loop. The top half (1) is the programme track, the bottom half (2) is the cue track. The programme item (3) is recorded on the tape in mono or stereo with as many repeat recordings (4) as will fit conveniently in the whole cartridge. This technique reduces the resetting time for a frequently used item. Each recording is associated with a stop pulse (5) on the cue track. This pulse ensures that the tape stops at the point where the recorded programme item is about to start, and is sometimes called the primary cue. A secondary cue (6) may follow the end of the programme material to signal the machine to spool forward to the next stop pulse, so reducing setting-up time. At the same place as the second cue, some machines provide yet another, or tertiary, cue. This is used to start another cartridge, enabling items (e.g. commercials) to be programmed in an automatic sequence. The total duration of a cartridge loop can be anything from 20 sec to 10 min. Special lubricated tape is used.

Digital Audio Tape — DAT — has revolutionised sound recording and editing and is recognised as the industry standard. It is used both for the mastering of music recordings and with small portable machines for the collection of material on location. Employing the same technology as that of video recording — a slow speed tape scanned by a revolving head — the DAT cassette is smaller than the conventional audio cassette and, as with the video cassette, physical access to the tape is denied. The signal is recorded in digital form in which the original electrical variations are represented by a series of pulses or 'bits' of information. Audio in the form of such 'bits' is easily manipulated by computer in the same way that typed text is re-ordered by a word processor. The sound quality remains exactly as the original and does not degrade as successive digital copies are made.

The tape cartridge is an enclosed single spool device, containing a continuous loop of tape, and is an ideal method of handling relatively short items, particularly those which need to be replayed several times, e.g. signature tunes, station identifications, jingles, commercials, programme trails. After playing, the stop pulse ensures that the tape automatically resets itself so that the material can be repeated as required. The cartridge also represents a most convenient method of providing individual inserts into a magazine programme or news bulletin, where flexibility is of prime importance.

Relative to the open spool, cartridges take a little more time and trouble to record but are extremely simple to replay and being fast to change they offer the producer the advantages of very flexible programming. However not all machines 'fast spool' and once started, e.g. to adjust the level, the tape may have to play through its entire duration in order to be reset once again at its start.

This problem is overcome by the entirely different *digital cartridge*. This does not use tape at all but records and plays back a floppy disk. Probably carrying not one item but several, it is unlike the tape cartridge in that it does not need rewinding so that any one of its tracks is capable of instant access. Disk reproduction always has this advantage over the 'linear' access of tape — and unlike tape, these disks do not become tangled and rarely jam.

The advantages of digital disk recording and reproduction are brought together in the *computer hard disk*. Once a piece of audio — a jingle or commercial — is loaded as data, any number of users can access it simultaneously and quite independently stop it, restart it, or put it on pause. It is infinitely re-usable and does not degrade. It is an ideal medium for making high quality stereo material instantly available, if necessary to several users.

Editing

The purposes of editing can be summarised as:

(1) To rearrange recorded material into a more logical sequence.
(2) To remove the uninteresting, repetitive, or technically unacceptable.
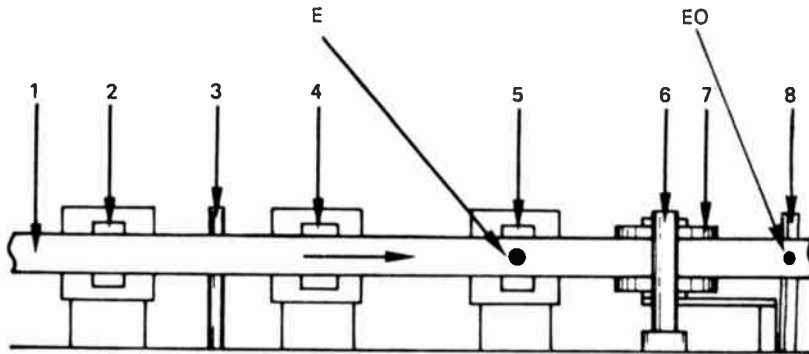
Fig 2.15. Tape machine head assembly. 1. Tape. 2. Erase head. 3. Guide pin. 4. Recording head. 5. Replay head. 6. Capstan. 7. Pinch wheel which holds the tape firmly against the capstan. 8. Guide pin. During editing, the tape is marked on the replay head at point E, or for offset marking at EO.

(3) To compress the material in time.
(4) For creative effect to produce new juxtapositions of speech, music, sound and silence.

Editing must not be used to alter the sense of what has been said or to place the material within an unintended context.

There are always two considerations when editing, namely the editorial and the mechanical. In the editorial sense it is important to leave intact for example the view of an interviewee, and the reasons given for its support. It would be wrong to include a key statement but to omit an essential qualification through lack of time. On the other hand facts can often be edited out and included more economically in the introductory cue material. It is also often possible to remove some or all of the interviewer's questions, letting the interviewee continue. If the interviewee has a stammer, or pauses for long periods, tape editing can obviously remove these gaps. However it would be unwise to remove them completely, as this may alter the nature of the individual voice. It could be positively
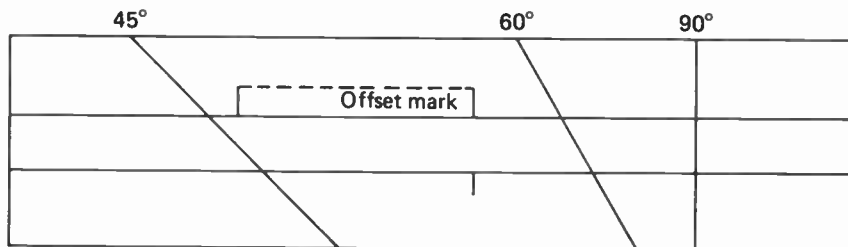
Fig. 2.16. Editing block with offset mark. The offset mark is ahead of the cutting slot by the same distance as the guide pin (8) is ahead of the replay head (5). The 60° slot is used to cut two stereo tracks at more nearly the same place.

misleading to edit pauses out of an interview where they indicate thought or hesitation. There is no point in increasing the pace while destroying half the meaning — silence is not necessarily a negative quantity.

There are four basic methods of editing:

- physical cutting, for reel to reel tape;
- dubbing, for audio cassettes;
- digital assembly editing, for DAT;
- by computer, for any digital recording.

The *cutting* process consists of identifying the beginning and the end of the unwanted section of the recording, marking both (generally using a light coloured 'chinagraph' pencil), cutting the tape with a single-sided razor blade at the marks using a diagonal slot in an editing block, removing the section of tape and joining together the tape ends with 3 cm of appropriate adhesive tape. Where access to the replay head is not possible, a second method of marking known as offset marking is used. This avoids applying any pressure to the head. Instead, the chinagraph mark is made against the guide pin ((8) in Figure 2.15). The mark is therefore slightly ahead of where the cut needs to be. This is taken into account on the editing block which also has an offset mark the same distance ahead of the cutting slot.

Initially, practice is required in listening carefully to a recording being played through the machine by hand at slow speed, so that the exact place where the tape is to be cut can be located. Since this generally coincides with the start of a word, this is not a difficult operation, especially if there is a small piece of silent tape immediately preceding it. These tiny silences are useful and the most frequent fault in editing is their removal, so destroying the paragraph pauses which occur naturally in speech.
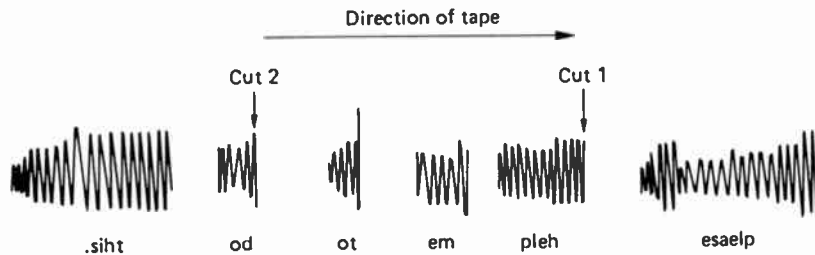
Fig. 2.17. Identifying an edit. Since the tape is moving from left to right, the first part of 'please, help me to do this', seen from the front of the heads, is on the right. To edit it to 'please, do this' the cuts are made at the beginning of the appropriate words, not at the end of the preceding ones.

A word must be said here about a studio technique which corrects a mistake without any editing. It is useful particularly during the recording of a single speaker. If an error or fluff is made the recording is stopped, wound back and replayed. At the end of the sentence before that in which the mistake was made, the machine is put in the record mode and the

speaker picks up immediately at that point. The offending sentence is erased and with no noticeable gap the correct version, we hope, takes its place. This simple procedure often saves time and avoids cutting a reel of tape for the sake of one or two verbal or operational errors.

The second basic editing method — *dubbing* — also avoids the physical cutting of tape. Here, the sections of tape to be used are individually copied in the required order on to a second tape. It is not so precise as cutting, and two machines are required, but it does preserve intact the original reel of tape so that it can be used again. It may well be the more suitable method where long sections of the material are to be removed, or where the recorded levels vary and need adjusting, or where a number of studio links have to be inserted, for example in making a 'package'. This term refers to a complete, recorded item comprising interview clips linked ' by studio speech, also perhaps using actuality and music. It is seldom satisfactory to cut together half and full-track tapes recorded at different times. In order to maintain a consistent sound level, the different elements are copied through a mixing desk on to the final tape; this becomes the package ready for transmission.

The material on an audio or DAT cassette can of course be edited by dubbing, or by copying to an open reel format and cutting as described above.

A fully *digital editing* suite is expensive, requiring at least two DAT machines and an edit controller. This controller uses time-code information on the original recordings as a 'label' for each part of the audio. Acting on instructions from the editor these can be reassembled in whatever new order is required. This process has the advantage of leaving the originals intact. It is therefore easy to experiment with possible edits until the desired result is obtained. However, this process can be lengthy since unlike reel to reel tape editing it has to be done in 'real-time'.

The fourth approach — *computer editing* — requires the audio recording to be transferred to the hard disk of a personal computer equipped with a sound card. A fairly large amount of memory is needed — 300 megabytes is about the minimum, one gigabyte is better. However, a radio station using this form of storage would require much more capacity. The editing principle is that using suitable software, the data can be reordered by rearranging the on-screen waveform (see Figure 2.18). This method can also create fades and other effects, while leaving the original recording intact.

Care of tape

The proper reproduction of all tape relies on the preservation of the magnetic patterns as recorded, and their close and consistent contact with the replay head of the tape machine during the reproduction process. The enemies of tape are excessive heat, vibration or banging, and the influence of external magnetic fields, for example from some microphones. These things affect the magnetic elements on the tape and can cause loss of quality, particularly at the upper frequencies. In extreme cases the programme material may suffer partial or total erasure. It is possible for example for tapes to be 'wiped clean' by certain types of luggage search
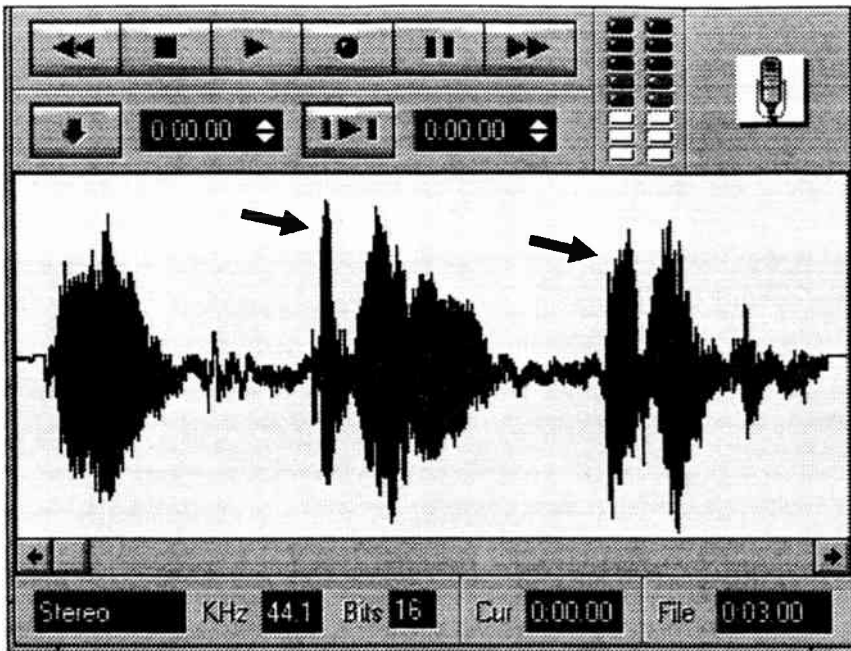
HELLO   GOOD MORNING   AND WELCOME

Fig. 2.18. Computer editing. The computer's mouse has set the arrows at the edit points to remove the 'Good morning' for this programme's afternoon repeat.

equipment used at airports. For the long term storage of tapes and cassettes the recommended temperature is 10°C (50°F).

To ensure good quality during playback it is important that the equipment, especially the replay head and the tape itself, is kept clean. A thin film of grease on the tape or remnants of marking pencil on the head will considerably impair the quality.

A characteristic of tape in storage is its remarkable anonymity. A disc or CD is inseparable from its label but one piece of tape is precisely like another. A spool, cassette or cartridge, and its box, should carry sufficient marking for the programme material to be identified. In the first instance it is the responsibility of the individual producer, interviewer or technical operator to ensure that the proper details are noted at the time of recording. These will include:

(1) Subject matter.
(2) Name and address of speaker, musicians or other participants.
(3) Location of recording.
(4) Date of recording.
(5) Details of any copyright material — music, poetry, etc.

(6) Duration.
(7) Details of any editing required prior to transmission.

   Other than the last item, all this information should accompany a tape that is retained for archive purposes.

Equipment faults

Studios are complex places: there is a lot to go wrong and sometimes it does — a knob or key on the mixer works loose, a CD player gets out of adjustment, the clock is not as accurate as it should be, a small indicator light may blow or a headphone lead break. Perhaps it is something physical like a squeaky door or an unsteady mic stand, or operational like a repeating groove or a skipping CD track. Whatever the problem it is likely to affect programmes and must be put right. It is up to every studio user to report any fault and the easiest way of doing this is by means of a small notebook permanently available in a conspicuous place. It becomes the responsibility of the person who discovers the fault to make a note of its symptoms and the time it happened. Every morning the book is routinely checked by a maintenance technician. Intermittent faults are particularly troublesome and may require a measure of detective work. It is in everyone's interest to record any technical incident, however slight, in order to maintain high operational standards.

3

Interviewing

The aim of an interview is to provide, in the interviewee's own words, facts, reasons or opinions on a particular topic so that the listener can form a conclusion as to the validity of what he or she is saying.

The basic approach

It follows from the above definition that the opinions of the interviewer are irrelevant, he should never get drawn into answering a question which the interviewee may put to him — an interview is not a discussion. We are not concerned here with what has been referred to as 'the personality interview' where the interviewer, often the host of a television 'chat show', acts as the grand inquisitor and asks his guests to test their opinions against his own. Within this present definition it is solely the interviewee who must come through and in the interviewer's vocabulary the word 'I' should be absent. Deference is not required but courtesy is; persistence is desirable, harassment not. The interviewer is not there to argue, to agree or disagree. He is not there to comment on the answers he gets. He is there to ask questions. To do this he needs to have done his homework and must be prepared to listen.

The interview is essentially a spontaneous event. Any hint of its being rehearsed damages the interviewee's credibility to the extent of the listener believing the whole thing to be 'fixed'. For this reason, while the topic may be discussed generally beforehand, the actual questions should not be provided in advance. The interview must be what it appears to be — questions and answers for the benefit of the eavesdropping listener. The interviewer is acting on behalf of the listener, asking the questions which the listener would want to ask. More than this, he is asking the questions which his listener would ask if he knew as much about the background to the subject as the interviewer knows. The interview is an opportunity to provide not only what the listener wants to know, but also what he may need to know. At least as far as the interviewing of political figures is concerned, the interview should represent a contribution towards a democratic society; i.e. the proper questioning of people who, because of

the office they hold, are accountable to the electorate. It is a valuable element of broadcasting and care should be taken to ensure it is not damaged, least of all by casual abuse in the cult of personality on the part of broadcasters.

Types of interview

For the sake of simplicity three types of interview can be identified, although any one situation may involve all three categories to a greater or lesser extent. These are the informational, the interpretive and the emotional interview.

Obviously, the purpose of the *informational interview* is to impart information to the listener. The sequence in which this is done becomes important if the details are to be clear. There may be considerable discussion beforehand to clarify what information is required and to allow time for the interviewee to recall or check any statistics. Topics for this kind of interview include: the action surrounding a military operation, the events and decisions made at a union meeting, or the proposals contained in the city's newly announced development plan.

The *interpretive interview* has the interviewer supplying the facts and asking the interviewee either to comment on them or to explain them. The aim is to expose his reasoning and allow the listener to make a judgement on his sense of values or priorities. Replies to questions will almost certainly contain statements in justification of a particular course of action which should themselves also be questioned. The interviewer must be well briefed, alert, and attentive to pick up and challenge the opinions expressed. Examples in this category would be a government minister on his reasons for an already published economic policy, why the local council has decided on a particular route for a new road, or views of the clergy on proposals to amend the divorce laws. The essential point is that the interviewer is not asking for the facts of the matter, since these will be generally known; rather he is investigating the interviewee's reaction to the facts. The discussion beforehand may be quite brief, the interviewer outlining the purpose of the interview and the limits of the subject he wishes to pursue. Since the content is reactive, it should on no account be rehearsed in its detail.

The aim of the *emotional interview* is to provide an insight into the interviewee's state of mind so that the listener may better understand what is involved in human terms. Specific examples would be the feelings of relatives of miners trapped underground in a pit accident, the euphoria surrounding the moment of supreme achievement for an athlete or successful entertainer, or the anger felt by people involved in an industrial dispute. It is the strength of feeling present rather than its rationality which is important and clearly the interviewer needs to be at his most sensitive in handling such situations. He will receive acclaim for asking the right question at the right time in order to illuminate a matter of public interest, even when the event itself is tragic. But he is quickly criticised for being too intrusive into private grief. It is in this respect that his manner of asking a

question is as important as its content, possibly more so. Another difficulty which faces the interviewer is to reconcile his need to remain an impartial observer with his not appearing indifferent to the suffering. The amount of time taken in preliminary conversation will vary considerably depending on the circumstances. Establishing the necessary relationship may be a lengthy process — but there is a right moment to begin recording and it is important for the interviewer to remain sensitive to this judgement. Such a situation allows little opportunity for retakes.

These different categories of interview are likely to come together in preparing material for a documentary or feature. First the facts, background information or sequence of events; then the interpretation, meaning or implication of the facts; finally their effect on people, a personal reaction to the issue. The *documentary interview* with, for example, a retired politician will take time but should be as absorbing for the interviewer as it will be for the listener. The process of recalling history should surprise, it should throw new light on events and people, and reveal the character of the person. Each interview is different but two principles remain for the interviewer — listen hard, and keep asking 'why?'

Related to the documentary interview, but not concerned necessarily with a single topic, is the style of interviewing which contributes to *oral history*. Every station, national, regional, or local, should assume some responsibility for maintaining an archival record of its area. Not only does it make fascinating material for future programmes but it becomes of value in its own right as it marks the changes which affect every community. The old talking about their childhood, or their parents' values, craftsmen describing their work, children on their expectations of growing up, the unemployed, music-makers, shopkeepers. The list is endless. The result is an enriching library of accent, story, humour, nostalgia, and idiosyncrasy. But to capture the voices of people unused to the microphone takes patience and a genuinely perceptive interest in others. It may take time to establish the necessary rapport and to put people at their ease. On the other hand when talking to the elderly, it is often advisable to start recording as soon as the interviewee recounts any kind of personal memory. They may not understand whether or not the interview has begun and will not be able to repeat what they said with the same freshness. Preparation and research beforehand into personal backgrounds helps to recall facts and incidents which the interviewee often regards as too insignificant or commonplace to mention. People generally like talking about themselves and it takes a quick-thinking flexibility to respond appropriately, to know when a conversation should be curtailed, and when moved on. The rewards however are considerable. A final point, such recordings need to be well documented — it is one thing to have tapes in the library, but quite another to secure their speedy and accurate retrieval.

Preparation before the interview

It is essential for the interviewer to know what he is trying to achieve. Is the interview to establish facts, or to discuss reasons? What are the main points

which must be covered? Are there established arguments and counter arguments to the case? Is there a story to be told? The interviewer must obviously know something of the subject and a briefing from the producer, combined with some research on his own part, is highly desirable. An essential is absolute certainty of any names, dates, figures or other facts used within the questions. It is embarrassing for the expert interviewee to correct even a trifling factual error in a question — it also represents a loss of control, for example:

> 'Why was it only 3 years ago that you began to introduce this new system?'
> 'Well actually it was 5 years ago now.'

It is important, although easily capable of being overlooked, to know exactly who you are talking to:

> 'As the chairman of the company, how do you view the future?'
> 'No, I'm the managing director . . .'

It makes no difference whatsoever to the validity of the question but a lack of basic care undermines the questioner's credibility in the eyes of the interviewee, and even more important, in the ears of the listener.

Having decided what has to be discovered, the interviewer must then structure the questions accordingly. Question technique is dealt with in a later section but it should be remembered that what is actually asked is not necessarily formulated in precise detail beforehand. Such a procedure could easily be inflexible and the interviewer may then feel obliged to ask the list of questions irrespective of the response by the interviewee. Preparation calls for the careful framing of alternative questions — with consideration of the possible responses so that the next line of enquiry can be worked out.

For example, you want to know why a government Minister is advocating the closure of coal mines with a large amount of resulting unemployment. If the question put is simply 'Why are you advocating . . . ?', the reply is likely to be a stock answer on the need for pits to be economic. Such a response is known by most people so the interview merely repeats the position, it does not carry the issue forward. To move ahead, the interviewer must anticipate and be in a position to put questions that *well-informed people in the industry* are asking — about other markets for coal, the relative operating and capital costs of coal-fired and gas power stations, the cost to the country of unemployed minerworkers, possible relief measures, and so on.

To summarise, an interviewer's normal starting point will be:

(1) To obtain sufficient briefing and background information on the subject and the interviewee.
(2) To have a detailed knowledge of what the interview should achieve, and at what length.
(3) To know what the key questions are.
(4) By anticipating likely responses, to have ready a range of supplementary questions.

The pre-interview discussion

The next stage, after the preparatory work, is to discuss the interview with the interviewee. The first few minutes are crucial. Each party is sizing up the other and the interviewer must decide how to proceed.

There is no standard approach: each occasion demands its own. The interviewee may respond to the broadcaster's brisk professionalism or might better appreciate a more sympathetic attitude. He may need to feel important, or the opposite. The interviewee in a totally unfamiliar situation may be so nervous as to be unable to marshal his thoughts properly; his entire language structure and the speed of delivery may be affected. Under stress he may not even be able to listen fully to your questions. The good interviewer will be aware of this and will work hard to enable the interviewee's thinking and personality to emerge. Whatever the circumstances, the interviewer has to get it right, and he has only a little time in which to form his judgements.

The interviewer indicates the subject areas to be covered but he is well advised to let the interviewee do most of the talking. This is an opportunity to confirm some of the facts, and it helps the interviewee to release his own tensions while allowing the interviewer to anticipate any problems of language, coherence or volume.

It is wrong for the interviewer to get drawn into a discussion of the matter, particularly if there is a danger that he might reveal his own personal attitude to the subject. Nor must he adopt a hostile manner or imply criticism. This may be appropriate during the interview but even so it is not the interviewer's job to conduct a judicial enquiry, nor to represent himself as prosecuting counsel, judge and jury.

The interviewer's prime task at this stage is to clarify what the interview is about and to create the degree of rapport which will produce the appropriate information in a logical sequence at the right length. He must obtain the confidence of the interviewee while establishing his means of control. A complex subject needs to be simplified, and distilled for the purposes of say a $2\frac{1}{2}$ minutes interview — there must be no technical or specialist jargon, and the intellectual and emotional level must be right for the programme. Above all, the end result should be interesting.

It is common and useful practice to say beforehand what the first question will be, since in a 'live' situation it can help to prevent a total 'freeze' as the red light goes on. If the interview is to be recorded, such a question may serve as a 'dummy' to be edited off later. In any event it helps the interviewee to relax and to feel confident about starting. The interviewer should begin the actual interview with as little technical fuss as possible, the preliminary conversation proceeding into the interview with the minimum of discontinuity.

Question technique

An interview is a conversation with an aim. On the one hand the interviewer knows what that aim is and he knows something of the subject. On the other he is placing himself where the listener is and is asking

questions in an attempt to discover more. This balance of knowledge and ignorance can be described as 'informed naivety'.

The question type will provide answers of a corresponding type. In their simplest form they are:

(1) Who?   asks for fact. Answer — a person.
(2) When?   asks for fact. Answer — a time.
(3) Where?   asks for fact. Answer — a place.
(4) What?   asks for fact or an interpretation of fact.
             Answer — a sequence of events.
(5) How?   asks for fact or an interpretation of fact.
             Answer — a sequence of events.
(6) Which?   asks for a choice from a range of options.
(7) Why?   asks for opinion or reason for a course of action.

These are the basic 'open' question types on which there are many variations. For example:

'How do you feel about . . .?'
'To what extent do you think that . . .?'

The best of all questions, and incidentally the one asked least, is 'why?' Indeed after an answer it may be unnecessary to ask anything other than 'why is that?' The 'why' question is the most revealing of the interviewee since it leads to an explanation of actions, judgements, motivation and values:

'Why did you decide to . . .?'
'Why do you believe it necessary to . . .?'

It is sometimes said that it is wrong to ask 'closed' questions based on the 'reversed verb':

Are you . . .?
Is it . . .?
Will they . . .?
Do you . . .?

What the interviewer is asking here is for either a confirmation or a denial; the answer to such a question is either yes or no. If this is really what the interviewer is after, then the question structure is a proper one. If however it is an attempt to introduce a new topic in the hope that the interviewee will continue to say something other than yes or no, it is an ill-defined question. As such it is likely to lead to the interviewer's loss of control, since it leaves the initiative completely with the interviewee. In this respect the reversed verb question is a poor substitute for a question which is specifically designed to point the interview in the desired direction. The reversed verb form should therefore only be used when a yes/no answer is what is required:

'Will there be a tax increase this year?'
'Are you running for office in the next election?'

Question 'width'

This introduces the concept of how much room for manoeuvre the interviewer is to give the interviewee. Clearly where a yes/no response is being sought, the interviewee is being tied down and there is little room for manoeuvre; the question is very narrow. On the other hand it is possible to ask a question which is so enormously wide that the interviewee is confused as to what is being asked:

'You've just returned from a study tour of Europe, tell me about it.'

This is not of course a question at all, it is an order. Statements of this kind are made by inexperienced interviewers who think they are being helpful to a nervous interviewee. In fact the reverse is more likely with the interviewee baffled as to where to start.

Another type of question, which again on the face of it seems helpful, is the 'either/or' question:

'Did you introduce this type of engine because there is a new market for it, or because you were working on it anyway?'

The trouble here is that the question 'width' is so narrow that in all probability the answer lies outside it so leaving the interviewee little option but to say 'Well neither, it was partly . . .' Things are seldom so clear cut as to fall exactly into one of two divisions. In any case it is not up to the interviewer to suggest answers; what he wanted to know was:

'Why did you introduce this type of engine?'

Devil's advocate

If the interviewee is to express his own point of view fully and to answer his various critics, it will be necessary for those opposing views to be put to him. This gives him the opportunity of demolishing the arguments to the satisfaction, or otherwise, of the listener. In putting such views the interviewer must be careful not to associate himself with them, nor must he be associated in the listener's mind with the principle of opposition. His role is to present propositions which he knows to have been expressed elsewhere, or the doubts and arguments which he might reasonably expect to be in the listener's mind. In adopting the 'devil's advocate' approach common forms of question are:

'On the other hand it has been said that . . .'
'Some people would argue that . . .'
'How do you react to people who say that . . .'
'What would you say to the argument that . . .'

The first two examples as they stand are not questions but statements and if left as such will bring the interview dangerously close to being a discussion. The interviewer must ensure that the point is put as an objective question.

It has been said in this context that 'you can't play good tennis with a bad opponent.' The way in which broadcasters present counter-argument needs care, but experienced interviewees welcome it as a means of making their case more easily understood.

Multiple questions

A trap for the inexperienced interviewer, obsessed with the fear that his interviewee will be lacking in response, is to ask two questions at once:

'Why was it that the meeting broke up in disorder, and how will you prevent this happening in future?'

The interviewee presented with two questions may answer the first and then genuinely forget the second, or he may exercise his apparent option to answer whichever one he prefers. In either case there is a loss of control on the part of the interviewer as the initiative passes to the interviewee.

Questions should be kept short and simple. Long rambling circumlocutory questions will get answers in a similar vein; this is the way conversation works. The response tends to reflect the stimulus—this underlines the fact that the interviewer's initial approach will set the tone for the whole interview.

Beware the interviewer who has to clarify his own questions:

'How was it you embarked on such a course of events, I mean what made you decide to do this—after all at the time it wasn't the most obvious thing to do, was it?'

Confusion upon confusion, and yet this kind of muddle can be heard on the air. If the purpose of the question is not clear in the interviewer's mind, it is unlikely to be understood by the interviewee—the listener's confusion is liable to degenerate into indifference and subsequent total disinterest.

Leading questions

Lazy, inexperienced or malicious questioning can appear to put the interviewee in a particular position before he begins:

'Why did you start your business with such shaky finances?'
'How do you justify such a high-handed action?'

It is not up to the interviewer to suggest that finances are shaky or that action is high-handed, unless this is a direct quote of what the interviewee has just said. Given the facts, the listener must be able to determine for himself from what the interviewee says whether the finances were sufficient or whether the action was unnecessarily autocratic. Adjectives which imply value judgements must be a warning signal, for interviewee and listener alike, that all is not quite what it appears to be. Here is an interviewer who has a point to make, and in this respect he may not be properly representing the listener. The questions can still be put in a perfectly acceptable form:

'How much did you start your business with?' (fact)
'At the time did you regard this as enough?' (yes/no)
'How do you view this now?' (judgement)
'What would you say to people who might regard this action as high-handed?' (This is the 'devil's advocate' approach already referred to.)

It is surprising how one is able to ask very direct, personally revealing, 'hard' questions in a perfectly acceptable way by maintaining at the same time a calmly pleasant composure. When a broadcaster is criticised for being over-aggressive, it is his manner rather than what he says which is being questioned. Even persistence can be politely done:

'With respect, the question was *why* this had happened.'

In asking *why* something happened it is not uncommon to get in effect *how* it happened, particularly if the interviewee wishes to be evasive. If he is evasive a second time, this will be obvious to the listener and there is no need for the interviewer to labour the point: it is already made.

Non-questions

Some interviewers delight in making statements instead of asking questions. The danger is that the interview may become a discussion. For example, an answer might be followed by the statement:

'This wouldn't happen normally.'

Instead of with the question 'Is this normal?'
A further example is the statement:

'You don't appear to have taken that into account.'

Instead of the question 'To what extent have you taken that into account?'
Again, the fault lies in the question not being put in a positive way; the interviewee can respond how he likes, perhaps by asking a question himself, and the interviewer will find it difficult to exercise control over both the subject matter and the timing.
Occasionally interviewers ask whether they can ask questions:

'Could I ask you if . . .'
'I wonder whether you could say why . . .'

This is unnecessary of course since in the acceptance of the interview there is an agreement to answer questions. There may occasionally be justification for such an approach when dealing with a particularly sensitive area and the interviewer feels the need to proceed gently. This phraseology can be used to indicate that the interviewer recognises the difficulty inherent in the question. Much more likely however it is used by accident when the questioner is uncertain as to the direction of the interview and is 'padding' in order to provide himself with more thinking time. Such a

device to gain time is likely to give the listener the feeling that his is being wasted.

Non-verbal communication

Throughout the interview the rapport established earlier must continue. This is chiefly done through eye contact and facial expression. Once the interviewer stops looking at his respondent, perhaps for a momentary glance at the machinery or at his notes, there is a danger of losing the thread of the interview. At worst, the interviewee will himself look away, and his thoughts as well as his eyes are then liable to wander. The concentration must be maintained. The eyes of the interviewer will express his interest in what is being said—the interviewer is never bored. He can express surprise, puzzlement or encouragement by nodding his head. In fact, it quickly becomes annoying to the listener to have these reactions in verbal form—'ah yes', 'mm', 'I see'.

Eye contact is also the most frequent means of controlling the timing of the interview—of indicating that another question needs to be put. It may be necessary to make a gesture with the hand, but generally it is acceptable to butt-in with a further question. Of course the interviewer must be courteous and positive to the point of knowing exactly what it is he wants to say. Even the most talkative interviewee has to breathe and the signs of such small pauses should be noted beforehand so that the interviewer can use them effectively.

During the interview

The interviewer must be actively in control of four separate functions—the technical, the direction of the interview, the supplementary question and the timing.

The technical aspects must be constantly monitored. Is the background noise altering so requiring a change to the microphone position? Is the position of the interviewee changing relative to the microphone, or have the voice levels altered? If the interview is being recorded, is the machine continuing to function correctly—the spools rotating and the meter or other indicator giving a proper reading?

The aims of the interview must always be kept in mind. Is the subject matter being covered in terms of the key questions decided beforehand? Sometimes it is possible for the interviewer to make a positive decision and change course but in any event he must keep track of where he is going.

The supplementary question. It is vital that the interviewer is not so preoccupied with the next question that he fails to listen to what the interviewee is saying. The ability to listen and to think quickly are essential attributes of the interviewer. He must be able to ask the appropriate follow-up question for clarification of a technicality or piece of jargon, or to question further the reason for a particular answer. Where an answer is being given in an unnecessarily academic or abstract way, the interviewer should ask to have it turned into a factual example.

The *timing* of the interview must be strictly adhered to. This is true whether the interview is to be of half an hour or $2\frac{1}{2}$ minutes. If a short news interview is needed, there is little point in recording for 10 minutes with a view to cutting it to length later. There may be occasions when such a time-consuming process will be unavoidable, even desirable, but the preferred method must be 'to sharpen one's mind beforehand, rather than one's razor-blade afterwards'. Thus the interviewer when recording keeps a clock running in his head. It stops when it hears an answer which is known to be unusable but continues again on hearing an interesting response. He controls the flow of the material so that the subject is covered as required in the time available. This sense of time is invaluable when it comes to doing a 'live' interview when of course timing is paramount. Such a discipline is basic to the broadcaster's skills.

Winding up

The word 'finally' should only be used once. It may usefully precede the last question as a signal to the interviewee that time is running out and that anything important left unsaid should now be included. Other signals of this nature are words such as:

'Briefly, why . . .'
'In a word, how . . .'
'At its simplest, what . . .'

It is a great help in getting an interviewee to accept the constraint of timing if the interviewer has remembered to tell him beforehand the anticipated duration.

Occasionally an interviewer is tempted to sum up. This should be resisted since it is extremely difficult to do without making some subjective evaluations. It must always be borne in mind that the broadcaster's greatest asset is his objective approach to facts and his impartial attitude to opinion. To go further is to forget the listener, or at least to underestimate the listener's ability to form a conclusion for himself. A properly structured interview should have no need of a summary, much less should it be necessary to impose on the listener a view of what has been said.

If the interview has been in any sense chronological, a final question looking to the future will provide an obvious place to stop. A positive convention as an ending is simply to thank the interviewee for taking part:

'Mr Jones, thank you very much.'

However, an interviewer quickly develops an ear for a good out cue and it is often sufficient to end with the words of the interviewee, particularly if he has made an amusing or strongly assertive point.

After the interview

The interviewer should feel that it has been an enlightening experience which has provided a contribution to the listener's understanding and

appreciation of both the subject and the interviewee. If the interview has been recorded, it should be immediately checked by playing back the last 15 seconds or so. No more, otherwise the interviewee is sure to want to change something and one embarks on a lengthy process of explanation and reassurance. The editorial decision as to the content of the interview as well as the responsibility for its technical quality rests with the interviewer. If for any reason he wishes to re-take parts of a recording, he would be wise to adopt an entirely fresh approach rather than attempt to re-create the original. Without making problems for the later editing, the questions should be differently phrased to avoid an unconscious effort to remember the previous answer. This amounts to having had a full rehearsal and will almost certainly provide a stale end-product. The interviewee who is losing track of what is going into the final tape is also liable to remark '. . . and as I've already explained . . .' or '. . . and as we were saying a moment ago . . .' Such references to material which has been edited out will naturally mystify the listener, possibly breaking his concentration on what is currently being said.

If the interview has been recorded, the interviewee will probably want to know the transmission details. If the material is specific to an already scheduled programme, this information can be given with some confidence. If however it is a news piece intended for the next bulletin, it is best not to be too positive lest it be overtaken by a more important story and consequently held over for later use. Tell the interviewee when you hope to broadcast it but if possible avoid total commitment.

Thank the interviewee for his time and trouble and for taking part in the programme. If he has come to the studio, it may be normal to offer his travelling expenses or a fee according to station policy. Irrespective of how the interview has gone, professional courtesy at the closing stage is important. After all, you may want to talk to him again tomorrow.

Location interviews

The businessman in his office, the star in her dressing room, the worker in the factory or out of doors; all are readily accessible with a portable tape recorder and provide credible programming with atmosphere. Yet each may pose special problems of noise, interruption, and right of access.

To remain legal the producer must observe the rules regarding public and private places. Permission is usually required to interview inside a place of entertainment, business premises, a factory, shop, hospital or school. In this last case it is worth remembering that consent of parents or a guardian should normally be sought before interviewing anyone under the age of 16. Working in a non-public area also means that if a broadcaster is asked to leave it is best to do so — or else run the risk of a charge of harassment or trespass.

In any room other than a studio, the acoustics are likely to be poor with too much reflected sound. It is possible to overcome this to an acceptable degree by avoiding hard, smooth surfaces such as windows, desk tops, vinyl floors or plastered walls. A carpeted room with curtains and other furnishings is generally satisfactory, but in unfavourable conditions the

Traffic islands   Alcoves

Tables   Bathrooms
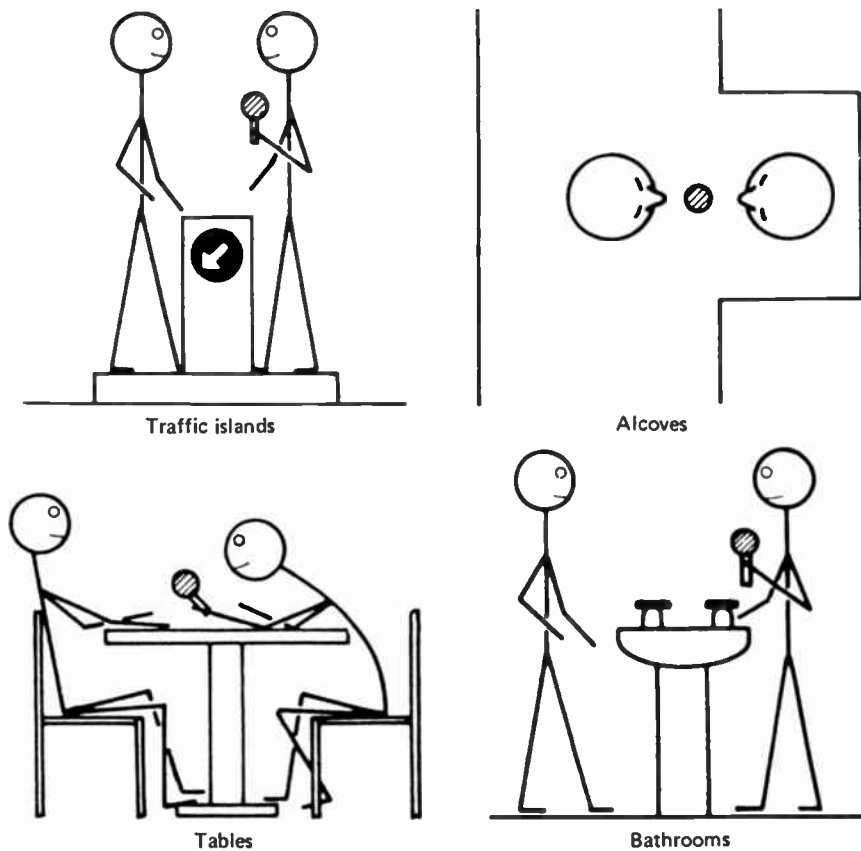
Fig. 3.1. Some interviewing situations to avoid. These would be noisy, acoustically poor, or at least asymmetrical, or physically awkward.

best course is to work closer to the microphone, while also reducing the level of input to the recorder.

The same applies to locations with a high level of background noise. Nevertheless the machine shop or aeroplane cockpit need present no insuperable technical difficulty; again the answer is to work closer to the mic and reduce the record level. This will sufficiently discriminate between the foreground speech and the background noise. A greater problem arises where the sound are intermittent — an aircraft passing overhead, a telephone ringing, or clock striking. At worst these may be so overwhelming as to prevent the interview from being audible but even if this is not the case, sudden noises are a distraction for the listener which a constant level of background is not. Background sounds which vary in volume and quality can also represent a considerable problem if the tape is to be edited later — a point interviewers should remember before beginning. The greatest difficulty in this respect arises when an interview has been recorded against a background of music. It is then almost impossible to edit.

Gardens

Curtains

Settees

Pedestrian precincts
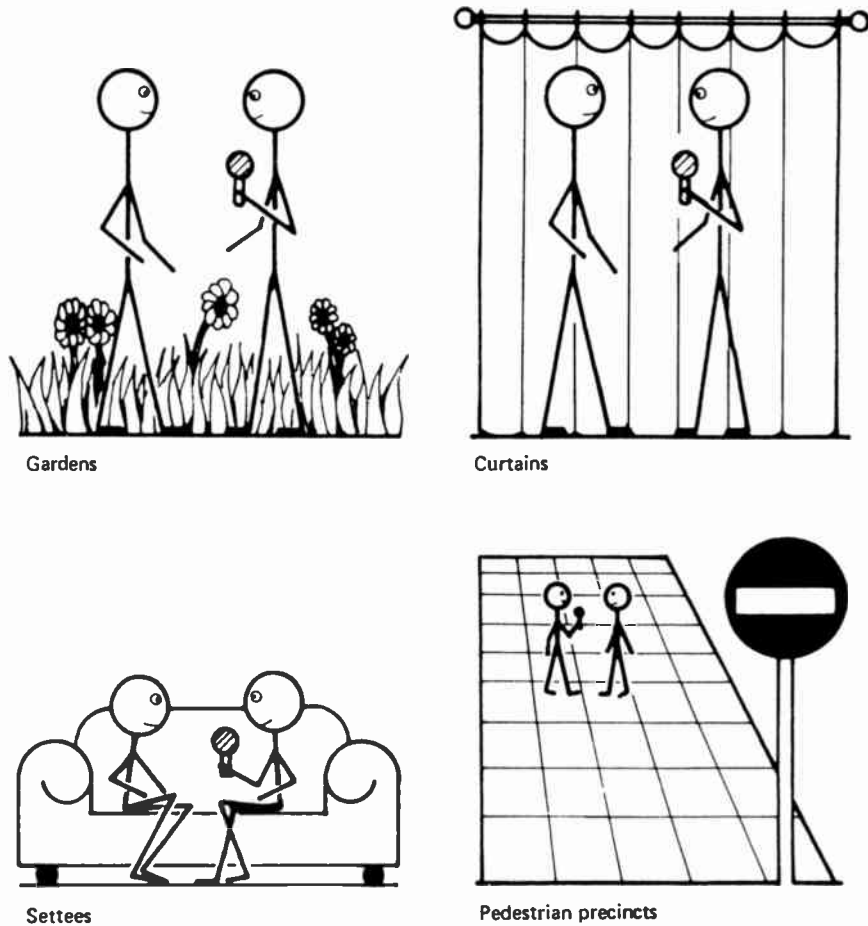
Fig. 3.2. Some good places for location interviews. These provide a low or at least a constant background noise, acoustically absorbent surroundings, or a comfortable symmetry.

Only the very experienced should attempt interviewing using a stereo microphone — and it should then be fixed with a micstand. Even small amounts of movement cause an apparent relocation of the environmental sounds with the consequent disorientation of the listener. Static stereo mics are good for recording location effects, but interviewing almost always calls for a hand-held mono omni-directional mic, or two small clip-on personal mics. In this latter case the stereo recording should be re-mixed on playback with some overlap between the two channels to provide the desired spatial relationship.

It is generally desirable for location interviews to have some acoustic effect or background noise and only practical experience will indicate how to achieve the proper balance with a particular type of microphone. When in doubt, priority should be given to the clarity of the speech.

As with the studio interview, the discussion beforehand is aimed at putting the interviewee at his ease. When outside, using a portable recorder, part of this same process is to show how little equipment is involved. The microphone and machine should be assembled, made ready, and checked during this preliminary conversation. It is important to handle these items in front of the interviewee and not spring the technicalities on him at the last moment. Before starting it is advisable to test the system by 'taking level', i.e. by recording some brief conversation to hear the relative volume of the two voices. If the microphone is to be hand-held, the cable should be looped around the hand, not tightly wrapped round it, so that no part of the cable leading to the recorder is in contact with the body of the microphone. This prevents any movement in the cable from making itself

Fig. 3.3. The microphone cable is formed into two loops. The loop round the finger is kept away from the microphone case to prevent extraneous noises, commonly known as mic rattles, being passed along the cable. The windshield helps to prevent wind noise and voice 'pops'.

heard as vibration in the microphone. The mic should be out of the eye-line at a point where it can remain virtually stationary throughout. Only in conditions of high background noise should it be necessary to move the mic alternately towards interviewer and interviewee. Even so, this is preferable to the use of an automatic gain control (AGC) on the machine which affects the speaker's voice and background noise together, i.e. it does not discriminate between them as microphone movement does. AGC should therefore be switched 'out', and any noise reduction system, e.g. Dolby, switched 'in'. A satisfactory playback of this trial recording is the final check before beginning the interview.

Some further rules in the use of portable recorders:

(1) Where necessary check the ability of the machine to work in unusual conditions, e.g. humidity, electrical radiation or magnetic fields, or at low temperature; or its suitability for specialist functions, such as recording in a coalmine.
(2) Always check the machine and its microphone before leaving base — record and replay.
(3) If there is any doubt about the state of electrical charge of the machine's own cells, take spare batteries.
(4) Always use a microphone windshield when recording out of doors.
(5) Do not leave a recorder unattended, where it can be seen, even in a locked car.
(6) Use the best quality $\frac{1}{4}''$ tape for reel to reel machines, and 'chrome' type for cassette machines.
(7) Ensure that rechargeable cells are put back on charge after use.

Interviewing through a translator

News in particular may involve interviewing someone who does not speak your own language. When the interview is 'live', there is no option but to go through an interpreter with the somewhat laborious process of sequential translation — so keep the questions short and simple:

'When were the soldiers here?'
'What has happened to your home?'
'Why did they destroy the village?'
'What happened to your family?'

Depending of course on the circumstances, answers even in another language can communicate powerfully. The translation provides the content of what is said but the replies themselves will define the spirit and strength of feeling in a crisis situation. If the interview is recorded then simultaneous translation is possible through subsequent dubbing and editing. The first question is put, the reply begins and is faded down under the translation. The second question is followed by the translation of the second answer, and so on. It is good to have snatches of the interviewee's voice occasionally, especially in a long interview, as a reminder that we are using an interpreter. What is totally removed in the editing is the translation of the interviewer's questions. Naturally it is best to use a

translator's voice similar to that of the interviewee, i.e. a man for a man, or a young girl for a young girl, etc. While it is not always possible to do this in the news context it should be carefully considered for a documentary or feature programme.

4

Being interviewed

Mesmerised perhaps by the 'media moguls' who revel in the cut and thrust of the questioning which appears on the nation's television screens, standing in awe of the interview barons who probe the judgements of the greatest in the land, some people are understandably a little fearful of being interviewed, even by their own local station. They may feel that they are at the mercy of the interviewer and let their minds go blank, hoping for the best. While the previous chapter insists that the overall initiative remains with the interviewer, there are processes which the interviewee must bear in mind — after all the reason for the broadcast lies within the interviewee, he or she is the expert.
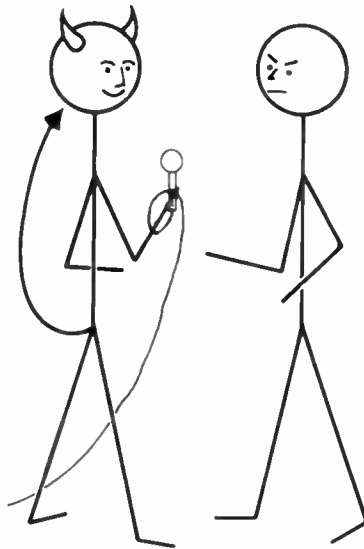
Fig. 4.1. The interviewee should not be nervous — after all, he is the one with the information, the expert! Note even this interviewer loops the microphone cable through his hand to prevent noise caused by cable movement.

Aims and attitudes

For someone about to be interviewed it is essential to recognise what an interview is and what opportunities it presents, and what it is not.

For example it is not a confrontation, which it is the interviewer's object to win. An interviewer whose attitude is one of battle, to whom the interviewee represents an opponent who has to be defeated, will almost inevitably alienate the audience. The listener quickly senses such hostility and the probability is that he will side with the underdog. It is easy to cause affront to the listener's sense of fair play and he generally feels that the balance of advantage already lies with the broadcaster. For an interviewer to be unduly aggressive therefore is counter-productive. Neither is an interview a 'point scoring' operation — this is best left to the debate and the discussion. A would-be interviewee therefore need not feel that he is going to be up against the views of someone else, other than in the indirect 'devil's advocate' form referred to earlier.

On the other hand, an interview is not a platform for the totally free expression of opinion. The assertions made are open to challenge, if not within the interview itself, then possibly in an adjacent 'balancing' interview. The interviewee may not even know about this unless he remembers to ask, but it does illustrate the need for some preparation on his part. He needs particularly to realise that even if nothing positive is said, an impression will certainly have been made. Radio is to do with pictures and the listener will visualise some sort of image to accompany the broadcast. The most useful impression which an interviewee can convey is one of credibility. Only when the listener is prepared to believe in the interviewee, or for that matter any speaker, will he begin to pay much attention to what is being said.

What the interviewee should know

Since it is impossible to interview someone who does not want to be interviewed, it is reasonable to assume that the arrangement is mutually agreed. The broadcaster in contacting a potential interviewee asks whether an interview might take place. The information which the interviewee needs at this point is as follows:

(1) What is it to be about? Not the exact questions but the general areas, and the limits of the subject.
(2) Is it to be broadcast live or recorded?
(3) How long is to to be? Is the broadcast a major programme or a short item? This sets the level at which the subject can be dealt with and helps to guard against the interviewee recording a long interview without his being aware that it must be edited to another length.
(4) What is the context? Is the interview part of a wider treatment of the subject with contributions from others or a single item in a news or magazine programme?
(5) For what audience? A local station, network use, for syndication?
(6) Where? At the studio or elsewhere?
(7) When? How long is there for preparation?

No potential interviewee need feel rushed into undertaking an interview and certainly not without establishing the basic information outlined above. Sometimes a fee is paid but this is unlikely in community radio; it is worth asking about.

Shall I be interviewed?

Having obtained an overall picture of what the broadcaster wants, the potential interviewee must ask himself whether he is the right person to be interviewed. Broadcasters will generally approach the person they believe to be most closely involved in the matter but their knowledge of contacts is not infallible. They may go to a company chairman when the PRO would be more appropriate, or they might approach the bishop when one of the lay workers is more informed on the factual detail as opposed to the policy involved.

In deciding whether to be interviewed or not, there may be considerations of possible repercussions at home or at work, the publicity value, or the personal satisfaction of broadcasting. It may also be necessary to ask what the broadcaster would do if there were a refusal to be interviewed. There are at least three courses open to him — to drop the subject altogether; to ask someone else; to broadcast the fact that 'no comment' was forthcoming. This last has the inevitable innuendo that there is something to hide; in this situation the listener should know why a full interview is not possible.

Making time for preparation

The broadcaster may telephone initially and on securing consent to an interview arrive with his portable recorder later that day. Alternatively, he may arrange a studio interview several days in advance. Here there is time for preparation by the interviewee. On the other hand, the interviewer may arrive equipped with his recorder and ask for an interview on the spot — or even telephone and tell the interviewee that he is already on the air! This last technique is bad practice, and besides contravenes the basic right of an interviewee that his telephone conversation will not be broadcast or recorded without his consent. There can be no question of doing this without his knowledge. It should be a standard procedure for all broadcasters that in telephoning a potential interviewee nothing is begun, recorded or transmitted without the interviewee being in possession of all the information outlined earlier. Even so, to be rung up and asked for an interview there and then is asking a great deal and no one should feel obligated to accept this invitation. It is in no-one's interest, least of all the listener's, to have all ill-thought out interview with incomplete replies and factual errors.

The broadcaster may ask for an immediate reaction to a news event and the interviewee may be perfectly prepared, indeed anxious to give it. It is however worth making sure that you are fully up-to-date on the news story before stating your views. It is likely to need thinking through, even briefly; there may be facts to check and other arguments to consider. The broadcaster has his deadline and is not in a position to wait indefinitely, but there may be good reasons why the potential interviewee suggests some slight delay, say ten

minutes. This is not to remove the possibility of the immediate interview by telephone, the quick comment, the emotive 'gut' reaction.

Preparing for the interview

Knowing now the subject areas to be discussed, the interviewee needs to crystallise and hold in the front of his mind the *two* most important points he wants to put over. These are the *key points* which he believes should be made — irrespective of the questions he is asked! If he and the interviewer are of a similar mind, these points will be obvious and will occur naturally as the response to questions. If not, the interviewee should include them where he feels it is appropriate.

Recognising the interviewer's role as 'devil's advocate', the wise interviewee will prepare for the possible *counter-arguments* which might be put to him. He should realise that the listener is likely to identify more readily with reasoned argument, based on a capacity to appreciate both sides of a case, than with dogma and bigotry. Accepting the existence of an opposite view and logically explaining why you believe it to be wrong, is one of the best ways of sounding convincing on radio.

Whatever is said is enhanced by good *illustration* which underlines the point being made. Drawn from the interviewee's own experience and conjuring up the appropriate pictures, an illustration is a powerful aid to argument. It should be *brief, factual, recent* and *relevant* — that is both relevant to the case being put and to the experience of the listener. The intention is that there should be a point of contact, a means by which the listener can identify with the interviewee. For community radio this will almost certainly mean that the illustration is 'local'. For example in interviewing a police officer about vandalism, a question might be put about unemployment as a possible cause. After answering the question, the interviewee might well illustrate his point with 'For example only last week we had a case of two boys in the city centre who . . .' To be effective, illustrations have to be thought about in the interviewee's preparation time.

Check the *essential facts* of the interview — the amount of money committed, the name of the person involved, the tonnage of cargo exported, etc. It is important not to appear too glib, but an interviewee who is in possession of the facts is more likely to gain the respect of the listener.

The interviewee has now prepared his two key points, counter arguments, illustration and facts, and on meeting the interviewer he confirms with him the aim of the interview, its context and duration.

Nerves

It is not the slightest use telling anyone 'not to be nervous'. Nervousness is an emotional reaction to an unusual situation and as such it is inevitable. Indeed it is desirable in that it causes the adrenalin to flow and improves concentration — with experience it is possible to use such 'red light' tensions constructively. On the other hand, if the interviewee is completely relaxed he may appear to be blasé about the subject and the listener may react against

this approach. In practical terms he should listen hard to the interviewer and look at him; eye contact is a great help to concentration.

Making an impression

In aural communication information is carried on two distinct channels—*content* (what is said) and *style* (how it is said). They should both be under the speaker's control and to be fully effective one must reinforce the other. Due however to stress, it is not always easy, for example, to make a light point lightly. Without intention, it is possible to sound serious, even urgent and the effect of making a light point in a serious way is to convey irony. The reverse, that of making light of something serious, can sound sarcastic. The problem therefore is how to appear natural in a tense situation. It may be useful to ask yourself 'how should I come over?'

In discussing the 'images' or impressions which people want to project, the same epithets invariably occur. Interviewees wish to be seen as friendly, sincere, human, competent, etc. The following list may be helpful:

(1) To be *sincere* — say what you really feel and avoid acting.
(2) To be *friendly* — use an ordinary tone of voice and be capable of talking with an audible smile. Avoid 'jargon' and specialist language.
(3) To appear *human* — use normal conversational language and avoid artificial 'airs and graces'. Admit when you do not know the answer.
(4) To be *considerate* — demonstrate the capacity to understand views other than your own.
(5) To be *helpful*—offer useful, constructive practical advice.
(6) To appear *competent* — demonstrate an appreciation of the question and ensure accuracy of answers. Avoid 'waffle' and 'padding'.

This is of course no different from the ordinary personal contacts made hundreds of times each day without conscious thought. What is different for a broadcast interview is that the stress in the situation can swamp the normal human qualities, leaving the 'colder' professional ones to dominate. An official concerned to appear competent will all too easily sound efficient to the point of ruthlessness unless the warmer human characteristics are consciously allowed to surface.

The most valuable quality is the interviewee's credibility. Only when the listener believes him as a person will he be prepared to take notice or act on what he is saying. For this reason, style is initially more important than content.

Non-answers

The *accidental evasion* of questions may be due to the interviewee genuinely misunderstanding the question, or the question may have been badly put; in either case the interview goes off on the wrong tack. When recording this is easily remedied, but if it happens on the air the listener may be unable to follow and lose interest, or he may think the interviewee stupid or the interviewer incompetent. One or other of the parties must bring the subject back to its proper logic.

The *deliberately evasive* technique often adopted by the non-answerer is to follow the interviewer's question with another question of his own:

'That certainly comes into it, but I think the real question is whether . . .'

If the new question genuinely progresses the subject, the listener will accept it. If not, he will quickly detect evasion and will expect the interviewer to put the question again. Rightly or wrongly the listener will invariably believe that someone who does not answer has something to hide and is therefore suspect.

There may be genuine reasons why '*No comment*' is an acceptable answer to a question. The facts may not yet be known with sufficient certainty, there may be a legal process pending, a need to honour a guarantee given to a third party, or the answer should properly come from another quarter. It may be that an interviewee legitimately wishes to protect himself from his business competitors — a factor which occurs in the sporting as well as the commercial world.

Nevertheless, the interviewee must be seen to be honest and to say why an answer cannot be given:

'It would be wrong of me to anticipate the report . . .'
'I can't say yet until the enquiry is finished . . .'
'I'm sure you wouldn't expect me to give details, but . . .'

Even if the inability to give a particular answer has been discussed beforehand, an interviewee should still expect to have the question put if it is likely to be in the listener's mind.

In an attempt to slow down the questioning rate or avoid the obvious next question, an interviewee may end his answer with a question back to the interviewer.

'. . . a lot of people are like that, don't you think?'
'. . . so that's what I did; how would you have gone about it?'

It is a golden rule that interviewers never answer questions and the interviewee will get himself ignored for trying to turn an interview into a discussion. The listener, however, may already have gained the impression that the interviewee is unwilling to be interviewed. As with all non-answers this damages his credibility.

The triangle of trust

The whole business of interviewing is founded on trust. It is a 3-way structure involving the interviewer, the interviewee, and the listener.

The interviewee trusts the interviewer to keep to the original statement of intent regarding the subject areas and the context of the interview, and also that he will maintain both the spirit and the content of the original in any subsequent editing. The interviewer trusts the interviewee to respond to his questions in an honest attempt to illuminate the subject. The listener trusts the interviewer to be acting fairly in his interests and believes there to be no secret collusion between the interviewer and the interviewee. The interviewee trusts the listener not to misrepresent what he is saying and to understand that within the limitations of time the answers are the truth of the matter.

This 'triangle of trust' is an important constituent not only of the media's credibility but of society's self-respect as a whole. Should one side of the triangle become damaged — for example listeners no longer trusting broadcasters, interviewees no longer trusting interviewers, or neither having sufficient regard for the listener — there is a danger that the process will be regarded simply as a propaganda exercise. Under these conditions it is no longer possible to distinguish between 'the truth as we see it' and 'what we think you ought to know'. Consequently, the underlying reason for communication begins to disappear, thereby reducing broadcasting's democratic contribution. The fabric of society is affected. This is to take an extreme view, but every time a broadcaster misrepresents, every time an interviewee lies or a listener disbelieves, we have lost something of genuine value.

Writing

Writing for radio is the storage of talk. Presentation
of a script at the microphone is the retrieval of
that talk out of storage. The overall process should
give the listener the impression that the broadcaster's
talking to him rather than reading at him. It's
prepared of course, but it should sound spontaneous.

   This chapter's written in a quite different style
from the rest of the book, - it'll contain things
which are quite against the rules of 'literary'
convention. It may even be difficult for some people
to read; the point is, though, that it's in a style
which is all right for me to say, - it's spoken
English, - a personal talk set out in a way which
I would find suitable as a script. Everyone of course
has to find their own way, and a style such as this
for a relaxed twenty minute talk certainly wouldn't
do as a voice piece in the news. That would have to
be much more tightly written.

   I mentioned that this might be difficult to read.
There's good reason for this and it's important to
realise that writing words on paper is a very crude

form of storage. It doesn't give you half what you
want in order to make unambiguous sense of it. It
doesn't for example, give you any idea of where the
emphasis should go. It's possible to underline certain
words but this isn't the whole story by any means.
The written word provides no indication of the vocal
sounds intended, - the shape of the sentence as it's
said. Yet quite a lot of the meaning of words and
phrases is conveyed in the subtleties of their
inflection. Neither does the page say how it should
sound in terms of speed, or where the pauses should
go. Yet all these qualities help to convey sense,
- without them, the words on the paper can be virtually
meaningless - or at least ambiguous. Take this
sentence:

   "You mean I have to be there at ten, tomorrow."
The words stay the same but the precise meaning can
alter 8 ways depending where you put the emphasis.
Just try it out loud!

   "You mean <u>I</u> have to be there at ten tomorrow?"
   "You mean I have to be there, at ten <u>tomorrow</u>"
                              - and so on.

   So <u>writing</u> is only one part of the communication
process, and it isn't completed until the script is
<u>said</u>, - and said properly. It's difficult enough
to do well when you're writing something which you're
going to read yourself, it's doubly so when writing
for someone else to read.

   Then why do we have a script at all? - Wouldn't
it be better just to have notes to 'talk through'
at the microphone? This is possible, but it's not

always advisable - even when the writer is the same
person as the broadcaster. No, there are good reasons
for having a script, like:-

- making sure there's as little stress in the
  actual broadcast as possible. The script is
  a 'safety-net' - at least you know what you're
  going to say, even though the script won't tell
  you exactly <u>how</u> you're going to say it.
- other points are that a full script makes sure
  that nothing is left out, that it runs to time
  and all the information and arguments are
  presented in the right order. One of the most
  important things about the spoken word is that
  it must be <u>logical</u>. Try telling a joke and
  getting the information in the wrong order!
  It falls flat on its face of course. In print
  it's different because the whole thing is there
  in front of you, - you can look back at something
  again to make sense of it. With 'talk' - it
  has to make sense there and then, or it's likely
  not to make sense at all. And this point depends
  very largely on getting the material in a logical
  order.
- Finally, why we write a script, is obviously
  to enable other people to communicate our
  thoughts, - to give some permanent form to the
  otherwise very transient nature of speech.

Well, having established the reasons '<u>why</u>', let's
have a look at '<u>what</u>' we're going to write.

The first thing to do, and it applies to any piece
of communication, is to decide what it is you want

to say. What are the points you want to make, and
what sort of impression do you want to leave behind?
You can never be 100% successful in this, but at least
it'll work a good deal better than if you have no
aims at all. You know those times when you're doing
a bit of writing and you stop because you somehow
can't finish the sentence - you've written yourself
into a corner. That's when you cross the sentence
out, put your pen down and say to yourself, "What
am I trying to say?" It's often a very good question!

So you list out your main points and make sure
that you've got the necessary facts or illustrations
to support them. Then in the cause of logic, you
assemble these ideas and put them in the right order
- the order which makes them most easily understood
by your listener. And you can't do this without having
the listener in mind, - a typical member of your
intended audience. A housewife at home, a child at
school, or a man in his car. It's a great help actually
to visualise your listener as you write, it helps
to prevent it becoming patronising. We often say
'how can I put this across?' Across, - this implies
a horizontal communication. Not 'how can I put it
down?' which is the patronising attitude - or worse
still 'how can I put it up?' which sounds servile
- but 'across' - someone on the same level as yourself.
That's where the writer should be with regard to his
listener.

This approach also stops the writer from suffering
the dread disease of 'difficult' words. We all like
to impress, but if we want to communicate then what's

important is not the impressive word, but the right
word, - the one that's right for our audience I mean.
After all, if we want to sound as though we're talking,
we'll use the everyday language of our natural speech
rather than the stilted 'officialese' or jargon that
so often appears in print. And if we want to sound
as though we're caring, - caring about our audience
- then the impression we want to make won't be the
broadcaster saying "aren't I clever!" No, the point
is to express, not impress; but I'll come back to
this business of language in a moment.

A further point about visualising your listener
is to think about broadcasting to one person. Radio
is one of the 'mass media' and it goes to thousands,
millions of people. Yet your message ends up in the
mind of the individual listener. It's wrong to think
of radio as a group experience - like an audience in
a hall, - or to treat it as a massive public address
system reaching out across the housetops and
countryside. So avoid phrases like "listeners may
like to know..." or "some of you will have seen..."
Talking just to one person you'd say, - "you may like
to know..." and "If you've seen..." It's a
communication between you, the broadcaster, and the
listener with his own thoughts. So write for the
individual, - he'll feel that you're talking just
to him and your words'll have much more impact.

So, having decided what we want to say, and in
what order; and we know who we're talking to; let's
set about the script itself.

Radio is an immensely 'switch-offable' medium,

you're talking to a very non-captive audience, so
the very first sentence must be interesting. Don't
spend a long time 'getting into' the subject, start
with an idea that's intriguing, relevant, or at least
unusual. And follow it with something which tells
me what you're on about, - don't leave me in doubt
about that!

   "The first sentence must interest, the second must
inform". It's an over-simplified 'rule of thumb'
but it's the right idea. Now you go through your
list of points linking them together in a logical
way, threading them in a sequence like beads on a
string. And always make it quite clear what you're
doing.

   Let me explain. If you get to a difficult point,
you might include the phrase, - "how can I explain
that?" This is a signal that you're about to digress
into an amplification of it. Or you might finish
a point and join it on to the next one by saying,
- "Let's go on from there to see how this works in
practice". This is a clear indication to your audience
that you're introducing a new topic, - in this case
turning from theory to its practical application.
Such 'indicators' are generally called 'signposts',
and there are plenty in this script, - the trouble
is, in the written word they can be rather tedious,
since on the printed page they normally appear much
more economically as paragraph headings. When spoken
though, they generally sound alright, indeed without
'signposts', it's easy for the listener to lose your
train of thought.

   Now, I said I'd come back to the actual use of
language, and the point I want to make is this; that
the overall style of the broadcast talk should be
conversational. I don't mean it should be sloppy
or casual, - some conversation can be quite formal;
and in radio, writing 'the news' generally adopts
a more 'careful' approach. But writing the links
for a magazine programme, or compiling the weather
forecast, a religious talk, book review - or any piece
of spoken communication - it should sound colloquial,
- like someone talking. This means that 'it is' becomes
'it's'; 'I would' sounds better as 'I'd'. You have
splendid words like 'this'll' and 'shouldn't've'.
They look terrible on the printed page because we're
not used to seeing them, but listen to people talking,
- they're the stuff of living language, - and good
language at that.

   There's a golden rule for getting the spoken word
on to paper - and that's simply to speak it out loud
as you go along, - and to write down what you hear.
Don't write it in your head, but from the sounds
you make as you talk. Once it's on the page you can
always change it, re-arrange and polish it, but the
basis of your script will be a spoken language - much
easier to put across in the studio. How many times
have you heard someone say - "as soon as I said it,
I knew it was wrong"? Well then, as a broadcaster,
don't let anything go down on to paper until you've
actually heard it, and known it to be right.

   Something else happens when you talk your sentences
out loud, - they get shorter. And they're not

necessarily the kind of sentences we were taught to
write at school. But they have colour and life, and
meaning - if you let them. Short sentences are easier
to read, and easier for the listener to understand.
You get away from the complexities of relative clauses,
- this sort of thing:-

Jim, who is just about to leave the school where
he's been for five years, which included a time as
head boy, is looking for a job.

That's not much good on the air, and the three thoughts
are much better written as three sentences:-

Jim has been at school for five years. This
includes a time as head boy. He's now about to leave
and is looking for a job.

A further point about saying your script out loud
as you write it, is that it helps to avoid the tongue
twister or the unintentional meaning. The following
examples are quite genuine pieces of broadcast script.
They may look alright on paper, but try them out loud:-

- Six Swedish fishing vessels sailed into the
  Skagerrak.
- This morning our reporter spoke to Mr... on
  the golf course, as he played a round with his
  wife.
- The Union said the report was wrong.
- At first, supplies of the new car would be
  restricted to the home market.

I'm still wondering about this last one. I think
it means that the new car would only be sold at home.
But couldn't it also mean that supplies to the home
market would be restricted and that production was all

going for export? It depends on the emphasis given
to the word 'restricted'. The sentence itself is
unclear.

   Here's another example I heard in a major news
bulletin. It was after a shooting incident in the
street. 'The man was found lying on the pavement
by his wife'. Now, what picture does that give you?
Does it mean he was lying on the pavement beside his
wife? Or should it have been - 'His wife found him
lying on the pavement'? The point is that your meaning
should be unambiguous - even to someone who's not
totally concentrating on what you're saying.

   Punctuation should help the reader extract the
sense from the writing, but it's a very flimsy device
when the whole meaning depends on a comma or two.
Take my third example - The Union said the report
was wrong. As it stands, it's the report that was
wrong and the Union that's saying so, - the Union
said the report was wrong. Put in two commas and
the situation is exactly reversed, - the Union, said
the report, was wrong. Look hard at any sentence
containing a dependent clause or bracketed phrase,
- is there an easier, a more natural way of saying
it? In punctuating a script, I'm very fond of the
'comma dash', - you may have noticed! This joins
phrases together yet shows me that there ought to
be a small pause. Some people's scripts are covered
with all sorts of marks, — arrows to indicate
inflection, musical notation, even directions like
'smile', — everything designed to help the reader
re—create the way he originally wanted it to sound.

  So much for punctuation. The really important thing
is that when you make your points, illustrate them
with parables, and anecdotes, — tell stories,
re—live events. And remember that radio is an
immensely visual medium, — paint pictures, — and
yes, in colour, and appeal to all the senses, — the
sense of smell, the sense of touch so we can all
appreciate the roughly dimpled skin of this
brilliant fresh orange that I have here in my
hand, — and the pungent smell and squirting juice as
I cut into it. Ah — and — mm — the succulent
sweetness of this first bite. Did you see something
of that? I hope so for it is the stuff of
radio, — for a talk, or a live commentary.

    Some points now on the mechanics of a script.
If at all possible it should be typed, double or even
triple spaced to make it easier to read - a large
typeface rather than a small one, - and leave clear
margins on both sides. This enables alterations and
additions to be made without obliterating the part
you want. If a script has to be written in longhand,
make sure it's totally clear for the reader. Some
people put handwritten scripts all in capital letters,
but this reduces the amount of information on the
page in terms of how you read it, - there's less
warning for example about the start of a new sentence,
or a 'proper' name.

  The script used in the studio should be on good
quality paper, — it's much quieter to handle; and to
avoid unnecessary turning of pages, type only on one
side of the paper.

The page itself should be set out with clear
paragraphs indicating the separate thoughts. A sentence
shouldn't run over to the next page but each sheet
end with a full stop. Indeed, sometimes it may be
desirable not to split an important phrase across
two lines of script, - after all you wouldn't do it
if you were writing figures.

On the subject of numbers, there are three schools
of thought, - writing them in figures, writing them
in words, or putting it both ways. For example:-

The Ministry of Defence expenditure on this item
would amount to one and a quarter million pounds.

The cost of the new engine, only came to $380.

Twenty-seven (27) people were injured in the accident.
The only rule is that the meaning should be clear.
The reader can always cross out the form he doesn't
want.

Now, what about the speed and timing? Our reading
speed varies, but a rate of 160 to 180 words a minute
would be normal for a newscast. To give a quick
reckoning on the time a script will take, a single
typed line is 3 to 4 seconds, and a double-spaced
page of A4, - 27 lines, say 270 words, about $1\frac{1}{2}$ minutes.
A certain amount of precision is needed here, a
thirty second voice report means about 85 words, a
$2\frac{1}{2}$ minute piece for the breakfast programme will be
450. It's a very great art, and a discipline, to get
what you want to say to fit neatly into the time
allowed, but the clock is a hard taskmaster.

Now, on finishing. We started with an interesting
sentence, and it's often a good idea in a general

talk to end with a reference back to that same thought.
It reinforces the point and can act as a 'trigger'
for the later recall of what you said. Of course,
if you want to leave your listener with a specific
thought, or motivate him to a particular action, then
these points must come right at the end. What I'm trying
to say here is that there <u>must</u> <u>be</u> an end, - not a
sudden stop, or a drifting away, - but a clear 'rounding
off'. A resumé perhaps, or a provocative question
to stimulate the listener to further thought. Openings
and closings - without doubt the most difficult part
of any broadcast, - but the final word is often how
you'll be remembered.

   And if, in between the beginning and the end, you've
avoided the kind of convoluted literary prose which
so often comes out when we put pen to paper, but
instead have used words in a style which has the texture
of a living, spoken language, - and if the listener
can understand the language, he may understand the
content. He may even have come closer to understanding
<u>you</u>. In fact, you'll have <u>communicated</u>.

   So to summarise on what's often called 'writing
for the ear'. Here are my twelve points.

   - decide what you want to say.
   - list your points in a logical order.
   - make sure the opening is interesting and
      informative.
   - write for the individual listener, - visualise
      him or her as you write.
   - speak out loud what you want to say, then write
      it down.

- use 'signposts' to explain the structure of
  your talk.
- paint pictures, tell stories, and appeal to all the
  senses.
- use ordinary conversational language.
- write in short sentences or phrases.
- use punctuation to aid clarity for the reader.
- type the script, double spaced, wide margins
  with clear paragraphs.
- and when in doubt, keep it simple, - remember,
  the idea is to express, not impress.

Having got our script on to paper, I'll be dealing
later on with Presentation - that's the art of getting
it off again!

Cue material

The paperwork which accompanies a recorded interview or other item such as a programme insert, has two quite separate functions. The first is to provide the studio staff with information. The second is to introduce the item for the listener so that it makes sense in its context.

The general rules concerning cue material apply equally to the links between items in a sequence programme and to the introductory announcements given to whole programmes.

Information for the broadcaster

Before a recorded programme or item can reach the air, the producer, presenter or studio operational staff require certain information about it. The way these details are laid out on a single page is standard and a sheet of cue material is recognisable as such in most radio stations round the world. It must indicate the following:

(1) Name of the radio station.
(2) Title of the programme.
(3) Date of the intended transmission.
(4) Reference title of the piece, a 'catch line'.
(5) Suggested on-air introduction.
(6) The 'in' and 'out' cues of the programme as they appear on the tape.
(7) Precise duration of the material.
(8) Suggested on-air 'back-announcement'.
(9) Any additional details of a technical or programme nature — editing requirements, unusual tape speed, mono/stereo, etc.

The cue material sheet may also include a note of payment to be made to the contributor. Thus all the information about the programme or item is drawn together on one page, as in the example opposite.

Tapes may carry a recording number in which case this should appear at the bottom of the cue sheet. However, numbering systems can be time consuming to administer and no system should be introduced unless it saves effort and is actually useful. There is sufficient information on the

example given here for the tape to be easily identified and most radio stations do without recording numbers, especially for insert tapes.

Some of the details will also appear on the outside of the tape-box — station, programme and catch-line or slug. The catch-line should be repeated on the spool itself — written on a small adhesive label rather than on the plastic.

The producer can often make his decisions based on the cue sheet information — whether in fact to use the item, or where to place it in the programme. If he knows the contributor well and is short of time, he can sometimes use the tape without hearing it first. This is not a recommended procedure, and the overall responsibility for the programme still rests with the producer.

1	***Radio Norfolk* — Cue Sheet**
2	**PROGRAMME:** Countywide
3	**DATE:** 26th October
4	**CATCHLINE:** Boat appeal
5	**OPENING ANNO:**
	Norfolk's best known charity is launching a major new appeal to help people with dis- abilities in the county. The Friends of Freedom Group which already runs outings on its own boat is hoping to raise £500,000 to provide a new boat and build an adventure club.
	Our reporter Julie Thompson asked the volunteer skipper of the MV Freedom, Peter Campion, what he hoped to do as a result of the appeal.
6	**CUE IN:** (Water FX fade up) One of the first things will be . . .
	CUE OUT: . . . at the beginning of next year. (boat FX fade 3″)
7	**DURATION:** 2′47″
8	**BACK ANNO:** Peter Campion from the Friends of Freedom Group. And that appeal opens on Saturday.
9	$7\frac{1}{2}$ i.p.s. Ready for transmission **PAYMENT** Thompson £. . . . . .

The studio operator also has all the information he needs to ensure the tape gets safely on the air. Prior to transmission the tape is checked to 'take level' and to confirm the 'in' cue.

The studio presenter has a clear indication of how to introduce the tape. He may have to alter words to suit his own style, but the good cue writer will write in a way which fits the specific programme.

In the example here the interviewer's first question has been removed from the tape and transferred to the introduction; the tape then begins with the first answer. This style is a very common form of cue but it is only one of many and it should not be over-used, particularly within a single programme. It is easy for cue material to become mechanical — to 'write in a rut' — it is important to search for fresh approaches, and some are given in later examples.

Information for the listener

There is an art to writing good cue material. The piece of writing which introduces an item has three functions for the listener. It must be interesting, act as a 'signpost' and be informative.

The information must be *interesting*. The first sentence should contain some point to which the listener can relate. It should be written in response to likely questions: 'What is the purpose of this interview?' 'Why am I broadcasting this piece?' Having found the most interesting facet — the 'angle' most relevant to the listener — the writer starts from that. But more than this, it should be relevant to as many listeners as possible. It should not be written so as to exclude people. To take a local example:

Not: There's a big hole in the road at the corner of Campbell Street and the Broadway.

But: They are digging up the road again. Everywhere you go traffic is diverted by a hole with workmen in it. What's going on? For example at the corner of . . .

The first intro will only interest people who drive down Campbell Street. The second is aimed at all road users, pedestrians too. To draw people in, write from the general to the particular. Another approach is to ask the occasional question as an attempt to involve the listener in a subconscious response.

Cue material is a *signpost* and should make a promise about what is to follow. Having gained the listener's interest, it is then important to satisfy his expectations.

The introduction must be *informative*. One purpose of an introduction is to provide the context within which the item may be properly understood. There may have to be:

(1) A summary of the events leading up to or surrounding the story.
(2) An indication of why the particular interviewee was chosen.
(3) Additional facts to help the listener's understanding. It may be necessary to clarify technical terms and jargon, or to explain any

background noise or sounds which would otherwise distract the listener.

(4) The name of the interviewer/reporter.

This last piece of information, generally the last words of the cue, can become a dreadful cliché:

'Our reporter, John Benson, has the details.'

This is a common introduction to reporter packages and wraps and if overdone becomes as boring as the 'and he asked her' introductions noted above for interviews. Cue writing therefore needs a fertile imagination in order to avoid predictable repetition.

Unless the interview or voice piece is very short, say less than a minute, it will be necessary to repeat after an interview the information about the interviewee. There is a high probability that the listener is not wholly committed to the programme and heard the introduction only superficially, despite a compellingly interesting opening line. The listener's full attention frequently becomes engaged only during the interview itself. Having become fascinated or outraged, it is afterwards that he wants to know the name of the interviewee and their qualification for speaking.

Radio is prone to fashion and there has been a tendency for the 'back-announcement' to be omitted. It is said that it slows the programme down. It is true that a 'backward pointing' signpost may have such an effect, whereas introductions help to drive the programme forward. However the argument in favour of a back-announcement puts listener information above programme pace. It also helps to give the impression that the presenter has been listening. Without some reference to the interview, the presenter who simply continues with the next item can sound discourteous. Broadcasters should remember that to the listener, pre-recorded items are people rather than spools of magnetic tape. They should therefore be referred to as if they had actually taken part in the programme.

The practice of omitting the back-announcement is probably an example of radio being influenced by television. In vision, it is possible to superimpose on an interview a caption giving the name and qualification of the interviewee. This can happen at any time throughout a piece and makes a back-announcement unnecessary. The two channels of television information, sound and vision, can be used simultaneously for different purposes. This is not the case with radio where a statement of the interviewee's name is often the simplest and most logical way of 're-informing' the listener.

Two further examples will illustrate the functions of cue material — that is to obtain the listener's interest, provide context, explain background noise, clarify technicalities and to 'back announce'.

Example one

```
ANNCT:    The strike at Abbots Electrical is over.
          Involving 45 assembly workers and lasting
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nearly two weeks, the strike has meant a
loss of production worth over £100,000.

The dispute began when three men were
sacked for what the management called,
"persistent lateness affecting the produc-
tivity of other workers".

The Union objected, saying that the men
were being "unduly victimised".

Two of the men have since been reinstated.
Is such a stoppage worth it? On the now
busy shop floor, our reporter spoke to the
Union representative, Joe Frimley.

CUE IN: (noise 3″) No stoppage is ever ...

CUE OUT: ... making up for lost time. (noise 2″)

Duration 2′ 08″

ANNCT: Joe Frimley, the Union representative at
           Abbots Electrical.

When a recording is made against background noise, it is useful to begin
the piece with two or three seconds of the sound alone. The insert tape can
be started before the cue and faded up under speech so that its words begin
neatly after the introduction. Similarly at the end of the insert, the
background noise is faded down behind the presenter's back-
announcement. Such a technique is preferable to the jarring effect of
'cutting' on to noise.

In the interests of fairness and objectivity, such an item would invariably
need to be followed and 'balanced' by a management view of the situation.

Example two

ANNCT: Space research and your kitchen sink. It
           seems an unlikely combination but the same
           advanced technology which put man on the
           moon has also helped with the household
           chores.

           For example, the non-stick frying pan uses
           a chemical called Poly-tetra-fluoro-
           ethylene (Pron: Poli-tetra-flŏorŏ-
           éthileen). Fortunately it's called PTFE for
           short. Used now for kitchen pans, this
           PTFE was developed for the coating of
           hardware out in space.

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            Dr John Hewson of the National Research
            Council explains.
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CUE IN: We've known about PTFE for some time ...

CUE OUT: ... always looking to the future.

<div align="right">Duration 3' 17"</div>

ANNCT: Dr Hewson

In this case the cue material had the job of explaining what PTFE is. It was referred to in the interview without clarification, so the listener has to be prepared for the term. Cue material is a great way of solving any problem of this sort in a pre-recorded item.

The last name in the cue is generally — but not always — the first voice on the tape. To cue the 'wrong' person is confusing. For example: 'Our reporter Bill West has been finding out how the building work is going.' The voice that follows is assumed to be that of Bill West; if it is actually the site manager it may be some time before the listener realises the fact.

In addition, therefore, to the several functions of cue material, the writer seeks both variety and a lack of ambiguity. Cues and links that are well thought out will make a real difference in lifting a programme above the rest. It may take time, but it will be time well spent.

News — policy and practice

The best short definition of news is 'that which is new, interesting, and true'.

'New' in that it is an account of events which the listener has not heard before — or an update of a story familiar to him. 'Interesting', in the sense of the material being relevant, or affecting him in some way. 'True', because the story as told is factually correct.

It is a useful definition not only because it is a reminder of three crucial aspects of a credible news service but because it leads to a consideration of its own omissions. If all news is to be really 'new' a story will be broadcast only once. Yet there is an obvious obligation to ensure that it is received by the widest possible audience. At what stage then can the news producer update a story, assuming that the listener already has the basic information? What do we mean by 'interesting' when we speak not of an individual but of a large, diversified group with a whole range of interests? Do we simply mean 'important'? In any case, how does the broadcaster balance the short-term interest with the long? And as for the *whole* truth — there simply is not time. So how should we decide out of all the important and interesting events which confront us, what to leave out? And concerning what is included, how much of the context should be given in order to give an event its proper perspective? And to what extent is it possible to do this without indicating a particular point of view? And if the broadcaster is to remain impartial, do we mean under *all* conditions?

These are some of the questions involved in the editorial judgement of news. To begin with we need to consider not the practical solutions, but the criteria by which possible answers may be assessed.

Starting with the listener, what does he expect to hear? Certainly in a true democracy he has a general right to know and discuss what is going on around him. There will be limitations, defined and maintained by law — matters of national security, confidences of a business or private nature, to which the public does not have rightful access. But these reasons can be used to cloak the genuine interest of the individual. Caught in such a conflict, the broadcaster is faced with a moral problem — the not unfamiliar one of deciding the greater good between upholding the law and championing the rights and freedom of the individual. At such times, those involved in public

responsibility should consider two separate propositions:

(1) Broadcasters are not elected: they are not the government and as such are not in a position to take decisions affecting the interest of the state. If they go against the practice of the law they do so as private citizens, with no special privileges because they have access to a radio station.
(2) Associated with the public right to know, is the private right not to divulge. A society which professes individual freedom does not compel or allow the media to extract that which a person wishes lawfully to keep to himself.

Thus the listener has a right to be informed; but although the constraints may be few and the breaches of it comparatively rare, the right is not total. Every broadcaster must know where he stands and on what basis his lines of editorial demarcation are drawn.

Objectivity

Some declare it to be impossible, that we are inevitably creatures of our own age and environment, seeing the world through the filters of a particular time and culture. In this sense only God is truly objective. But broadcasters must be concerned with truth—even when quite different perceptions and beliefs are held to be true. Objectivity here means recounting these truths accurately and within their own context, even when they conflict with our own personal values. The difficulty is that professional news judgements must, in the end, rely on personal decisions. This is why the question of individual motivation is so important: *why* do I wish to cover this story in this way?—to tell the truth, or to make a point?

In the case of the BBC, the basis of news and current affairs broadcasting has always been — and still is — firstly to separate for the listener the reporting of events (news) from the discussion of issues and comment (current affairs), and secondly to give both sides of an argument. This is best achieved from the position of being independent of both. Of course there are journalists who see broadcasting as a means of indulging their own attempts at public manipulation, just as there are governments which see news purely in terms of propaganda for their own cause. But people sheltered from unpalatable truths cannot decide, and cannot grow. Of course no government wants, for example, to publicise corruption in high places, but suppose it is there and the broadcasters know that, should it not be investigated and exposed? The political history of the last 200 years shows that if the media does not do it, eventually the people will. Arising from the broadcaster's privileged position as the custodian of this form of public debate, the role of a radio service, even one under government or commercial control, is to allow expression to the various components of controversy but not to engage itself in the argument nor to lend its support to a particular view.[1] What the producer must not do is

[1] This policy of impartiality is by no means universal and in some countries stations are encouraged to take an editorial line. In Britain, radio was for many years the monopoly of the BBC, and had to be as objective as possible. Where there are several broadcasting sources, each may develop its own attitude to political and other controversial issues and like a newspaper attempt to sway public opinion.

to introduce a partiality as a result of his own conscious but undisclosed personal convictions and motivation, even for the best of reasons. He must avoid decisions based on his own religious, political or commercial views — since this is putting himself before his listener. The impartiality of chairmanship is an ideal to which the producer must adhere; any bias will seriously damage his credibility for honest reporting. Yet in a world when one man's 'terrorist' is another man's 'freedom fighter', the very language we use in imparting the facts is itself a matter of dispute and allegiance. In this example one learns to use other, more neutral, words like 'guerrilla', and 'gunman'.

Objectivity becomes more difficult and more crucial as society becomes less ordered in its deliberations and more torn with its own divisions. This is something which many countries have witnessed in recent years. The crumbling of an established code of behaviour alters the precepts for making decisions — it may be possible to act impartially in a discussion on, say the permissive society, but the rest of the station's output is likely to indicate clearly the broadcaster's viewpoint. What is the meaning of impartiality when covering a complex industrial dispute involving official and unofficial representatives, breakaway groups, vocally militant individuals and separate employers' and government views and solutions?

Even more difficult situations are those such as Northern Ireland where there is a 'limited' civil war. Do we give equal time for those who would uproot society — for those who oppose the rule of law? These are not easy questions since there is a limit to the extent to which anyone may be impartial. When one's own country is involved in armed conflict it is probably not possible or even desirable to be neutral — but one must, as far as possible, remain truthful. While society may be divided and changing in its regard for what is right and wrong, it is less so in its more fundamental approach to good and evil. No public medium of communication can function properly and without critical dissent unless society is agreed within itself on what is lawful and unlawful. It is possible to be impartial in a peaceful discussion on attempts to bring about changes in the existing law, but such impartiality is not possible in reporting attempts to overthrow it by force. One can be objective in reporting the activities of the man with the gun, but not in deciding whether to propagate his views.

A former Director General of the BBC, Sir Hugh Greene, said in the sixties, 'I do not mean to imply that a broadcasting system should be neutral in clear issues of right and wrong, even though it should be between Right and Left. I should not for a moment admit that a man who wanted to speak in favour of racial intolerance had the same rights as a man who wanted to condemn it. There are some questions on which one should not be impartial.'

There are those who disagree that race relations is a proper area for showing partiality just as there are those who oppose the underlying acceptance of the Christian faith as a basis for conducting public affairs. This is not an abstract or purely academic issue, it is one which constantly faces the individual producer. He must decide whether it is in the public interest to give voice to those who would challenge the very system of democracy which enables him to provide that freedom of expression. On the one hand to give them a wider currency may be interpreted as a form of public endorsement, on the other to expose them for what they are may result in their total censure.

What is important is the maintenance of the freedom to exercise that choice, and ultimately to be accountable for it to an elected authority. Sir Geoffrey Cox, former Chief Executive of ITN (Independent Television News), has said of the broadcaster's function: 'It is not his duty, or his right, to editorialise on the question of democracy, to advocate its virtues or attack its detractors. But he has a firm duty to see that society is not endangered either because it is inadequately informed, or because the crucial issues of the day have not been so probed and debated as to establish their truth. A good broadcast news service is essential to the functioning of democracy. It is as necessary to the political health of society as a good water supply is to its physical health.'

Democracy cannot be exercised within a society unless its individual members are given a choice on which to make their own moral, political, and social decisions. That choice does not exist unless the alternatives are presented in an atmosphere of free discussion. This in turn cannot exist without freedom — under the law — of the press and broadcasting. The key to objectivity lies in the avoidance of secret motivation and the broadcaster's willingness to be part of the total freedom of discussion — to know that even his editorial judgement, the very basis of his programme making, is open to challenge. Keep the listener informed about what you are doing and why you are doing it — that is the public interest.

Item selection and treatment

From all the events and stories of the day how does the broadcaster decide what to include in the news bulletin? A decision to cover, or not to cover, a particular story may itself be construed as bias. The producer's initial selection of an item on the basis of it being worthy of coverage is often referred to as 'the media's agenda-setting function'. The extent to which a producer allows his own judgement to select the items for broadcast is a subject for much debate. People will discuss what they hear on the radio and are less likely to be concerned with topics not already given wide currency. So is a radio station's judgement as to what is significant, worth having? If so, the process of selection, the reasons for rejection, and the weight accorded to each story (treatment, bulletin order and duration) are matters which deserve the utmost care.

There is sufficient evidence to support the significance of the *primacy* and *recency* effects in communication. This means that items presented at the beginning of a bulletin have greater influence than those coming later — also that the final statements exert an inordinate bearing on the total impact — probably because they are more easily recalled. These principles are made much use of in debates and trials but clearly apply also to bulletins, interviews, and discussions. Who speaks first and who is allowed the last word, is often a matter of some contention.

The broadcaster's power to select the issues to be debated — and their order of presentation — represents a considerable responsibility. Yet given a list of news stories a group of editors will each arrive at broadly similar running orders for a news bulletin designed for a particular audience. Are there any objective criteria?

The first consideration is to produce a news package suited to the style of

the programme in which is it broadcast, answering the question, 'What will my kind of listener be interested in?' A five-minute bulletin can be a world view of twenty items, superficial but wide-ranging; or it can be a more detailed coverage of four or five major stories. Both have their place, the first to set the scene at the beginning of the day, the second to highlight and update the development of certain stories as the day proceeds. The important point is that the shape and style of a bulletin should be matters of design and not of chance. Unlike a newspaper with its ability to vary the type size, radio can only emphasise the importance of a subject by its placing and treatment. A typical five-minute bulletin may consist of eight or nine items, the first two or three stories dealt with at one minute's length, the remainder decreasing to thirty seconds each or less. The point was made earlier that compared with a newspaper this represents a very severe limitation on *total* coverage.

Having decided the number and the length of items, the news producer has to select what is important as opposed to what is of passing interest. When short of time it is easier to gain the interest of the listener with an item on the latest scandal than with one on the state of the economy. The second item is more significant for everyone in the long term, but requires more contextual information. The producer must not be put off by such difficulties, for it is the temptation of the easy option which leads to some justification in the charge that 'the media tends to trivialise'. An effect of the policy that news must always be available at a moment's notice is that stories of long term significance do not find a place in the bulletin. It is after all easier to report the blowing up of an aircraft than the development of one.

A second criterion for selection is to favour items to do with people rather than things. The threat of an industrial dispute affecting hundreds of jobs will rate higher than a world record price paid for a painting. 'How could this event affect my listener?' is a reasonable question to ask. For the listener to a local station in Britain, fifty deaths following an outbreak of typhoid in Hong Kong would be probably regarded with less significance than a road accident in his own area in which no one was hurt. But should it? Particularly in local radio there is a tendency to run a story because of its association with mayhem and disaster rather than its relevance. A pre-occupation with house fires and traffic accidents, called 'the journalists' predilection for ambulance chasing', is to be discouraged.

By definition, news is to do with the unusual and abnormal but the basis of news selection must not be whether a story arouses curiosity or is spectacular, but whether it is significant and relevant. This certainly does not mean adopting a loftily worthy approach — dullness is the enemy of interest — it is to find the right point of human contact in a story. This may mean translating an obscure but important event into the listener's own understanding. A sharp change in the money markets will be readily understood by the specialist. Radio news must enable its significance to be appreciated by the man in the street. The job of news is not to shock but to inform. A broadcasting service will be judged as much by what it omits as what it includes.

Investigative reporting

The investigation of private conduct and organisational practice — and malpractice—is an important part of media activity. Newspapers have long

regarded themselves as watchdogs, keeping an eye particularly on those in positions of public trust. The role of *The Washington Post* in the Watergate exposé is a well-documented example. Radio too recognises that it is not enough to wait for every news story to break of its own accord — some, of genuine public concern, are protected from exposure simply because of the vested interests which work to ensure that the truth never gets out. It is therefore sometimes necessary to allocate newsroom effort to the process of research enquiry into a situation which is not yet established fact. The story may never materialise because insufficient fact comes to light. This will involve the station in some loss through unproductive effort, but it is nothing like the loss which will be suffered if the newsroom proceeds to broadcast a story of accusations which turn out to be false.

Government departments or commercial businesses involved in underhand dealings; public officials or others with power engaged in questionable financial practice; the rich and famous called to account for their sexual immorality; these are the most common areas of investigation. But who is to say what is underhand, questionable, or immoral? While it may be possible to remain impartial in the reporting of news fact, the exposé inevitably carries with it an assessment of a situation against certain norms of behaviour. Such values are seldom purely objective. An investigation into the payment of a bribe in order to secure a contract may provoke a public scandal in one part of the world while in another it is simply the way in which business is conducted. In other words, investigation requires a judgement of some malpractice — of right and wrong. The reporter must therefore be correct on two counts — that the facts as reported stand up to later scrutiny, and that his or her own judgement as to the morality of the issue is subsequently endorsed by the listener, that is by Society.

To enable the reporter's own values to remain largely outside the investigation, the most fruitful approach is often to use the stated values of the organisation or person being investigated as the basis of the judgement made. Thus, a body claiming to have been democratically elected but which subsequently was shown to have manipulated the polls lays itself open to criticism by its own standards. The same is true of governments which, while happy to be signatories of agreements on the treatment of prisoners, also allow their armed forces to practise beatings and torture; or business firms which promise refunds in the event of customer complaint but which somehow always find a loophole to evade this particular responsibility. The radio station may have to represent the listener in cases of personal unfairness, or pursue the greater interests of society in the face of public corruption. But the broadcaster must be right. This takes patience, hard, wearying research, and the ability to distinguish relevant fact from a smokescreen of detail.

Occasionally, outside pressure will be brought to bring the enquiry to a halt. This may be the signal that someone is getting uncomfortable and that the effort is beginning to bear results. It is surprising how often malpractice breeds dissatisfaction. Once the fact of an investigation becomes known a person with a grudge is likely to provide anonymous information. Such 'leaks' and tip-offs of course need to be checked and treated with the utmost caution. A story that is told too soon will fall apart as surely as one that is wrong. Further, a station must resist the temptation to get so involved with a story that it falls prey to the same malpractice — although perhaps on a much

smaller scale — as it is attempting to expose. So does it pay for information? Does it go in for surreptitious recording, of phone calls for instance? Does it jeopardise its own integrity by giving false information or staging events in the hope of laying a trap for others? Investigative reporters should not work alone, but in twos or threes — to argue through the methods, develop theories, and assess results. They will be wise to stay in close contact with their management — whose backing and continuing financial support is crucial.

When it works, the effects are immediate and considerable. The reputation gained by the programme and station are incalculable. A 'scoop' puts competitors nowhere. The public at large wants wrongs put right. People respect a moral order, especially for others, and in the end prefer justice to expediency.

Campaigning journalism

Programmes, and their station or network, cease to be objective or impartial when they wholeheartedly promote a particular course of action. The extent to which any such bias will threaten the credibility of the station as a whole depends on the proportion of the audience which will already agree with the action proposed. Thus a local station which advocates a by-pass for its town, or wants to raise money for handicapped children, is unlikely to create opposition among its listeners. Even if the newsroom originates the campaign, the standing of the normal bulletin material will probably remain unaffected. If however the station is advocating action on a more contentious issue — non-smoking in all public places, the introduction of random breath checks as a deterrent to drunken drivers, or mandatory blood sampling to detect carriers of the AIDS virus, then the station must expect opposition, some of which will criticise any story on the subject which the station carries.

In general, campaigning is best kept away from the newsroom. The news editor should be allowed to pursue the professional reporting of daily factual truth without being involved in considerations of what other people — governments, councils, advertisers or radio managements — want reported, or unreported. This at least minimises the danger of one programme's editorial policy jeopardising news credibility. Voices associated with news almost always run some risk when they appear in another broadcasting context. Journalists who lend weight to a particular view, however worthy, easily damage their reputation as dispassionate observers.

A producer wanting to promote a cause must obviously seek the backing of his management and be aware of the possible effect of any campaign on other programmes, especially news. Partiality of view in itself may become counter-productive to the very issue it is supposed to promote. Political causes are the most extreme, and produce the greatest cynicism ... 'but then you would say that, wouldn't you.'

The news reporting function

The reporter out on the street and the sub-editor at his desk are the people who make the decisions about news. Their concern is accuracy, intelligibility, legality, impartiality and good taste.

Before looking at these key principles it is important to say something about one of the more difficult aspects of the job.

Most of the work is relatively straightforward; some of it is routine. Chronicling events and the reasons for them requires much re-writing of other people's copy received by a multitude of means. It entails hours spent on the phone checking sources, and days out on location recording interviews and filing reports. It is during these times away from the newsroom, when the reporter is on his own, that he is required to have a sense of self-sufficiency — an apparent self-confidence, not always felt — to tackle the unknown and sometimes dangerous situation.

Civil disturbance or war reporting

Tragedy should be reported in a sombre manner — the broadcaster always remaining sensitive to how the listener will react. Reporting on a riot or commentating from a battle zone it is the reporter's task to report, not to get involved. It is sensible therefore always to get local advice on conditions and as far as possible to stay outside a disturbance, rather than try to work from inside the melee. It is then possible to see and assess what is happening as the situation develops. Under these conditions the reporter should remain as inconspicuous as possible and not add to or inflame the situation by his or her presence.

The primary ambience in a crisis is likely to be one of confusion. Asking for an official view tends to produce either optimistic hopes or worst fears, so any comment of this kind should be accurately attributed, or at least referred to as 'unconfirmed'. Analysis and interpretation of an event takes two forms — the pressures and causes which led up to it, and the implications and consequences likely to stem from it. Unless the reporter is very familiar with the situation it is best to leave reasons and forecasts to a later stage, and probably to others. On the spot, there is no room for speculation: the story should be told simply on the basis of what the reporter sees and hears.

In actual hostilities an accredited war reporter will be required to wear a flak jacket or other protective clothing — the military do not like to be held responsible unnecessarily for their own civilian casualties. It will be necessary to liaise closely with the officer in charge and to accept limits sometimes on what can be said. Facts may have to be withheld in the interests of a specific operation, for example the size and intent of troop movements, or the names and identities of people involved in a kidnapping or police siege. This is for fairly obvious tactical reasons and it is generally permissible to say that reporting restrictions are in force. One of the most memorable reports to come out of the Falkland Islands conflict arose from just such a situation. Brian Hanrahan reporting from the deck of the British aircraft carrier 'Hermes':

> At dawn our Sea Harriers took off, each carrying three one-thousand pound bombs. They wheeled in the sky before heading for the islands, at that stage just ninety miles away. Some of the planes went to create more havoc at Stanley, the others to a small airstrip called Goose Green near

Darwin, 120 miles to the west. There they found and bombed a number of grounded aircraft mixed in with decoys. At Stanley the planes went in low, in waves just seconds apart. They glimpsed the bomb craters left by the Vulcan and left behind them more fire and destruction. The pilots said there'd been smoke and dust everywhere punctuated by the flash of explosions. They faced a barrage of return fire, heavy but apparently ineffective. I'm not allowed to say how many planes joined the raid, but I counted them all out and I counted them all back. Their pilots were unhurt, cheerful and jubilant, giving thumbs-up signs. One plane had a single bullet-hole through the tail — it's already been repaired.
(Courtesy BBC News.)

Expressed in a cool unexcited tone, it is worth noting the shortness of the sentences and ordinariness of the words used. It is not necessary to use extravagant language to be memorable. See also the section on live commentary on p. 202

Working in conditions of physical danger, a basic knowledge of first aid is valuable. Several organisations equip their staff reporting from areas of potential risk with a medical pack containing essentials such as sterile syringes, needles and intravenous fluid. Psychological as well as bodily safety remains important and reporters faced with violence, and the mutilated dead and dying — whether it be the result of a distant war, or a domestic train crash — can suffer trauma for some time afterwards as a result of their experiences. The sometimes harrowing effects of news work should not be underestimated and the opportunity always provided for suitable counselling.

Accuracy

A reporter's first duty is to get the facts right. Names, initials, titles, times, places, financial figures, percentages, the sequence of events — all must be accurate. Nothing should be broadcast without the facts being double checked, not by hearsay or suggestion but by thorough reliability. 'Return to the source' is a useful maxim. If it is not possible to check the fact itself, at least attribute the source declaring it to be a fact. Under pressure from a tight deadline, it is tempting to allow the shortage of time to serve as an excuse for lack of verification. But such is the way of the slipshod to their ultimate discredit. Even in a competitive situation, the listener's right to be correctly informed stands above the broadcaster's desire to be first. The radio medium, after all, offers sufficient flexibility to allow opportunity for continuing intermittent follow-up. Indeed, it is ideally suited to the running story.

Sometimes accuracy by itself is not enough. With statistics the story may be not in their telling but in their interpretation. For instance, according to the traffic accident figures the safest age group of motorbike users is the 'over 80s' — not one was injured last year! So a story concerning a 20% increase in the radioactivity level of cows' milk over two years may be perfectly true, but is it significant? How has it varied at other times? Was the level two years ago unusually low? Were the measurements on precisely the same basis? And so on. Statistical claims need care.

Accuracy is required too in the sounds which accompany a report. The reporter working in radio knows how atmosphere is conveyed by 'actuality' — the noise of a building site, the shouts of a demonstration. It is important in achieving impact and establishing credibility to use these sounds, but not to make them 'bigger' than they really are. How fair is it then to add atmospheric music to an interview recorded in an otherwise silent cafe? It may be typical of the cafe's music (and it is useful in covering the edits) — but is it honest and real? Is it right to add small-arms fire to a report from a battle area? Typically it is there, it was just that the guns happened to be silent when I was recording. In other words does the piece have to *be* reality, or to convey reality? The moment you edit you destroy real-time accuracy. It is a question of motive. The accurate reporter, as opposed to a merely sensationalist one, will need a great deal of judgement if he is to excite and interest, but not mislead.

The basic structure for the news interviewer is first to get the facts, then to establish the reasons or cause lying behind them, and finally to arrive at their implication and likely resultant action. These three areas are simply past, present, and future — 'What's happened? Why do you think this is? What will you do next?' At another level, a news story is to do with the personal motives for decision and action, and it is these which have to be exposed, and if need be challenged with accurate facts or authoritative opinion quoted from elsewhere.

Intelligibility

Conveying immediate meaning with clarity and brevity is a task which requires refinement of thought and a facility with words. The first requisite is to understand the story so that it can be told without recourse to scientific, commercial, legal, governmental or social gobbledegook which so often surrounds the official giving of information. A reporter determined to show that he is at home with such technicalities through their frequent application has little use as a communicator. He must be the translator of jargon not its disseminator.

In recognising where to start he must have an insight into how much the listener already knows and how ideas are expressed in everyday speech. In being understood, the reporter's second requirement is therefore a knowledge of the audience — it is unwise to deal only with colleagues and professional sources for he will find himself subconsciously broadcasting only to them. If the audience is distant rather than local he must from time to time travel among them, or at the very least set up whatever means of feedback is possible.

The third element in telling a story is that it should be logically expressed. This means that it should be chronological and sequential — cause comes before effect:

Not: A reduction in the permitted level of cigarette advertising is recommended in a Department of Health report out today.

But: In a report out today the Department of Health recommends a reduction in the permitted level of cigarette advertising.

The key to intelligibility therefore is in the reporter's own understanding of the story, of the listener, and of the language of communication.

Putting these three aspects together the news writer's job is to tell the story as he understands it, putting it in a logical sequence, answering for the listener questions such as:

'What has happened?'
'When and where did it happen?'
'Who was involved?'
'How did it happen and why?'

The first technique is to ensure that of these six basic questions, at least three are answered in the first sentence:

(a) The Chancellor of the Exchequer told Parliament this afternoon that he would be raising Income tax by an average of 4 per cent in the autumn.

<div align="right">(who, where, when, what, when)</div>

(b) Eight people were killed and over sixty seriously injured when two trains collided just outside Amritsar in northern India in the early hours of this morning.

<div align="right">(what, where, when)</div>

The second and subsequent sentences should continue to answer these questions:

(a) He said it would be applied only to the upper tax bands and would not affect the basic rate. In answer to an Opposition question he said this was necessary to reduce the Government deficit.

<div align="right">(how, who, why)</div>

(b) The crowded overnight express from Delhi was derailed and over-turned by a local freight train as it left a siding near Amritsar station. Railway workers and police are still taking the injured from the wreckage and it is feared that the death toll may rise.

<div align="right">(how, what)</div>

Legality

To stay within the law demands a knowledge of the legal process and of the constraints which the law imposes on anyone, individual or radio station, to say what they like. In Britain no-one for example is allowed to pre-judge a case, to interfere with a trial, influence a jury or anticipate the findings. Thus there are considerable restrictions on what can be reported while a matter is sub-judice. To exceed the defined limits is to run the very severe risk of being held in contempt of court — an offence which is viewed with the utmost seriousness since it may threaten the law's own credibility.

Under present British law the outline of what is permissible in reporting a crime falls under four distinct stages:

(1) *Before an arrest is made* it is permissible to give the *facts* of the crime but the description of a death as 'murder' should only be used if the

police have made a statement to that effect. Witnesses to the crime may be interviewed but they must not attempt to describe the identity of anyone they saw or speculate on the motive.

(2) After an arrest is made, or if a warrant for arrest is issued, the case is said to be 'active'. This continues *while the trial is in progress* and it is not permissible to report on committal proceedings in a magistrates court, other than by giving the names and addresses of the parties involved, the names of counsel and solicitors, the offence with which the defendant is charged, and the decision of the Court. The reporting of subsequent proceedings in the higher court is permitted but no comment is allowed. The matter ceases to be 'active' on sentence or acquittal.

(3) Responsible comment is permissible *after the conviction and sentence is announced*, so long as the judge is not criticised for the severity or otherwise of the sentence, and there is no allegation of bias or prejudice.

(4) *If an appeal is lodged*, the matter again becomes sub-judice. No comment or speculation is allowed and only factual court reports should be broadcast.

Complications can arise if the police are too enthusiastic in saying that 'they have caught the person responsible'. This is for the court to decide and broadcasters should not collude with police in pre-judging a case. There are special rules which apply to the reporting of the juvenile and matrimonial courts. The key question throughout is whether what is broadcast is likely to help or hinder the police in their investigation or undermine the authority of the judicial process.

Such matters are the stock in trade of the journalist, and producers unacquainted with the courts are advised to proceed carefully and to seek expert advice.

The second great area of the law of which all programme-makers must be aware is that of libel. The broadcaster enjoys no special rights over the individual and is not entitled to say anything which would 'expose a person to hatred, ridicule or contempt, cause him to be shunned or avoided, or tend to injure him in his office, profession or trade'. To be upheld, a libel can only be committed against a clearly identifiable individual or group. In Civil law, it is not possible to defame the dead. The most damaging accusation that can be brought against a broadcaster standing under the threat of a libel action is that he acted out of malice. This is not an unknown hazard for the investigative journalist working for example on a story involving the possibility of corruption or dubious practice involving well-known public figures. The broadcaster's complete real defence against a charge of libel is that what he said was true, and that this can be proved to the satisfaction of a jury. Again, we have the absolute necessity of checking the facts and using words with a precision which precludes a possibly deliberate misconstruction.

A second defence is that of 'fair comment'. This means that the views expressed were honestly held and made in good faith without malice. This attaches particularly to book reviews, or the critical appraisal of plays and films, but may also apply to comments made about politicians or other

public figures. Such a defence also has to show that the remarks are based on demonstrable facts not misinformation.

To repeat a libellous statement made by someone else is no defence unless that person enjoys 'absolute privilege', as in a court of law or in Parliament. Even so, reports of such proceedings have to be fair as well as accurate and if the statement made turns out to be wrong and an apology or correction is issued, this too is bound to be reported. A defence of 'qualified privilege' is available to reports of other public proceedings such as Local Authority Council meetings, official tribunals, company annual general meetings open to the public, and other meetings to do with matters of public concern. The same defence may be used in relation to a fair and accurate report of a public notice or statement issued officially by the police, a government department or local authority. Where no 'privilege' exists, the broadcaster is as guilty as the actual perpetrator of the libel. Producers and presenters of the phone-in should be constantly on their guard for the caller who complains of shoddy workmanship, professional incompetence, or worse on the part of an identifiable individual. An immediate reference by the presenter to the fact that 'well, that's only your view' may be regarded as a mitigation of the offence, but the broadcaster can nevertheless be held to have published the libel.

The law also impinges directly on the broadcaster in matters concerning 'official' secrets, elections, consumer programmes, sex discrimination, race relations, gaming and lotteries, reporting from foreign courts, and copyright.

The individual producer should remain aware of the major legal pitfalls and must have a reliable source of legal advice. Without it he is likely, sooner or later, to need the services of a good defence lawyer.

Impartiality and fairness

The reporter does not select 'victims' and hound them — he does not ignore those whose views he dislikes — he does not pursue vendettas, nor have favourites. He does not promote the policies of sectarian interests and he resists the persuasions of those seeking free publicity. He is fair. Having no editorial opinion of his own, he seeks to tell the news without making moral judgements about it. He is the servant of his listener. Broadcasting is a general dissemination and no view is likely to be universally accepted. 'Good news' of lower trade tariffs for importers is bad news for home manufacturers struggling against competition. 'Good news' of another sunny day is bad news for farmers anxiously waiting for rain. The key is a careful watch on the adjectives, both in value and in size. Superlatives may have impact but are they fair? News may report an industrial dispute but what right does the reporter have to describe it as 'a *serious* industrial dispute'? On what grounds may he refer to a company's '*poor* record', or a medical research team's '*dramatic* breakthrough'? Words such as 'major', 'crucial', and 'special' are too often used simply to convince people that the news is important. Much better to leave the qualifying adjectives to the actual participants and for the newswriter to let the facts speak for themselves.

Reporters are occasionally concerned that they may not be able to be totally objective since they have received certain inbuilt values from their upbringing and education. While it may be true that broadcasting has more of its fair share of people from middle-class families and with a college education, any imbalance or restriction which results is the problem not of the reporter but the editor in chief. The reporter need not be unduly concerned with his own unconscious motivations of background and experience, except to recognise that others may not share them. However he must be aware of, and subdue, any conscious desire he may have to persuade others to think the same way. It is sensible to ensure that any significantly large ethnic group in the community is represented in the broadcasting staff.

Unlike the junior newspaper journalist where every last adjective and comma can be checked before publication, the broadcast reporter is frequently in front of the microphone on his own. To help guard against the temptation to insert his own views, reporters should not be recruited straight from school, but have as wide and varied a background as possible and preferably bring to the job some experience of work outside broadcasting.

Good taste

As with all broadcasting, news programmes have a responsibility to abide by the generally accepted standards of what listeners would regard as 'good taste'. There are two areas which can create special problems — giving offence and causing distress.

In avoiding needless offence there must first be a professional care in the choice of words. People are particularly sensitive, and rightly so, about descriptions of themselves. The word 'immigrant' means someone who entered a country from elsewhere, yet it tends to be applied quite incorrectly to people whose parents or even grandparents were immigrants. Human labels pertaining to race, religion or political affiliations must be used with especial care and never as a social shorthand to convey anything other than their literal meaning. Examples are 'black', 'coloured', 'muslim', 'guerrilla', 'southern', 'jewish', 'communist', etc. — used loosely as adjectives they tend to be more dangerous than as specific nouns.

The matter of giving offence must be considered in the reporting of sexual and other crimes. News is not to be suppressed on moral or social grounds but the desire to shock must be subordinate to the need to inform. The journalist must find a form of words which when spoken will provide the facts without causing embarrassment, for example in homes where children are listening. With print, parents may divert their children from the unsavoury and squalid, in radio an immediate general care must be exercised at the studio end. A useful guideline is for the broadcaster to consider how he would actually express the news to someone in his local supermarket, with other people gathered round.

More difficult is the assessment of what is good taste in the broadcasting of 'live' or recorded actuality. Reporting an angry demonstration or industrial dispute when tempers are frayed is likely to result in the

broadcasting of 'bad' language. What should be permitted? Should it be edited out of the recording? To what extent should it be deliberately used to indicate the strength of feeling aroused? There are no set answers, the context of the event and the situation of the listener are both pertinent to what is acceptable. However in using such material as news, the broadcaster must ensure that his motive is really to inform and not simply to sensationalise. It may be 'good copy', but does it genuinely help the listener in his understanding of the subject? If so it may be valid but the listener retains the right to react as he or she feels appropriate to the broadcaster's decision.

News of an accident can cause undue distress. It is necessary only to mention the words 'air crash' to cause immediate anxiety among the friends and relatives of anyone who boarded a plane in the previous 24 hours. The broadcaster's responsibility is to contain the alarm to the smallest possible group by identifying the time and location of the accident, the airline, flight number, departure point and destination of the aircraft concerned. The item will go on to give details of the damage and the possibility of survivors, but by then the great majority of air travellers will be outside the scope of the story. In the case of accidents involving casualties, for example a bus crash, it is helpful for listeners to know to which hospital the injured have been taken or to have a telephone number where they can obtain further information. The names of those killed or injured should not normally be broadcast until it is known that the next-of-kin have been informed.

A small but not unimportant point in bulletin compilation is the need to watch for the unintended and possibly unfortunate association of individual items. It could appear altogether too callous to follow a murder item with a report on 'a new deal for butchers'. Common sense and an awareness of the listener's sensitivities will normally meet the requirements of good taste but it is precisely in a multi-source and time-constrained process, which news represents, that the niceties tend to be overlooked.

A summary

To sum up news principles. Good journalism is based on an oft-quoted set of values — it must be accurate and truthful, it stems from observation and enquiry, and it must do more than react to events, in that attempting to be impartial and objective it must actively seek out and test views. It has to make sense of events for readers, listeners and viewers, resisting the pressures of politicians, advertisers and others who may wish to cast the world in a light favourable to their own interests or cause. Any society founded on democratic freedom of choice requires a free flow of honest news. It is totally pointless to run a broadcast news service unless it is trusted and believed.

The newsroom operation

Almost every broadcasting station ultimately stands or falls by the quality of its news and information service. Its ability to respond quickly and to

report accurately the events of the day extends beyond just news bulletins. The newsroom is likely to represent the greatest area of 'input' to a station and as such it is the one source capable of contributing to the whole of the output. Unlike a newspaper which directs its energies towards one or two specific deadlines, a radio newsroom is involved in a continuous process. The main sources of news coverage can be listed as:

(1) *Professional:* staff reporters and specialist correspondents, e.g. crime, local government; freelances and 'stringers'; computer, fax and wire services; news agencies; syndicating sources including other broadcasting stations; newspapers.
(2) *Official:* government sources both national and local; emergency services such as police, fire and hospitals; military and service organisations; public transport authorities.
(3) *Commercial:* business and commercial PR departments; entertainment interests.
(4) *Public:* information from listeners, taxi drivers, etc; voluntary organisations, societies and clubs.

There is a danger that in basing its news too much on press releases and handouts, a station is too easily manipulated by government and business interests. The output begins to sound like the voice of the Establishment. An editor will become wary of material arriving by hand from a given source just before a major deadline. Of course, a handout provides 'good', one-sided information — that is its purpose. It needs to be evaluated and cross-examined and questions asked about implications as well as immediate effects. A newsroom must be more than just a processor of other people's stories. The same is true of lifting items from newspapers — always look for new angles, and follow-up if a story has appeared elsewhere, develop it don't run it as it is, take it further.

The heart of the newsroom is its diary. This may be in book form or held as computer data. As much information as possible is gleaned in advance so that the known and likely stories can be covered with the resources available. The first editorial meeting of each day will review that day's prospects and decide the priorities. Reporters will be allocated to the monthly trade figures, the opening of a new airport or trunk road, the controversial public meeting, the government or industry press conference, the arrival of a visiting Head of State, or the publication of an important report. The news editor's job is to integrate the work of the local reporters with the flow of news coming in from the other sources available, balancing the need for international, national or local news. But the news editor must also consider how he would deal with the unforeseen — an explosion at the chemical works, a surprise announcement by a leading politician, a murder in the street. A newsroom however cannot wait for things to happen, it must pursue its own lines of enquiry, to investigate issues as well as report events.

Local newsrooms are sometimes tempted to select bulletin items in terms of geographical coverage — going for 20 stories representative of the area, rather than 10 items of more universal interest. This should be resolved in the form of a stated policy — that is the extent to which a newsroom regards itself as serving several minorities as opposed to one
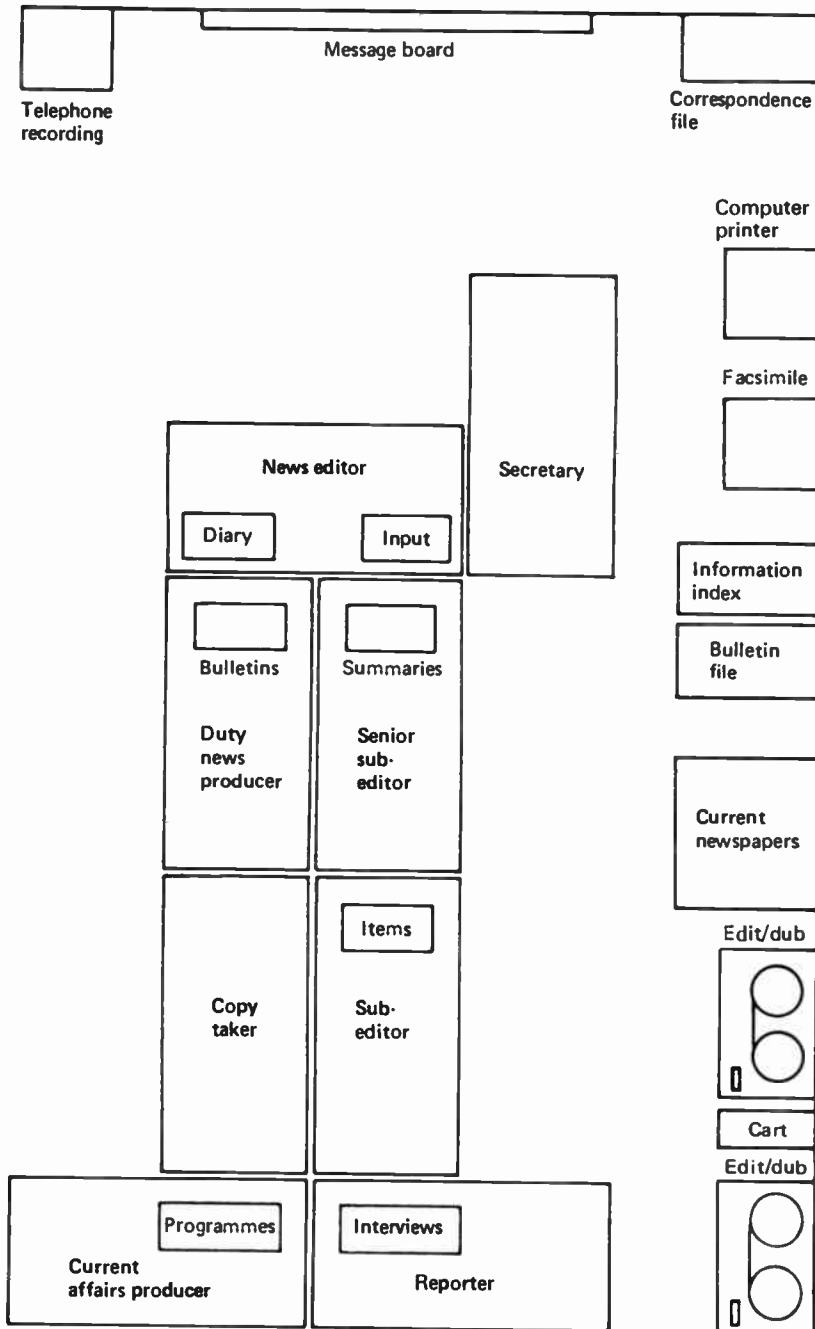
Fig. 7.1. Features of a newsroom. A possible layout involving eight job functions. A computer terminal on each desk enables journalists to generate copy, and provides access to all available sources. Tape editing facilities include dubbing from cassette or DAT, and copying to cartridge for studio use.

audience of collective interest. The first is true of a newspaper where each reader selects his own item for consumption, the second is more appropriate to radio where the selection is done for him. Given considerably less 'space' the fewer stories have to be of interest to everyone.

The competent newsroom has to be organised in its copy flow. There should be one place which receives the input of letters, press releases, printer and facsimile material, and other written data. A reporter making 'routine' calls to the emergency services or other regular contacts collects the verbal information so that, after consulting the diary, the news editor can decide which stories to cover. He may call a meeting in person or by phone to discuss the likely prospects, especially with specialist correspondents. One person will be allocated to write, or at least edit, the actual bulletins — a task not to be regarded as a committee job. If possible other writers are put on the shorter bulletins and summaries. Working from the same material, a two-minute summary needs a quite different approach. Omitting the last three sentences of each story in a five minute bulletin will not do!

Reporters and freelances are allocated to the stories selected, each one is briefed on the implications and possible 'angles' of approach, together with suggestions for its treatment, and given a deadline for completion. Elsewhere in the room or nearby, cassettes are copied, tapes are edited and may be dubbed to cartridge for use in the studio, cue material written, recordings are made of interviews over the phone, and previous copy 'subbed', updated or otherwise refreshed for further use. The mechanical detail will depend on the degree of sophistication enjoyed by the individual newsroom — the availability of a radio car or other mobile direct inject equipment, OB and other 'remote' facilities, electronic data processes, off-air or closed circuit television, updated stories permanently available via computer screens in the studios, intercom to other parts of the building, etc.

A newsroom also requires systems for the speedy retrieval of information from a central index. This may take the form of a physical file containing the names, addresses and telephone numbers of useful contacts, plus newspaper cuttings, scripts or other items relating to running stories or future events. These can be arranged either alphabetically or in date order but in such a way that everyone has access and understands the system. However, the computerised newsroom has the great advantage of being able to link together the diary information with 'today's' prospects, the current news programme running orders and bulletin scripts. Everyone has the same information updated at the same instant. The presenter in the studio has the latest news material constantly available, reading it from the screen. For the short-term retention of local information, the urgent telephone number or message to a colleague on another shift, a chalk board or similar device is simple and effective.

The important principle is that everyone should know exactly what they have to do to what timescale, and to whom they should turn in difficulty. The news editor or director in overall charge must be in possession of all the information necessary for him to control the output. He must also be clear, as must everyone else, on the extent to which the minute by minute

operation is delegated to others. There is no place or time for confusion or conflict.

Style book

One of the editor's jobs is to maintain the collection of rules, guidelines, procedures and precedents which forms the basis of the newsroom's day-to-day policy. It is the result of the practical experience of a particular news operation and the wishes of an individual editor. The style book is not a static thing but is altered and added to as new situations arise. A large organisation will issue guidelines centrally which its local or affiliate stations can augment.

Sections on policy will clarify the law relating to defamation and contempt of court. It will define the procedure to be followed for example in the event of bomb warnings (whether or not they are hoax calls), private kidnapping, requests for a news black-out, the death of heads of state, observance of embargoes, national and local elections, the naming of sources, and so on.

The book sets out the station's Mission or Purpose Statement and the role of news within that. It will indicate the required format for bulletins, the sign-on and sign-off procedures, the headline style, correct pronunciation of known pitfalls, and the policy regarding corrections, apologies and the right or opportunity of reply. It will list on-station safety regulations, as well as provide advice on proper forms of address. Above all there will be countless corrections of previous errors of grammar and syntax — from the use of collective nouns to the use of the word 'newsflash'.

The newcomer to a newsroom can expect to be given the style book on arrival and told to 'learn it'.

Radio car, mobile phone and ISDN

The larger station will have a car, reserved for newsroom use, which the editor will send out with a reporter to cover a particular story. It will be used to interview the VIP, cover a demonstration, and report on a train crash. The very small operation may simply have a high-power radio microphone capable of sending a signal back to the station over a few kilometres. The principles of using mobile facilities tend to be similar whatever their design, and the following forms a common basis for routine operation:

- Ensure a proper priority procedure for every vehicle. Who controls and sanctions its use? Who decides if a booking is to be overridden to cover a more important story? Do all potential users know these procedures?
- Remember that you are driving a highly distinctive vehicle. Whatever the hurry, be courteous, safe, and legal.
- Before leaving base, check that all necessary equipment is in the car, that the power supply batteries are in a good state of charge, and that someone is ready to listen out for you.
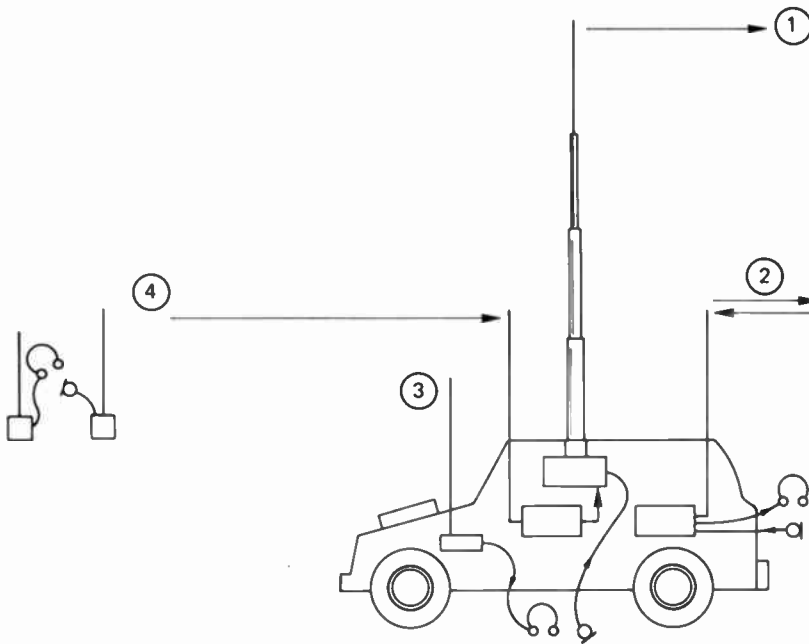
Fig. 7.2. Radio car. 1. High-quality programme circuit to base studio. 2. Two-way communications link with base for cue and control. This enables the car to contribute to a programme not being broadcast 'live'. Where this link is used as the on-air programme circuit no other equipment is necessary. 3. Car radio receiver. 4. Optional low-power programme link enabling the reporter to work remotely from the vehicle if necessary, using a radio-mic and receiving off-air cue from an additional radio.

- Switch on the 2-way communications receiver in the car so that the base station can call you. Tune the car radio to receive station output.
- On arrival at the destination, raise the telescopic mast where applicable, taking care to avoid obstructions and overhead power and telephone lines. Call the station on the communications link and send level on the programme circuit.
- Agree the cue to go ahead, duration of piece, and handback. Check that you are hearing station output on your headphones.
- After the broadcast, replace all equipment tidily and lower the mast before driving off (cars with telescopic masts should have safety interlocks to prevent movement with the mast extended). Leave the communications receiver on until back at base in case the station wishes to call you.
- Radio vehicles attract visitors; make sure they are safely parked day and night.

Every car should be put 'on charge' when at base, and never garaged with the petrol tank less than half-full. It should carry area and local street maps, a reel of cable for remote operation, spare headphones, batteries and petrol can, extension leads, pad of paper, clipboard, pencil, cleaning cloth and torch.

A much cheaper radio car is a simple run-about vehicle equipped with a mobile phone. A digital phone, especially one adapted to take a broadcast quality microphone, can connect to the base studio using the public telephone system to provide programme inserts even from outside the station's transmission area. The reporter needs to hear cue programme in order to go ahead, and of course cannot be sent talkback while on air. But the advent of the mobile phone has greatly increased the ease and flexibility of location reporting.

A further development to aid the reporter is the Integrated Services Digital Network — ISDN. At relatively low cost this is a system using international or national telephone circuits for high quality voice transmission. Equipped with an ISDN 'black box' compatible with a similar box at the base studio, the distant reporter plugs his microphone into, or plays back his recorder through, this equipment which encodes the signal in digital form. All that is needed is a telephone socket into which to plug the ISDN box. The system works perfectly well for speech and may be 'stretched' for music.

The news conference and press release

News conferences, company meetings, official statements and briefings of all kinds almost always set out to be favourable to those who hold them. It is important therefore to listen carefully to what is being said — and what is not being said — and to ask key questions. Having been given facts or plans for action, the question is 'why?' It is necessary to quote accurately what is said — not difficult with a recorder — and to attribute the spokesperson or source. What is being said may or may not be totally true — what is true is that a named person is saying it.

Press releases, publicity handouts, notices and letters descend on the editor's desk in considerable quantity. Most end up on the spike, unused — although if it is not suitable for a bulletin, a well-organised newsroom will offer a story to another part of the output. From time to time editors are asked to define what should go into a press release and how it should be laid out. The following guidelines apply:

(1) The editor is short of time and initially wants a summary of the story, not all the detail. Its purpose is to create interest and encourage further action.
(2) At the top should be a headline which identifies the news story or event.
(3) The main copy should be immediately intelligible, getting quickly to the heart of the matter and providing sufficient context to highlight the significance of the story — *why* it is of interest as well as *what* is of interest, e.g. 'this is the first 18 year old ever to have won the award'. The writing style should be more conversational than formal; avoid legal or technical jargon.
(4) Double-check all facts: names (first name and surname), personal qualifications, titles, occupations, ages, addresses, dates, times, places, sums of money, percentages etc.

ROYAL NAVY

MINISTRY OF DEFENCE NEWS RELEASE
Royal Marines in European Infantry Competition

Two teams of Royal Marines from 42 Commando will be taking part in the tenth annual Northern European Command Infantry Competition to be held at Plon, Schleswig-Holstein, West Germany from 11 to 15 September.

See list of names attached.

In competition with squads from Norway, Denmark, Germany, Netherlands and Canada, the eight-man teams will be tested in various infantry skills including shooting, map-reading, obstacle crossing and field craft.

The aim of the competition is to improve the professional standards of infantry units within the Northern European Command of NATO and to improve mutual understanding of the troops taking part through friendly competition.

Issued by: Public Relations (Royal Navy)
Ministry of Defence,
Main Building,
Whitehall, London S.W.1.
021-218-3257/3258

(5) End with a contact name, office of origin, address, telephone numbers (including a home number), date and time of issue.

(6) It should be typed, double-spaced with broad margins, on one side of a standard size such as A4, with a distinctive logo or heading — or on coloured paper to make it stand out. When sending copies to different addresses within a radio station, this should be made clear. An embargo should only be placed on a press release if the reason is obvious — for example in the case of an advance copy of a speech, or where it is sensible to allow time to digest or analyse a complex issue before general publication. Radio is an immediate medium and editors have no inclination to wait simply in order to be simultaneous with their competitors.

&

AMPERSAND
CROYDON ARTS ASSOCIATION

Civic Centre Croydon

PRESS NOTICE
Date

TO: News Editor
    and Producer, "Music Box"

CROYDON SYMPHONY ORCHESTRA — NEW CONDUCTOR

JOHN THORNEHILL is to join the Croydon Symphony
Orchestra as its resident conductor on a 3-year contract from
1st January 1995. He is currently musical director of The
Music Group of New York.

Born in Philadelphia in 1945, he studied the piano and violin
at Columbia University and won a 2 year scholarship in com-
position at the Paris Conservatoire.

He visited Britain in 1975 with the Lincoln Youth Orchestra
during which tour he gave a concert at the Croydon Civic
Hall. He also met his wife, Julia, from Cambridge.

He is particularly interested in the training of young musicians
and for 3 years has been involved in the summer school at
Tanglewood, Massachusetts.

The composer of several published works for string orchestra,
he hopes to have more time for composition.

Note to the Editor: Mr & Mrs Thornehill are visiting Croydon on
November 18–19th and will be available for interview.

Details of press conference to be announced.

Further information from: Gavin Watson,
                            Croydon 4411 ext 671 (office)
                            Westerham 55931 (home)

Newsreading and presentation

Presentation is radio's packaging. It hardly matters how good a programme's content, how well written or how excellent its interviews; it comes to nothing if it is poorly presented. It is like taking a beautiful perfume and marketing it in a medicine bottle. Good presentation stems from an understanding of the medium and a basically caring attitude towards the listener. A broadcaster at the microphone ought consciously to care whether or not the listener can follow and understand what he is saying. By 'thinking outwards', away from himself, a newsreader or presenter is less prone to the destructive effects of studio nerves; or for that matter the complacency of over-familiarity, and is therefore more likely to communicate meaning. Since he does not know the listener personally he adopts the relationship of an acquaintance rather than that of a friend. He is friendly, respectful, informative and helpful. He has something to offer the listener, but does not use this to gain advantage either by exercising a knowledgeable superiority or by assuming any special authority. The relationship is a horizontal one, he refers to his 'putting something across', not down or up. He does not make undue assumptions about his acquaintance, or presume on the relationship, but works at it always taking the trouble to make what he is saying interesting.

Of course newsreading tends to be more formal than a music programme but there is room for a variety of approaches. Whatever the overall style of the station, governed by its basic attitude to the listener, it should be fairly consistent. While the sociologist may regard radio as a mass-medium, the man at the microphone sees it as an individual communication, he is talking to some*one*. Thinking of his listener as one person he says, 'If you're travelling south today,...' not 'Anyone travelling south...' The presenter does not shout. If he is half a metre from the microphone and his listener is a metre from the radio, the total distance between them is one and a half metres. What is required is not volume but an ordinary clarity. Too much projection causes the listener psychologically to 'back off'—it distances the relationship. Conversely by dropping his voice the presenter adopts the confidential or intimate style more appropriate to the closeness of late night listening.

The rate of delivery depends on the style of the station and the material being broadcast. Inter-programme or continuity announcements should be at the presenter's own conversational speed, for example newsreading at
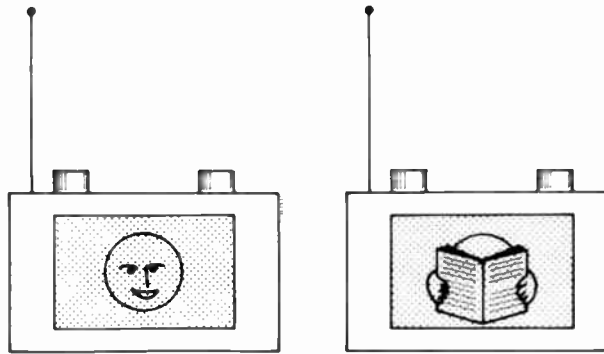
Fig. 8.1. The script must not come between the broadcaster and the listener. The listener should feel that he is being spoken to — not read to. The script needs to be written for talking aloud and the vocal inflections and stresses kept as natural as the broadcaster's own speech.

160–200 words per minute, but slower if short-wave transmission. Commentary should be at a rate to suit the action. If a reader is going too fast it may not help simply to ask him to slow down; this is likely to make him sound stilted and over-careful. What is required is that he leaves more pause between the sentences — that is when the understanding takes place. It is not so much the speed of the words which can confuse, but the lack of sufficient time to make sense of them.

The simplest way of getting the style, projection and speed right, is to visualise the listener sitting in the studio a little way beyond the microphone. The presenter is not by himself reading, he is talking with the listener. This small exercise in imagination is the key to good presentation.

Newsreading

The first demand placed on the newsreader is that he understands what he is reading. He cannot be expected to communicate sensibly if he has not fully grasped the sense of it himself. With the reservations expressed later about 'rip 'n' read' material, there is little place for the newsreader who picks up a bulletin with thirty seconds to go and hopes to read it 'word perfect'. He must be better than punctual, he must be early. Neither is technically faultless reading the same thing as communicating sense. A newsreader should be well informed and have an excellent background knowledge of current affairs so that he can cope when changes occur just before bulletins. He should take time to read it out loud beforehand — this gives him a chance to understand the content and be aware of pitfalls. There may be problems of pronunciation over a visiting Chinese trade mission or statement by an African foreign minister. There may be a phrase which is awkward to say, an ambiguous construction, or typing error. The pages should be verbally checked by the person who, in the listener's mind, is responsible for disseminating them. While a newsroom may like to give the impression that its material is the latest 'hot off the press' rush, it is seldom impossible for the reader to go through all

the pages as a bulletin is being put together. Thorough preparation should be the rule, with reading at sight reserved for emergencies.

Of course in practice this is often a counsel of perfection. In a small station where the newsreader may be working single-handed, the news can arrive on the printer within seconds of its deadline. It has to be read at sight. This is not the best practice and runs a considerable risk of error. It places on the syndicating news service, and on the transmitting keyboard operator, a high responsibility for total accuracy. The reason for poor broadcasting of 'rip 'n' read' material may lie with the station management for insufficient staffing, or with the news agency for less than professional standards. The fact of the matter is that in the event of a mistake on the air, from whatever cause, the listener blames the newsreader.

The person at the microphone therefore has the right to expect a certain level of service. This means a well written and properly set out bulletin, accurately typed, arriving on a well maintained machine a few minutes before it is needed. He can then check to see if the lead story has changed and scan it quickly for any unfamiliar names. He picks out figures and dates to make sure he understands them. In the actual reading, his eyes are a little ahead of his speech, enabling him to take in *groups of words*, understanding them before passing on their sense to the listener.

The idea of 'rip 'n' read' is excellent but it should not become the cause nor be made the excuse for poor microphone delivery.

In the studio the newsreader sits himself comfortably but not indulgently, feeling relaxed but not complacent, breathing normally and taking a couple of extra deep breaths before he begins.

Here are some other practicalities of script reading:

- Don't eat sweets or chocolate beforehand: sugar thickens the saliva.
- Always have a pen or pencil with you for marking alterations, corrections, emphasis, etc.
- If you wear them, make sure you have your glasses.
- Don't wear anything that could knock the table or rattle — bangles, cuff-links.
- Place a glass of water near at hand.
- Remove any staples or paper-clips from the script and separate the pages so that you can deal with each page individually.
- Make sure you have the whole script, check that the pages are in the right order, the right way up.
- Give yourself space, especially to put down the finished pages — don't bother to put them face down.
- Check the clock, cue light, headphones — for talkback and cue programme, and the mic-cut key if there is one.
- Check your voice level.
- Where timing is important, time the final minute of the script (180 words — perhaps 18 lines of typescript) and mark that place. You need to be at that point with a minute left to go and may have to drop items in order to achieve this.
- Once started, don't worry about your own performance, be concerned that you are really communicating to your imagined listener, 'just beyond the mic'.

- If reading from a computer screen connected to a local network system, check that a colleague on another terminal is not in-putting to the news while you are broadcasting.

Pronunciation

A station should as far as possible be consistent over its use of a particular name. Problems arise when its output comprises several sources, e.g. syndicated material, a live audio news feed, a sustaining service. What must be avoided is one pronunciation in a nationally syndicated bulletin, followed a few minutes later by a different treatment in a locally read fax or 'rip 'n' read'. The newsroom must listen to the whole of the station's news output, from whatever source, and advise the newsreader accordingly. Secondly, listeners are extremely sensitive to the incorrect pronunciation of names with which they are associated. The station which gets a local place name wrong loses credibility, one which mispronounces a personal name is regarded as either ignorant or rude. The difficulty is that listeners themselves may not agree on the correct form. Nevertheless a station should make strenuous efforts to ensure a consistent treatment of place names within its area. A phonetic pronunciation list based on 'educated local knowledge' must be adopted as a matter of policy and a new broadcaster joining the staff should acquaint himself with it at the earliest possible time.

Alternatively it may be possible to store correctly spoken pronunciations in audio form on a computer hard disk. It is then an easy matter for a presenter to bring a name up on the screen and to hear it being said.

Vocal stressing

An important aspect of conveying meaning about which a script gives no clue is that of stress — the degree of emphasis laid on a word. Take the phrase:

'What do you want me to do about that?'

With the stress on the 'you', it is a very direct question. On the 'me', it is more personal to the questioner; on the 'do', it is a practical rather than a theoretical matter; on the 'that', it is different again. Its meaning changes with the emphasis. In reading news such subtleties can be crucial. For example we may have in a story on Arab/Israeli affairs the following two statements:

Mr. Radim is visiting Washington where he is due to see the President this afternoon. Meanwhile the Israeli Foreign Minister is in Paris.

The name is fictional but the example real. Put the emphasis on the word 'Israeli', and Mr. Radim is probably an Arab foreign minister. Put it on 'Foreign', and he becomes the Israeli Prime Minister. Try it out loud. Many sentences have a central 'pivot', or are counter-balanced about each other: 'While *this* is happening over *here*, *that* is taking place over *there*.' Many sentences contain a counter-balance of event, geography, person or time: 'Mr *Smith* said an election should take place *now*, *before* the issue came up. Mr. *Jones* thought it should wait at least until *after* the matter had been debated.'

Listening to newsreaders it is possible to discern a widespread belief that there is a universal news style, where speed and urgency have priority over meaning, where the emphasis is either on every word or scattered in a random fashion, but always on the last word in every sentence. Does it stem from the journalist's need for clarity when dictating copy over the 'phone? The fact is that a single misplaced emphasis will cloud the meaning, possibly alter it. The only way of achieving correct stressing is by fully understanding the implications as well as the 'face value' of the material. This must be a conscious awareness during the preparatory read-through. As has been rightly observed, 'take care of the sense and the sounds will take care of themselves'.

Inflection

The monotonous reader either has no inflection in his voice at all, or the rise and fall in pitch becomes regular and repetitive. It is the predictability of the vocal pattern which becomes boring. A too typical sentence 'shape' starts at a low pitch, quickly rises to the top and gradually descends, arriving at the bottom again by the final full stop. Placed end to end, such sentences quickly establish a rhythm which, if it does not mesmerise, will confuse because with their beginning and ending on the same 'note', the joins are scarcely perceptible. Meaning begins to evaporate as the structure disappears. Without sounding artificial or contrived, sentences normally start on a higher pitch than the one on which the previous one ended — a new paragraph certainly should. There can often be a natural rise and fall within a sentence, particularly if it contains more than one phrase. Meaningful stressing rather than random patterning will help.

A newsreader is well advised occasionally to record his work for his own analysis—is it too rhythmic, dull or aggressive? In the matter of inflection he should experiment off the air, putting a greater rise and fall into his voice than usual to see whether the result is more acceptable. Very often when he may feel he is really 'hamming it up', the playback sounds perfectly normal and only a shade more lively. Even experienced readers can become stale and fall into the traps of mechanical reading, and a little non-obsessive self-analysis and experimentation is very healthy.

Quotation marks

Reading quotes is a minor art on its own. It is easy to sound as though the comment is that of the newsreader, although the writing should avoid this construction. Some examples:

While an early bulletin described his condition as 'comfortable', by this afternoon he was 'weaker'. (This should be rewritten to attribute both quotes.)

The opposition leader described the statement as 'a complete fabrication designed to mislead'.

He later argued that he had 'never seen' the witness.

To make someone else's words stand out as separate from the newsreader's own, there is a small pause and a change in voice pitch and speed for the quote.

Alterations

Last minute hand-written changes to the typed page should be made with as much clarity as possible. Crossings out should be done in blocks rather than on each individual word. Lines and arrows indicating a different order of the material need to be bold enough to follow quickly and any new lines written clearly at the bottom of the page. To avoid confusion a 'unity of change' should be the aim. It is amazing how often a reader will find his way skilfully through a maze of alterations only to stumble when his concentration relaxes on the next perfectly clear page.

Corrections

But what happens when a mistake is made? Continue and ignore it or go back and correct it? When is an apology called for? It depends of course on the type of error. There is the verbal slip which it is quite unnecessary to do anything about, a misplaced emphasis, a wrong inflection, a word which comes out in an unintended way. The key question is 'could the listener have misconstrued my meaning?' If so, it must be put right. If there is a persistent error, or a refusal of a word to be pronounced at all, it is better to restart the whole sentence. Since 'I'm sorry I'll read that again' has become a cliché, something else might be preferred — 'I'm sorry, I'll repeat that', or 'Let me take that again'. It is whatever comes most naturally to the unflustered reader. To the broadcaster it can seem like the end of the world; it is not. Even if the listener has noticed it he simply wants a correction with as little fuss as possible.

Lists and numbers

The reading of a list can create a problem. A table of sports results, stock market shares, fatstock prices or a shipping forecast; these can sound very dull. Again, the first job for the reader is to understand his material, to take an interest in it so that he can communicate it. Secondly the inexperienced reader must listen to others, not to copy them, but to pick up the points in their style which seem right for himself. There are particular inflections in reading this material which reinforce the information content. With football results, for example, the voice indicates the result as it gives the score. The same is true of racing results, which have a consistent format:

'Racing at Catterick — the three thirty.
First, number 7, Phantom, 5 to 2 favourite,
Second, number 9, Crystal Lad, 7 to 1
Third, number 3, Handmaiden, 25 to 1
Non-runner, number 1, Gold Digger.'

For obvious reasons care must be taken over pronunciation and prices. A highly backed horse might be quoted at '2 to 5'. This is generally given as '5 to 2 on'.

In passing, it is worth noting that sport has a good deal of its own jargon which looks the same on the printed page, for instance the figure '0'. The newsreader should know when this should be interpreted as 'nought', 'love', 'zero', 'oh', or 'nil' — the listener will certainly know what is correct. Unless it is automatic to the reader, it is well worth writing the appropriate word on the script. Whenever figures appear in a script, the reader should sort out the hundreds from the thousands and if necessary write the number on the page in words.

If it has been correctly written, a script consists of short unambiguous sentences or phrases, easily taken in by the eye and delivered vocally well within a single breath. The sense is contained not in the single words but in their grouping. To begin with we learn to read letter by letter, then word by word. The intelligent newsreader delivers his material phrase by phrase, taking in and giving out whole groups of words at a time, leaving little pauses between them to let their meaning sink in. The overall style is not one of 'reading'—it is much more akin to 'telling'.

In summary, the 'rules' of newsreading are:

(1) Understand the content by preparation.
(2) Visualise the listener by imagination.
(3) Communicate the sense by telling.

Station style

Radio managers become paranoid over the matter of station style. They will regard any misdemeanour on-air as a personal affront, especially if they instituted the rule which should have been observed. It's nevertheless true that a consistent station sound aids identification. It calls for some discipline, particularly in relation to the frequently used phrases to do with time. Is it 3.25 or 25 past 3? Is it 3.40 or 20 minutes to 4? Is it 1540? Dates: is it 'May the eleventh', 'the eleventh of May', or 'May eleven'? Frequencies, 1107 kilo-hertz, 271 metres medium wave, can be given in several ways: 'on a frequency of eleven-oh-seven', or 'two-seven-one metres medium wave', or 'two-seventy one'. Temperatures: Celsius, centigrade or Fahrenheit? Or just '22 degrees'?

Some stations insist on a very strict form of identification, some prefer variety:

Radio Berkely
Berkely radio — two seven one
The county sound of Berkely
The sound of Berkely county
Berkely county radio   etc. etc.

Idents can be by station name, frequency or wavelength, programme title, presenter name, or by some habitually used catchline:

XFM–where news comes first

XFM–the heartbeat of the county
XFM–with the world's favourite music

Find out the station policy and stick to it — even when sending in an audition tape, use the form you hear on-air.

A frequent rule of presentation is 'never say goodbye'. It's an invitation for the listener to respond and switch off. At the end of a programme the presenter hands over to someone else — you (the station) never give the impression of going away. Further, the presenter joins the listener not the other way round. 'It's good to be with you', is a subtle form of service, whereas 'Thank you for joining me' is more of an ego-trip for the presenter. The station should go to the bother of reaching out to its listeners, not expect them to come to it.

Continuity presentation

Presenting a sequence of programmes, giving them continuity, acting as the voice of the station, is very similar to being the host of a magazine programme responsible for linking different items. The job is to provide a continuous thread of interest even though there are contrasts of content and mood. The presenter makes the transition by picking up in the style of the programme that is finishing so that by the time he has done the back-annoucements and given incidental information, station identification and time check, he is ready to introduce the next programme in perhaps a quite different manner. Naturally to judge the mood correctly he has to do some listening. It is no good coming into a studio with under a minute to go, hoping to find the right piece of paper so as to get into the next programme, without sounding detached from the whole proceedings. A station like this might as well be automated.

If there is time at programme breaks, trail an upcoming programme — not the next one since you are going to announce that in a moment. The most usual style is to trail the 'programme after next'. But do so in a compelling and attractive way so as to retain the interest of the listener — perhaps by using an intriguing clip from the programme (see p. 112.) If the trail is for something further ahead, then make this clear — 'Now looking ahead to tomorrow night . . .'

Continuity presentation requires a sensitivity to the way a programme ends, to leave just the right pause, to continue with a smile in the voice or whatever is needed. Develop a precise sense of timing, the ability to talk rather than 'waffle', for exactly fifteen seconds, or a minute and a half. A good presenter knows it is not enough just to get the programmes on the air, his concern is the person at the end of the system.

Errors and emergencies

What do you do when the cart fails to 'fire', the machine does not start or having given an introduction there is silence when the fader is opened? Firstly, no oaths or exclamations! The microphone may still be 'live' and this is the time when one problem can lead to another. Secondly, look hard to see that there has not been a simple operational error. Are all the signal lights showing

correctly? Is there an equipment fault which can be put right quickly? Can a tape be transferred to another machine? If by taking action the programme can continue with only a slight pause, five seconds or so, then no further announcement is necessary. If it takes longer to put right, ten seconds or more, something should be said to keep the listener informed:

'I'm sorry about the delay, we seem to have lost that report for a moment . . .'

Then if action is assured it is possible to continue:

'We'll have it for you shortly . . .'

The presenter may assume personal or collective responsibility for the problem but what he must not do is to blame someone else:

'Sorry about that, the man through the glass window here pressed the wrong button'!

The same goes for tapes or discs played at the wrong speed, the wrong item following a particular cue, or pages read in the wrong order. The professional does not become self-indulgent, saying how complicated the job is, he simply puts it right, with everybody else's help, in a natural manner and with the minimum of bother. His job is to expect the unexpected.

Sooner or later a more serious situation will occur which demands that the presenter 'fills' for a considerable time. Standby announcements of a public service type — an appeal for blood donors, safety in the home, code for drivers, procedure for contacting the police or hospital service. Also programme trails and other promotional material can be used. These 'fills' should always be available to cover the odd twenty seconds, and changed once they have been used.

Standby music is an essential part of the emergency procedure. Something for every occasion — a break in the relay of a church service, the loss of Saturday football, an under-run of a children's programme. To avoid confusion the music chosen should not be identical to anything it replaces, simply of a sympathetic mood. Once it is on there is a breathing space to attempt to get the problem sorted out. The principle is to return to the original programme as quickly as possible. Very occasionally it may be necessary to abandon a fault-prone programme and some stations keep a 'timeless talk' or fifteen minute feature permanently on standby to cover such an eventuality.

Headphones

A vocal performer can sometimes become obsessed with the sound of his own voice. The warning signs include a tendency to listen to himself continuously on headphones. The purpose of headphone monitoring is essentially to provide talkback communication, or an outside source or cue programme feed. Only if it is unavoidable should both ears be covered, otherwise the presenter begins to live in a world of his own, out of touch with others in the studio. If he has a great deal of routine work, the same announcements, station identifications, time checks and introductions, it is easy not to try very

hard to find appropriate variations. Like the newsreader he should occasionally listen to himself recorded off-air, checking a repetitive vocabulary, use of cliché or monotony of style.

Trails and promos

Part of a station's total presentation 'sound' is the way it sells itself. Promotional activity should not be left to chance but be carefully designed to accord with an overall sense of style. 'Selling' one's own programmes on the air is like marketing any other product, and this is developed in the next chapter, but remember that the appeal can only be directed to those people who are already listening. The task is therefore to describe a future programme as so interesting and attractive that the listener is bound to tune in again. The qualities which people enjoy and which will attract them to a particular programme are:

- Humour that appeals.
- Originality that is intriguing.
- An interest that is relevant.
- A cleverness which can be appreciated.
- Musical content
- Simplicity — a non-confusing message.
- A good sound quality.

If one or more of these attributes is presented in a style to which he can relate, the listener will almost certainly come back for more. The station is all the time attempting to develop a rapport with the listener, and the programme trailer is an opportunity to do just this. It is saying of a future programme, 'this is for *you*'.

Having obtained the listener's interest, a trail must provide some information on content — what the programme is trying to do, who is taking part, and what form (quiz, discussion, phone-in, etc.) it will take. All this must be in line with the same list of attractive qualities. But this is far from easy — to be humorous *and* original, to be clever as well as simple. The final stage is to be sure that the listener is left with clear transmission details, the day and time of the broadcast. The information is best repeated:

'. . . You can hear the show on this station tomorrow at six p.m. Just the thing for early evening — the 'Kate Greenhouse Saga', on 251 — six o'clock tomorrow'.

Trails are often wrapped around with music which reflects something of the style of the programme, or at least the style of the programme in which the trail is inserted. It should start and finish clearly, rather than on a fade; this is achieved by prefading the end music to time and editing it to the opening music so that the join is covered by speech.

At its simplest, a trail lasting 30 seconds looks like this:

```
MUSIC:     Bright, faded on musical phrase, held under speech.     5"
SPEECH:    Obtains interest.                                      10"
           Provides information on content.
           (Music edit at low level under speech)                 5"
           Gives transmission details.                            5"
MUSIC:     Faded up to end.                                       5"
```

There is little point in ordering a listener to switch on; the effect is better achieved by convincing him that he will be deprived if he does not. And of course if that is the station's promise then it must later be fulfilled. Trails should not be too mandatory, and above all they should be memorable.

Making commercials

The purpose of an advertisement is to sell things. It is not there simply to amuse people or to impress the chairman's wife; it is designed to move goods off shelves, cars out of showrooms, and customers eagerly towards services. The radio advertiser must use a good deal of skill in motivating his target audience to a specific action. The effective advertisement will:

- interest
- inform
- involve
- motivate
- direct

Most commercials are made by advertising agencies in conjunction with specialist production houses. They arrive at the station on disk or cartridge and need only dubbing to the most suitable operational medium — generally a cart or computer hard disk. However, producers may be called upon to make local commercials and the elements which he or she must consider are:

- The target audience — for whom is this message primarily intended?
- The product or service — what is the specific quality to be promoted?
- The writing — what content and style will be appropriate?
- The voice or voices — who will best reinforce the style?
- The background — is music or sound effects needed?

The producer must also be familiar with the station copy policy or code of practice governing advertising. Regulatory standards form the essential background to commercial production.

Copy policy

'I've bought the time, I can say what I like.'

Unfortunately not. A client does not have free rein with the station's air but must comply with a set of rules, a copy of which should be readily available to all potential advertisers. In Britain the Broadcasting Act 1990

makes the issuing of such rules the duty of the Radio Authority, which is also charged with enforcing them.

The principle is that all advertising should be 'legal, decent, honest and truthful' and that nothing should 'offend against good taste or public feeling'.

The Radio Authority's 'Code of Advertising Standards and Practice, and Programme Sponsorship' sets out the rules, including specific prohibitions on advertising which:

- could be confused with programming;
- is on behalf of any political body;
- shows partiality in matters of current political or industrial controversy;
- unfairly attacks or discredits other products;
- includes sounds likely to create a safety hazard for drivers;
- makes use of product placement in programmes;
- exploits the superstitious or plays on fear;
- is on behalf of any body which practises or advocates illegal behaviour;
- makes claims which give a misleading impression.

No advertising is permitted within coverage of a religious service, formal royal ceremony, or a schools' programme under 30 minutes. Programme presenters must not endorse a product in a presenter-read commercial. The Code lists those categories where central clearance of copy is required and includes detailed sections on financial advertising — investments, savings, insurance, etc. — alcohol, advertising for and by children, the advertising of medicines and treatments including contraceptives and pregnancy-testing services, charity advertising, appeals for disasters and advertising on behalf of religious bodies. It bans the advertising of cigarettes, guns and gun clubs, pornography, the occult, betting and gaming, escort agencies, products for the treatment of alcoholism, hypnosis and psychoanalysis. It also lists the current legislation relevant to broadcast advertising. The Code is essential reading for anyone involved in British commercial radio.

In the US radio advertising regulation is chiefly through the self-adopted code of the National Association of Broadcasters. This is similar to the Radio Authority rules quoted and has points to make about the use of words 'safe' and 'harmless' related to pharmaceuticals, the presentation of marriage, and the sensitivity necessary in the use of material relating to race, colour or ethnic derivation. The advertising of hard liquor (distilled spirits) is prohibited. In addition to the National Code, network and local stations have their own policies which conform to State laws. Some of these are very detailed, defining terms such as 'like new', 'biggest', 'factory fresh', 'no credit refused' and 'guarantee'.

Public Service Announcements made available to charitable and non-profit organisations without charge must conform to the same standards as the paid-for commercials and also require approval by the commercial department. Stations may define the standard of language acceptable — where payment is on wordage there is a temptation for advertisers to supply copy in 'telegraphese'. Copy policy is not a fixed and immutable thing. It goes out of date as standards and fashions vary. The commercial

producer must therefore keep abreast of these regulations as he is aware of changes in the law itself.

The target audience

Only on the very smallest station will the producer be required to sell airtime. The qualities of persistence, persuasion and patience belong to the sales team who will negotiate the price, the number of spots, and the discount offered by the Rate Card. The placing of the spots will of course crucially affect the rate charged, and is something the producer also needs to know for two reasons. First because the transmission time must be appropriate to the intended listener, and second, because it may affect the written copy. Clearly there is no point in broadcasting a message to children when they are in school, or to farmers when they are busy. Nothing is gained by exhorting people to 'buy something now' when the shops are shut. If you are selling holidays, who makes the purchasing decision for which type of vacation? What precise age buys what type of record? Which socio-economic group do you wish to attract for a particular drink?

To sell its airtime effectively, a commercial station needs to know about its audience. Through independent market research it has to show why it is better than its competitor at reaching a particular section of the public. What age groups does it attract? How much disposable income do they have, and what do they do with it? To what extent do they buy coffee, cars, furniture, holidays, magazines, mortgages or insurance? And of what kind — expensive upmarket or 'cut-price'? If you are the manufacturer of kitchen equipment you want to spend your advertising budget where it is most likely to pay off. So which is the best way of reaching newly married couples setting up home? A radio station with a well-researched audience profile is much more convincing than an amateur with a hunch.

The product or service 'premise'

In 30 seconds, it's not possible to say everything about anything. So identify one, or perhaps two, key features about the product which mark it out as especially attractive. Choose one of these — its usefulness, efficiency, simplicity, low cost, durability, availability, value for money, exclusivity, technical quality, newness, status, advanced design, excitement or beauty. There are other possibilities but a single memorable point about a product is far more effective than an attempt to describe the whole thing. In the case of food and drink the key phrases may be more subjective — easy to prepare, made in a moment, satisfying, long lasting, luscious, nutritious, and so on.

Now develop a short statement which connects the product's intention with a known and desirable effect. This becomes the 'critical premise' or consumer benefit, and often comprises a subject, an action verb and a result. Here are some examples:

Clean breath helps personal relationships.
Disinfecting your bathroom gives you a safer home.
A slimming diet makes you more attractive.
Serving rich coffee impresses your friends.
Driving while drunk kills innocent people.
Unsafe sex increases the risk of AIDS.
Inoculation against disease can save your child's life.
An energy breakfast promotes a successful day.

This is the writer's hypothesis and is the essential first building block for any radio spot. Before going further, test it out on other people — do they believe it? Does the action genuinely link the cause and the effect? Is the end result something that people in your target audience want? This brings us back to the point that effective advertising is grounded on thorough, relevant research. If the premise is shown to be true it is now necessary to connect the product firmly with it.

Whether the object of attention is a January sale, a fast food shop, a cosmetic cream or a life insurance policy, the client and producer/writer together must agree the primary feature to be sold. In this case it is the product's spectacularly life-like quality:

```
VOICE:      This is the sound of a bee landing on a flower, recorded
            on ordinary tape.

FX:         Intermittent mouthblown 'raspberry' (4 secs)

VOICE:      This is the sound of the same bee landing on the same
            flower, but recorded on a different tape - new BASF LH
            Maxima One.

FX:         High power propeller aircraft in dive.  Screech of brakes,
            and 'plop' (5 secs)

VOICE:      Aye - I'll lay it's Maxima One.
            One of four new tapes from BASF - ordinary tape is dull
            by comparison.

[Courtesy FCO Ltd]                              (33 secs)
```

It is important to consider the overall style or image to be projected. Is the impression required to be friendly, warm and domestic or is it unusual, lively and adventurous. If the idea is to convey reassurance, dependability and safety, this should be communicated in the writing, but also in the voicing and any music used. Every element must be consistent in combining to support the premise, and associate the product with it.

Writing copy

This is the heart of it, and it's worth remembering two things — (1) well chosen, appropriate words cost no more than sloppy clichés; and (2) radio is a visual medium.

First impressions count — the 'primacy' and 'recency' effects referred to under 'News' are no less important here. The opening sentence should

immediately identify the setting — the location, persona, key selling point or product. This can be greatly helped by well-chosen effects:

MALE VOICE CHOIR:	'All Through the Night' (faded, continues under)
FX:	Clank of milk bottles
VOICE:	Down at the depot, before the crack of dawn, You'll find the lads from Unigate preparing for the morn. They're loading up the turkeys, packing up the cheese, the freshest cream, the choicest meats, the tempting range of Christmas treats that's surely bound to please. (pause - music continues under) Your Unigate milkman can offer you so much more than milk this Christmas, and all at super-value prices. So this Christmas don't forget to stop the milkman - he's got a float full of Christmas goodies - from Unigate.
FX:	Owlhoot (music ends) (55 secs)

[Courtesy County Sound Radio - station-produced commercial]

The American copywriter Robert Pritikin has pointed out the value of specifically writing for the eye as an aid to product recall. He wrote a now famous illustration of radio's ability to help the listener to visualise even something as intangible as a colour:

ANNCT: The Fuller Paint Company invites you to stare with your
          ears at... yellow. Yellow is more than a colour. Yellow
          is a way of life. Ask any taxi driver about yellow. Or
          a banana salesman. Or a coward. They'll tell you about
          yellow. (Fx Phone rings)
          Oh, excuse me. Yello!! Yes, I'll take your order.
          Dandelions, a dozen; a pound of melted butter; lemon drops
          and a drop of lemon, and one canary that sings a yellow
          song. Anything else? Yello? Yello? Yello? Oh,
          disconnected. Well, she'll call back.

          If you want yellow that's yellow-yellow, remember to remember
          the Fuller Paint Company, a century of leadership in the
          chemistry of colour. For the Fuller colour center nearest
          you, check your phone directory. The yellow pages, of
          course.

[Robert C. Pritikin, writing in 'Monday Memo', Broadcasting
Magazine, 18 March 1974, p. 22]

Here the listener can put his own images to the ideas presented — and the key point about this paint, not its value or durability — its yellowness. Everything is geared to communicate its bright liveliness — even the shortness of the sentences. On reading the piece any good producer will be able to hear the appropriate voice for it and, if need be, the right music.

Creating something visual to produce a memorable image leading to product recall demands great imagination — especially for the more mundane. After all, as an on-station producer what would you write for a local windscreen repair service?

MAN'S VOICE: You're not going to believe this.
                 (Music under - orchestral strings, urgent 'thriller'
                 theme)
                 It was about two in the morning and I was waiting
                 for the lights when a foreign looking woman jumped
                 into the car. "Drive", she said. My foot hit the
                 floor. Five seconds later all hell let loose, soldiers
                 were everywhere, tracker dogs, helicopters and
                 armoured cars. I saw a rifle pointed at the windscreen.
                 She grabbed me and literally threw me under the
                 dashboard. There was a sharp crack and the windscreen
                 gave in. Moments later, I was alone in the darkness
                 - she'd gone, so had everyone else. On the seat I
                 saw a card. It read simply, 'silver shield', they
                 were with me in minutes.
                 See - I said you wouldn't believe me.

VOICE 2:   For the silver shield 24 hour windscreen service
                 just dial one hundred and ask for Freephone Silver
                 Shield - because you never know when you might need us.
                 (Music: up to finish)

[Courtesy County Sound Radio]   (50 secs)

In a few seconds of airtime the script must gain our interest, make the key
point about the product (in the above case, immediacy) and say clearly what
action the listener must take to obtain it. This is especially important for
station-produced marketing promotions aimed at potential buyers of its own
advertising spots. Here the voices wittily imitate two well-known cricket
commentators:

FX: Cricket atmosphere (held under throughout)

VOICE 1:   Yes, Hello everyone and welcome to Southern Sounds small-
                 ads county classic. It's a marvellous day here and
                 interestingly enough, it's 9-99 for 5 transmissions. Quite
                 an incredible offer - how did we arrive at that John?

VOICE 2:   Well, it's 9-99 for 5 transmissions, once a night for a
                 week. And that's the best small advertising offer in
                 county radio in England since 1893.

VOICE 1:   Quite amazing, and all we have to do is call Alison small-
                 ads, during playing hours on Brighton 4 triple 2 double
                 8. (Fx: light applause) And here comes an advertiser
                 now - running in with his cheque for 9-99 (Fx: bat on ball,
                 applause) - and it's superbly fielded by Alison small-ads
                 - and it's on the air in a flash - very good effort that
                 I thought. And so with the offer still at 9-99 for 5 it's
                 back to the studio.
                                                     (55 secs)

[Courtesy Southern Sound Radio - station marketing promo]

Advertising based on familiar radio programmes obviously strikes a chord
with the listener, given the right placing. The next example also imitates BBC
commentators, the writing parodying the sports style. This is one of a series of
ads making use of this device:

```
MAN 1:    So you want to be a football commentator, eh?

MAN 2:    Over the moon Brian.

MAN 1:    Right, well you've gotta have all your football cliches -

MAN 2:    ah ha.

MAN 1:    plenty of drama -

MAN 2:    I'm way behind you there.

MAN 1:    and put your emphasis on - all the wrong words.

MAN 2:    I'm sure I can, manage that.

MAN 1:    Right - I'll give you a bit of the old crowd.

FX:       Football crowd noise (held under)

MAN 2:    (in football commentary style)  And we go into the second
          half with the score standing at 1-nil.  So the game really
          is perfectly balanced - and I'm not going to sit on the
          fence but this game could go either way.  You could take
          the atmosphere and cut it up  in a thousand pieces, dip
          it in custard and give it to the crowd.  And there's Gray,
          - Aston Villa's vibrant virtuoso who's decided to take
          his nerve by the horns and stamp his authority on this
          game in those Nike boots of his...

MAN 1:    (interrupting) Er - Hang on, hang on.  (Fx cut)  What did
          you say?

MAN 2:    Er Gray - Andy Gray the footballer.

MAN 1:    No, no - you said Nike, I'm sure I heard you say Nike.

MAN 2:    Quite categorically, yes.

MAN 1:    Yes but you can't mention brand names - OK?  I mean what
          do you think this is - a commercial or something?
                                                      (60 secs)
```

[Courtesy Grierson Cockman Craig & Druiff Ltd]

This approach, once the format, style, and characters are established, is very effective in promoting the brand name. The time may come when for a national product the name need not be mentioned at all. The advantage is that the listener joins in the game and is almost certain to say the product name to himself — as in the famous 'Schhhh... you know who' campaign. Here, Duracell batteries use only one voice — the same somewhat tired, 'ordinary', older man's voice which was used for a time in all their radio ads, plus their 'sound logo', used on tv as well:

```
VOICE:    As an ordinary HP-8 grade radio battery I have one great
          ambition - I want to be forgotten.  If I'm remembered it
          means I'm dead.  Admit it - that's the only time you ever
          remember your batteries.  You never ask us how we are or
          take us out for a nice walk - only the walk to the bin.
          Well you can forget me for 145 hours of continuous radio
          noise.  But there's a radio battery that can be forgotten
          for over 500 hours.  Now that's what I call forgettable.

          You know the one - erm - oh well, wassisname.
```

```
ANNCR:       Wassisname (logo Fx: big door slam)
             No ordinary battery looks like it or lasts like it.
                                                   (50 secs)
```

[Courtesy Dorland Advertising Ltd]

Voicing and treatment

Casting a commercial is a make or break business. Doing it well stems from having a clear idea of the overall impression required. Professional actors may be expensive but are much more likely than the station's office staff or the client firm's MD to provide what is required. They have greater flexibility, vocal range and, above all, are 'produceable'. Once they know what you want, trained performers will produce consistent results — and you will certainly need it done many times, if only to get the inflections, timing — with effects and music — absolutely right.

Here's a striking piece of no-nonsense writing without music or effects. The one voice has to be quiet, strong, tough and compassionate. It mustn't be associated with any single professional or social group. The speed of delivery is important.

```
MAN'S VOICE:    Our organisation currently has vacancies for people
                in this area.

                Successful applicants will get no company car, no
                luncheon vouchers, no holidays, no bonuses, no expense
                account, no business lunches, no glamour, and - no
                salary.

                If you're interested, and can spare a few hours a
                week to be a Samaritan, give us a ring for more
                information.  We're in the 'phone book.

                But please don't 'phone unless you're serious, -
                someone else may be trying to get through.
                                                   (30 secs)
```

[Courtesy Saatchi & Saatchi Compton Ltd]

In production, vocal inflection, emphasis, pace and projection are infinitely variable. Even though you start with a clear idea of how a piece should sound, you may want to try it a number of ways. It's generally worth asking your speaker what sounds right or comfortable to him or her. Should it be confidential, and relaxed or more excited? What emotional content is appropriate? Should he 'shout', literally, to call attention, for example, to a new store opening.

There are times however when the end result is not the product of creative artifice and technique, but comes straight from reality. Here is the very real voice of genuine anguish — not an actress with words written for her — but the halting voice, careful and controlled, of a mother who had been interviewed after her son was killed in a road accident:

```
WOMAN'S VOICE:    They were crossing the road again after getting off
                  the bus - and this crazy car came from nowhere and
                  just took Simon - and he was killed instantly appa-
                  rently.

                  And I just knew when she said - I'm sorry, will you
                  come and sit down? (voice breaking) I remember it so
                  vividly.

                  When the police came and told us that he had
                  been - erm - charged - they just told us what an awful
                  state he was in, and - erm - couldn't sleep. and was
                  having nightmares, and he had a little boy of his own,
                  aged five.

                  The best way I can describe it is that when I thought
                  about what had happened, I was - I preferred to be me
                  than to be him. Because I didn't think I could live
                  myself with the idea that I'd killed a small child.

MAN'S VOICE:      Drinking and driving wrecks lives.

                                                          (60 secs)
```

[Courtesy: COI/Dept of Transport, DMB&B]

The producer has a range of techniques to alter a voice; filters, graphic equaliser and 'presence' control to change the tonal quality or to give a more incisive cutting edge, compression to restrict the dynamic range and keep the levels up, multi-tracking and variable-speed recording to increase the apparent number of voices, echo for 'space', phasing effects for mystery, harmonisers and so on. Beware of gimmicks however. If one is tempted to use technical tricks to 'make it more interesting', check the writing again — are the words really doing their job? One of the most effective ads I ever made was also the simplest. For a station in the tropics, its purpose was to sell a new iced lolly on a stick:

```
VOICE 1 (calling off):    Hey, where are you going?

VOICE 2 (calling, closer): To get a Blums ice block.

ANNCR:                    Available in the best stores.
                                        (5 secs)
```

Run fairly frequently, because of its low cost, the phrases — or versions of them — could soon be heard all over town. An ad has to be right for its own culture. No matter how clever or complicated an advertisement is, it is never good on its own — only in relation to what happens after it is broadcast.

Music and effects

The main role of music is to assist in establishing mood. The biggest trap is to use a track from the library simply because of its title. The label may *say* 'Sunrise Serenade' but does it *sound* like an early morning promise of a new day, or is it cold, menacing, or just nondescript? Music in the context of the radio commercial must do what you want — immediately. If in doubt, play your choice to a colleague and ask 'what does this remind you of?' On your own you can convince yourself of anything.

The right music will almost certainly not be the right length. If you want the music to finish at the end, rather than to be faded, some judicious editing will be needed under the speech.

This was certainly the case in a witty ad using Mozart to promote holidays in Jamaica — in a British context a sensible guess at the tastes of the socio-economic target group likely to be interested in this type of holiday:

FX:	Orchestra tuning up. Concert hall atmosphere
ANNCR (quietly):	And conducting Mozart's symphony number 40 in G minor - Arturo Barbizelli - looking tanned and fit from his recent holiday in Jamaica.
FX:	Applause, quietens
MUSIC:	Mozart symphony No. 40 (4 bars) then accompanied by steel drums, calypso style (4 bars) (Music under)
ANNCR:	He was only there for a fortnight! (Music up, alternating between classical and calypso style. Music under)
ANNCR:	Find out about Jamaica - the island that warms you through and through.
JAMAICAN VOICE:	Ring Jamaica Tourist Board on 01-493-9007. (Music up and faded out)
	(50 secs)

[Courtesy Young and Rubicam Ltd]

If the budget will run to specially commissioned music, however simple, you can clearly make it do what you want. Even a small station ought to be able to offer clients the possibility of tailor-made music — perhaps using a local musician with a bank of synthesisers. It can make all the difference — as with this firm of solicitors singing their own song. A comic, and memorable, idea which certainly gives the impression of its being a lively and 'unstuffy' firm.

MUSIC:	Upbeat piano accompaniment
VOICE 1:	I'm Underhill
VOICE 2:	I'm Wilcock
VOICE 3:	and I'm Taylor
ALL:	pleased to meet you
VOICE 1:	we're solicitors
ALL:	and jolly proud of it
VOICE 2:	in Wolverhampton
ALL:	Waterloo Road -
VOICE 3:	If you've a problem
ALL:	then we can help you as only a solicitor can
VOICE 1:	so that's Underhill

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VOICE 2:    and Wilcock
VOICE 3:    and Taylor
ALL:        solicitors in Wolverhampton's Waterloo Road
                                              (20 secs)
[Courtesy Beacon Radio - station produced commercial]
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A word of warning about adding new words to a well-known song. Make sure that the music is out of copyright, or at least obtain written clearance from the publisher before proceeding. Publishers can be very sensitive about parodies of the work they own. All published music used in advertisements should be cleared in the same way that the station deals with its other music. For ads and promos Performing Rights and Copyright Societies will normally make special arrangements rather than insisting on details of individual use.

On a technical point, make sure that the music/speech mix is checked for audibility in both the mono and stereo versions. The point made earlier is crucial — it may not be satisfactory to broadcast the same mix, in terms of relative level, on stereo FM as on mono medium wave.

Sound effects, like music have to make their point immediately and unambiguously. They are best used sparingly, unless the impression required is one of chaos or 'busyness'. The right atmosphere effect to set the scene, manipulated and added to at appropriate points in the script — as in the 'cricket' example earlier — works well. Producers should not be misled by the title of an effects track or what it *actually* is. It is only what it *sounds* like that matters. And again, there is an armoury of techniques, from filters to vari-speed reproduction, for altering the sound.

Humour in advertising

We all like to laugh, and there is a perfectly logical connection between our liking an advertisement because it makes us laugh, and liking the product which it promotes. The brand name endears itself to us by being associated with something that is witty and amusing. But the danger is twofold — that if the joke is too good it may obscure or send-up the product, and that if it is not good enough it will not stand up to one hearing, let alone the repetition that radio gives. The answer lies in genuinely comic writing that does not rely on a single punch line, and in characterisation that may be over-played but which is nevertheless credible. The good commercial has much in common with the successful cartoon drawing. Even so, exposure of such wit should be carefully regulated. It is probably best to create a series of vignettes in a given style, and intermix them across the spot times to give maximum variety. The listener will enjoy the new jokes as well as welcoming old favourites — further, he will recall the product long before the ad gets to it.

One fairly sure-fire situation is to parody a popular tv programme, such as one of the soap operas, choosing voices and accents which represent already very familiar characters, or at least stereotypes:

MUSIC:	Big orchestral introduction (faded under)
ANNCR:	Nancy Loofah has something on her mind in today's episode of 'Washingtown' - the long-running Fairy toilet soap-opera. (Music faded out. Fx slow clock tick)
MAN:	So Nancy, why did you want to see me?
WOMAN:	Well Doctor Flannel, you know that I'm head of the Soft-Soap Corporation.
MAN:	Of course.
WOMAN:	Well, everywhere I turn I seem to see my biggest competitor.
MAN (reassuring):	OK, well let's try a little test. I'll say a word - you say the first thing that comes into your head.
WOMAN:	OK.
MAN:	Let's start with 'pure'.
WOMAN:	Fairy.
MAN:	Mild.
WOMAN:	Fairy.
MAN:	Gentle.
WOMAN:	Fairy.
MAN:	Longer-lasting.
WOMAN:	Fairy.
MAN (smiling):	Right, well I'd say you had a mild -
WOMAN:	Fairy.
MAN:	- a mild fairy fixation. It should pass.
WOMAN:	Oh, how long will it last?
MAN:	Well, if it were an ordinary soap, not long. But as it's Fairy...
WOMAN (gently):	It's alright doctor, you can tell me.
MAN:	As it's Fairy soap, Mrs Loofah, I'm afraid it could go on for ages. (Music faded up)
WOMAN (horrified):	Oh, no!
ANNCR:	Has Nancy really been brainwashed? Listen soon for 'Washingtown' - the long-running Fairy toilet soap-opera. (Music ends) (60 secs)

[Courtesy Saatchi & Saatchi Compton Ltd]

Some of these 'one-minuters' are full-scale dramas in their own right. As has been said in another chapter, if the station facilities and expertise cannot properly undertake this kind of work, it is better to succeed with something simpler than embark on the complexity of a major production such as this:

|	
(American voices)	Fx hiss of space circuit, bleep
MAN 1 (on filter):	OK base, I'm on the ladder now. (Music: majestic, low level) This is one small leap for man...
MAN 2:	Hank, er, just hold on there will you. (Music cuts) That's 'one small step for man' there.
MAN 1 (filter):	er, yes sir. (To self) One small step - OK base. (Music begins) This is one tiny (music cuts) - oh rats.
MAN 2 (laconic):	Relax Hank, just take your time now. (Music begins)
MAN 1 (filter):	This is one big, small, step here, for one man to take off a ladder... (music cuts)
MAN 2:	OK Hank, you're getting warm. 'One giant leap for mankind'.
MAN 3 (filter):	Hank, I'm getting cramp on the ladder up here, will you hurry it up please. (Music begins)
MAN 1 (filter):	This is one small leap for a giant - (music cuts)
MAN 2 (interrupting):	One giant leap for mankind. (Music begins)
MAN 1 (filter):	This kind man is a small giant. (Music cuts)
MAN 2 (testily):	Giant leap. (Music begins)
MAN 1 (filter):	This leap year is gonna be the best (music cuts) - aah
MAN 2:	Chuck, will you unload the Heineken bay and refresh that man's speech please?
FX (close):	Pouring liquid into a glass
MAN 1 (filter):	OK, I'm ready - run the music. (Music begins again) This is one small step for man - one giant leap for mankind. Fx applause up Music: men's voices sing slowly in the style of 'Space Odyssey' 'Heineken refreshes the parts other beers cannot reach'.
MAN 1 (filter; triumphant):	The Blue Tit has landed.
MAN 2:	The Eagle, Hank, the Eagle.
	(85 secs)

[Courtesy Lowe Howard-Spink Marschalk]

A radio commercial is trying to sell a real product or service: the advertisement itself must therefore have reality, however outrageous its style. In the end, people must believe it.

The discussion programme

The topic for a broadcast debate should be a matter in which there is genuine public interest or concern. The aim is for the listener to hear argument and counter-argument expressed in conversational form by
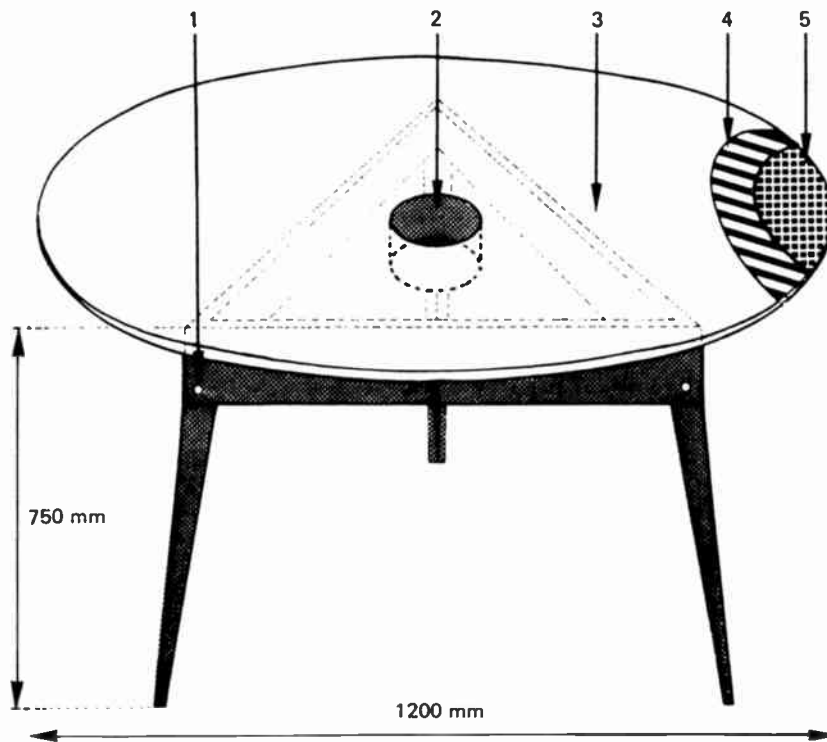
Fig. 10.1. A talks/discussion table. Designed for studio use the table has three legs to reduce obstruction and to prevent it wobbling on an uneven floor. 1. Headphone Jack carrying a programme feed with or without additional talkback. 2. Centre hole to take the microphone either placed on a special carrier fitting, or on a floor stand. 3. Acoustically transparent table top consisting of a loose weave cloth surface, a layer of padding (4) and a steel mesh base (5). (Courtesy of BBC Engineering Information Department.)

people actually holding those views with conviction. The broadcaster can then remain independent.

Format

In its simplest form there will be two speakers representing opposing views together with an impartial chairman. The producer may of course decide that such an arrangement would not do justice to the subject, that it is not as clear cut as the bidirectional discussion will allow and it might therefore be better to include a range of views — the 'multi-facet' discussion.

In this respect the 'blindness' of radio imposes its own limitations and four or five speakers should be regarded as the maximum. Even then it is preferable that there is a mix of male and female voices.

Under the heading of the discussion programme should also come what is often referred to as 'the chat show'. Here, a well known radio personality introduces a guest and talks with him. It may incorrectly be described as an interview but since 'personalities' have views of their own which they are generally only too ready to express, the result is likely to be a discussion. The 'chairman plus one' formula can be a satisfactory approach to a discussion, particularly with the more lightweight entertainment, the non current-affairs type of subjects. It works less well in the controversial, political, current-affairs field since it is more difficult for the chairman to remain neutral if he is part of the discussion. In any case the danger for the

Fig. 10.2. A discussion can become confusing if it contains too many different points of view.

broadcaster is that in order to draw out his guest contributor, he is always acting as 'the opposition' and becomes identified as 'anti everything'. In such cases the more acceptable format is that of the interview. It is important for listeners and broadcasters to draw a clear distinction between an interview and a discussion.

Selection of participants

Do all participants start equal? A discussion tends to favour the articulate and well organised. The chairman may have to create opportunities for others to make their case. It is possible to 'load' a discussion so that it is favourable to a particular point of view, but since the listener must be able to make up his mind by hearing different views adequately expressed, the producer should look for balance — of ability as well as opinion. Often there are on the one hand the 'official spokesmen', and on the other the good broadcasters! Sometimes they combine in the same person but not everyone, in the circumstances of the broadcast debate, is quick thinking, articulate and convincing — however worthy they may be in other respects. In selecting the spokesman for one political party it is virtually
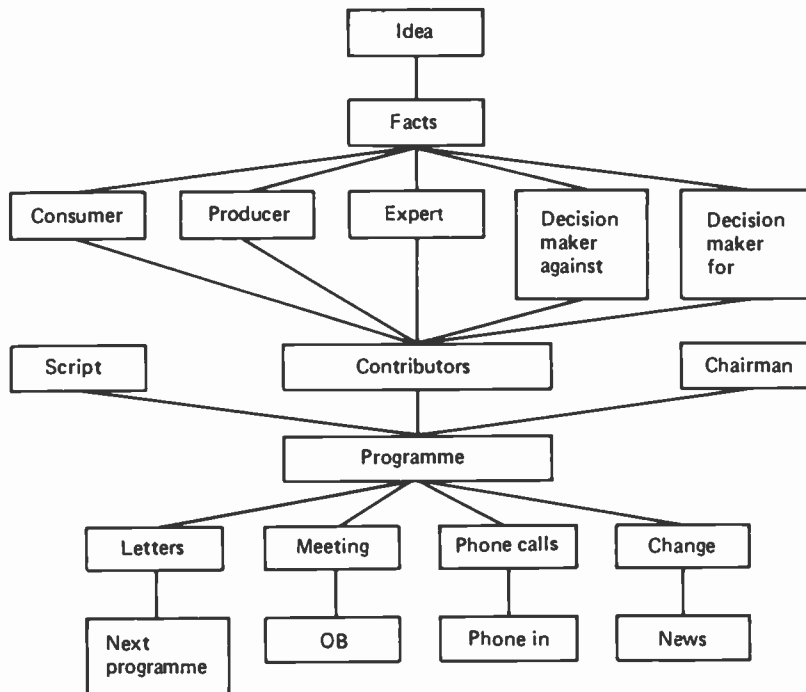

Fig. 10.3. Stages in producing a discussion programme. Select the topic — research the information — choose the participants — co-ordinate the contributors — broadcast the programme — deal with the response — evaluate the possibility of follow-up.

obligatory also to include his 'shadow' opposite number — whatever the quality of his radio performance.

There will obviously be times when it is necessary to choose the leader of the party, the council member, the chairman of the company or the official spokesperson; but there will also be occasions when the choice is more open to the broadcaster and in the multi-faceted discussion it is important to include as diverse a range of interests as is appropriate.

In general terms these can be summarised as: power-holders and decision makers, legal representation and 'watch-dog' organisations, producers of goods and services, and consumers of goods and services. These categories will apply whether the issue is the flooding of a valley for a proposed hydro-electric scheme, a change in the abortion law, or an increase in the price of food.

The listener should also be regarded as a participant and the topic should at least be one which involves him. If the listener is directly affected he can be invited to take part in a follow-up programme either by letter or by phone. In the event of a public meeting on the subject it may be that the broadcaster can arrange to cover it with an outside broadcast.

The chairperson

Having selected the topic and the team, the programme will need someone to chair the discussion. The ideal is knowledgeable, firm, sensitive, quick thinking, impartial, and courteous. He or she will be interested in almost everything and will need a sense of humour — no mean task!

Having obtained this paragon of human virtue who also possesses a good radio voice and an acute sense of timing, there are several points which need attention before the broadcast. One of these is to decide what to call the chairperson. Here the term chairman is used to include both men and women.

Preparation

The subject must be researched and the essential background information gathered and checked. Appropriate reference material may be found in libraries, files of newspaper cuttings, and in the radio station's own newsroom. The chairman must have the facts at his fingertips and have a note of the views already expressed so that he understands the points of controversy. He can then prepare a basic 'plot' of the discussion outlining the main areas to be covered. This is in no sense a script, it is a reminder of the essential issues in case they should get sidetracked in the debate.

It is important that the speakers are properly briefed beforehand making sure that they understand the purpose, range *and limitations* of the discussion. They should each know who is to take part and the duration of the programme. It is not necessary for them to meet before the broadcast but they should be given the opportunity to do their own preparation.

Starting the programme

At the start of the broadcast the chairman introduces the subject making it interesting and relevant to the listener. This is often done by putting a series of questions on the central issues, or by quoting remarks already made publicly.

The chairman should have everyone's name, and his or her designation, written down in front of him. He then introduces them, making sure that all their voices are heard as early as possible in the programme. During the discussion he should continue to address them by name, at least for the first two 'rounds' of conversation. Their names should be used again at intervals throughout. It is essential that the start of the programme is factual in content and positive in presentation. Such an approach will be helpful to the less confident members of the team and will reassure the listener that the subject is in good hands. It also enables the participants to have something 'to bite on' immediately so that the discussion can begin without a lengthy warming up period.

Speaker control

In the rather special conditions of a studio discussion, some people become highly talkative believing that they have failed unless they have put their whole case in the first five minutes. On the other hand there are the nervously diffident. It is not possible to make a poor speaker appear brilliant, but there is an important difference between someone with poor delivery and someone with little to say. The chairman must draw out the former and curb the latter. Even the most voluble have to breathe — a factor which repays close observation! The chairperson's main task is to provide equal opportunity of expression for all participants. To do this may require suppression as well as encouragement, and such disciplines as are required should be communicated — probably non-verbally.

After having an opinion strongly expressed, that speaker should not be allowed to continue for too long before another view of the matter is introduced. The chairman can interrupt, and it's best done constructively . . . 'That's an important point, before we go on, how do others react to that? — Mrs. Jones?' The chair must in these cases give a positive indication by voice, facial expressions and possibly hand signal as well, of who is to speak. It is also necessary to prevent two voices from speaking at once, other than for a brief interjection, by a decisive and clear indication of 'who holds the floor'. It is not a disaster when there are two or more voices, indeed it may be a useful indicator of the strength of feeling. It has to be remembered however, particularly when broadcasting monophonically, that when voices overlay each other, the listener is unlikely to make much sense of the actual content.

Subject control

The chairman has to obtain clarification of any technical jargon or specialist language which a contributor may use. Abbreviations, particularly of

organisations, are generally far less well understood by the listener than people sitting round a studio table would like to think.

With one eye on his prepared 'plot' and the other on the clock, the chairman steers the subject through its essential areas. However, it's important to remain reasonably flexible and if one particular aspect is proving especially interesting, the chair may decide to depart from the original outline. Questions in the chairman's mind should be:

- Time gone — time to go.
- How long has he had?
- Is it irrelevant?
- Is it boring?
- Is it incomprehensible?
- Next question.
- Who next?

Above all, he must be able to spot and deal with red herrings and digressions. To do this he must know where the discussion should be going and have the appropriate question phrased so that he can interrupt positively, constructively and courteously.

In a lengthy programme it may be useful to introduce a device which creates variety and helps the discussion to change direction. Examples are a letter from a listener, or quote from an article read by the chairman, a pre-recorded interview, a piece of actuality, or a phone call. If the chairman is to retain his impartiality such an insert should not be used to make a specific point but simply to raise questions on which the participants may then comment.

Technical control

The chairman has to watch for, and correct, alterations in the balance of voices which was obtained before the programme began. This may be due to a speaker moving back 'off-mic', turning directly to address his neighbour or leaning in too close. There may be wide variations in individual voice levels as the participants get annoyed, excited, discomfited or subdued. And he has to be aware of any extraneous noise such as paper rustle, matches being struck or fingers tapping the table. Non-verbal signals should suffice to prevent them becoming too intrusive.

As an aid in judging the effect of any movement, changes in voice level or unwanted sounds, the chairman will often wear headphones. These should be on one ear only to avoid his being isolated acoustically from the actual discussion. This will also enable him to hear talkback from the producer so that he can be fed with additional ideas — for example on a point of the discussion which might otherwise be overlooked. On occasions, everyone in the studio will require headphones. This is likely if the programme is to include phone calls from listeners, or when members of the discussion group are not physically present in the same studio but are talking together over links between separate studios. In these circumstances, the talkback arrangements have to be such that the producer's editorial comments are confined only to the headphones worn by the
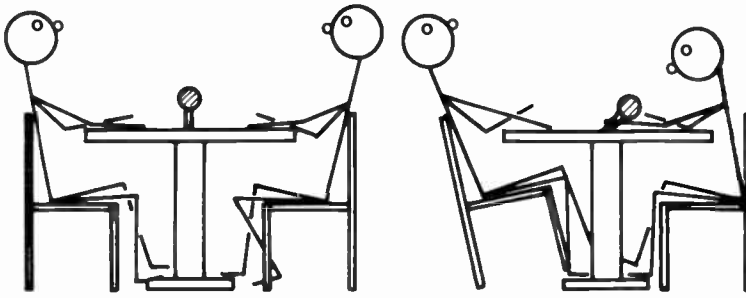
Fig. 10.4. Voice levels must be watched throughout. A person with a quiet voice will have to sit close in to the table and the discussion chairman must prevent too much movement.

chairman. To avoid embarrassment and confusion such a system must be checked before the programme begins.

An important part of the technical control of the programme is its overall timing. The chairman must never forget the clock.
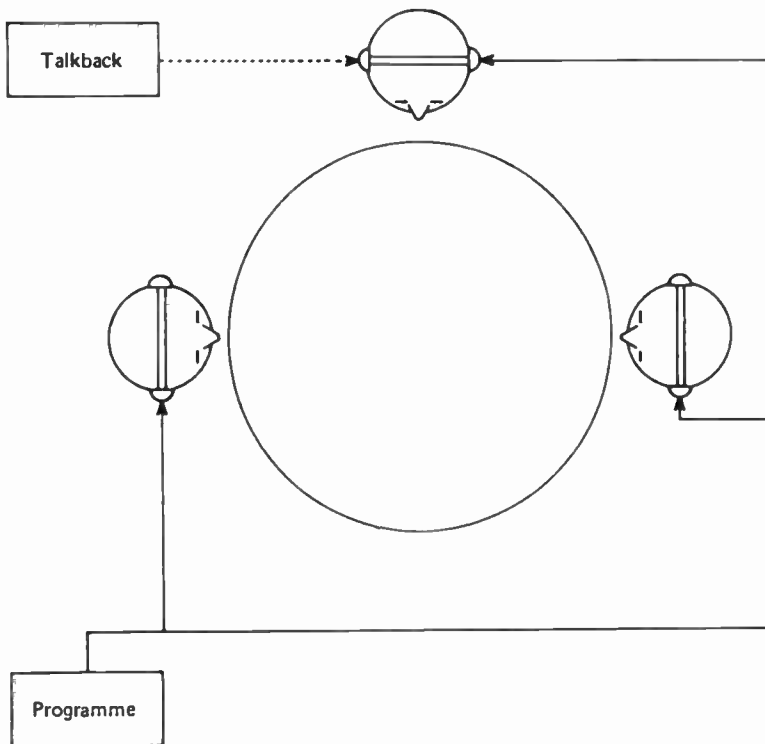

Fig. 10.5. Talkback from the producer goes only to the discussion chairman. The other participants may also have to wear headphones, carrying the programme feed only, in order to hear a remote contributor or phone call.

Ending the programme

It is rarely desirable for the chairman to attempt a summing up. If the discussion has gone well, the listener will already have recognised the main points being made and the arguments which support them. If a summary *is* required, it is often better to invite each speaker to have a 'last word'. Alternatively, the chairman may put a key question to the group which points the subject forward to the next step — 'Finally, what do you think should happen now?' This should be timed to allow for sufficient answering discussion.

Many a good programme is spoiled by an untidy ending. The chairman should avoid giving the impression that the programme simply ran out of time:

'Well, I'm afraid we'll have to stop there . . .'
'Once again the old clock has beaten us . . .'
'What a pity there's no time to explore that last point . . .'

The programme should cover the material which it intended, in the time it was allowed. With a minute or less to go, the chairman should thank the contributors by name, giving any other credits due and referring to further programmes or public events related to the subject.

After the broadcast comes the time when the participants think of the remarks they should have made. An opportunity for them to relax and 'unwind' is important, and this is preferably done as a group, assuming they are still speaking to each other. They are at this stage probably feeling vulnerable and exposed, wondering if they have done justice to the arguments they represent. They should be warmly thanked and allowed to talk informally if they wish. The provision of some refreshment or hospitality is often appropriate.

It is not the broadcaster's job to create confrontation and dissent where none exists. But genuine differences of opinion on matters of public interest offer absorbing broadcasting since the listener may feel a personal involvement in the arguments expressed and in their outcome. The discussion programme is a contribution to the wider area of public debate and may be regarded as part of the broadcaster's positive role in a democratic society.

The phone-in programme

Critics of the phone-in describe it as no more than a cheap way of filling airtime and undoubtedly it is sometimes used as such. But like anything else, the priority it is accorded and the production methods applied to it will decide whether it is simply transmitter fodder or whether it can be useful and interesting to the listener. 'It's Your World' on the BBC's World Service has at least the potential for putting anyone anywhere in touch with a major international figure to question policy and discuss issues of the day.

Through public participation the aim of a phone-in is to allow a democratic expression of view and to create the possibility of community action. An important question therefore is to what extent such a programme excludes those listeners who are without a telephone. Telephone ownership can vary widely between regions of the same country, and the cities are generally far better served than the rural areas. Per head of population North America has more telephones than anywhere else in the world. It follows that to base programmes simply on the American or Canadian practice may be misleading.

It is possible to be over-glib with the invitation — '... if you want to take part in the programme just give us a ring on ...' Cannot someone take part simply by listening? Or to go further, if the aim is public participation, will the programme also accept letters, or people who actually arrive on the station's doorstep? The little group of people gathered round the door of an up-country studio in Haiti, while their messages and points of view were relayed inside, remains an abiding memory of a station doing its job.

It is especially gratifying to have someone, without a phone at home, go to the trouble of phoning from a public call box. To avoid losing the call when the money runs out, the station should always take the number and initiate such calls as are broadcast on a phone-back basis.

Technical facilities

When inviting listeners to phone the programme it is best to have a special number rather than take the calls through the normal station telephone number. Otherwise the programme can bring the general telephone traffic to a

halt. The technical means of taking calls have almost infinite variation but the facilities should include:

(1) Off-air answering of calls.
(2) Acceptance of several calls — say four or five simultaneously.
(3) Holding a call until required, sending it a feed of cue programme.
(4) The ability to take two calls simultaneously on the air.
(5) Origination of calls from the studio.
(6) Picking up a call by the answering position after its on-air use.

Programme classification

The producer of a phone-in must decide the aim of his programme and design it so that it achieves a particular objective. If he simply throws the phone-lines open to listeners, the result can be a hopeless muddle. There are always cranks and exhibitionists ready to talk without saying anything, and there are the lonely with a real need to talk. Inexpert advice given in the studio will annoy those listeners who know more about the subject than the presenter, and may actually be harmful to the person putting the question. It is essential that the producer knows what he is trying to do and by an adequate screening of the incoming calls, limits the public participation to the central purpose of the programme.

Types of phone-in include:

(1) The open line — conversation with the studio presenter.
(2) The specific subject — expert advice on a chosen topic.
(3) Consumer affairs — a series providing 'action' advice on detailed cases.
(4) Personal counselling — problems discussed for the individual rather than the audience.

The open line

A general programme where topics of a non-specific nature are discussed with the host in the studio. There need be no theme or continuity between the calls but often a discussion will develop on a matter of topical interest. The 1-minute phone-in, or 'soap-box', works well when callers are allowed to talk on their own subject for one minute without interruption, providing they stay within the law.

Support staff

There are several variations on the basic format in which the presenter himself simply takes the calls as they come in. The first of these is that the lines are answered by a programme assistant or secretary who ensures that the caller is sensible and has something interesting to say. The assistant outlines the procedure — 'please make sure your radio set is not turned on in the back-ground' (to avoid acoustic 'howl-round') — 'you'll hear the programme on this phoneline and in a moment X (the presenter) will be talking to you'. The
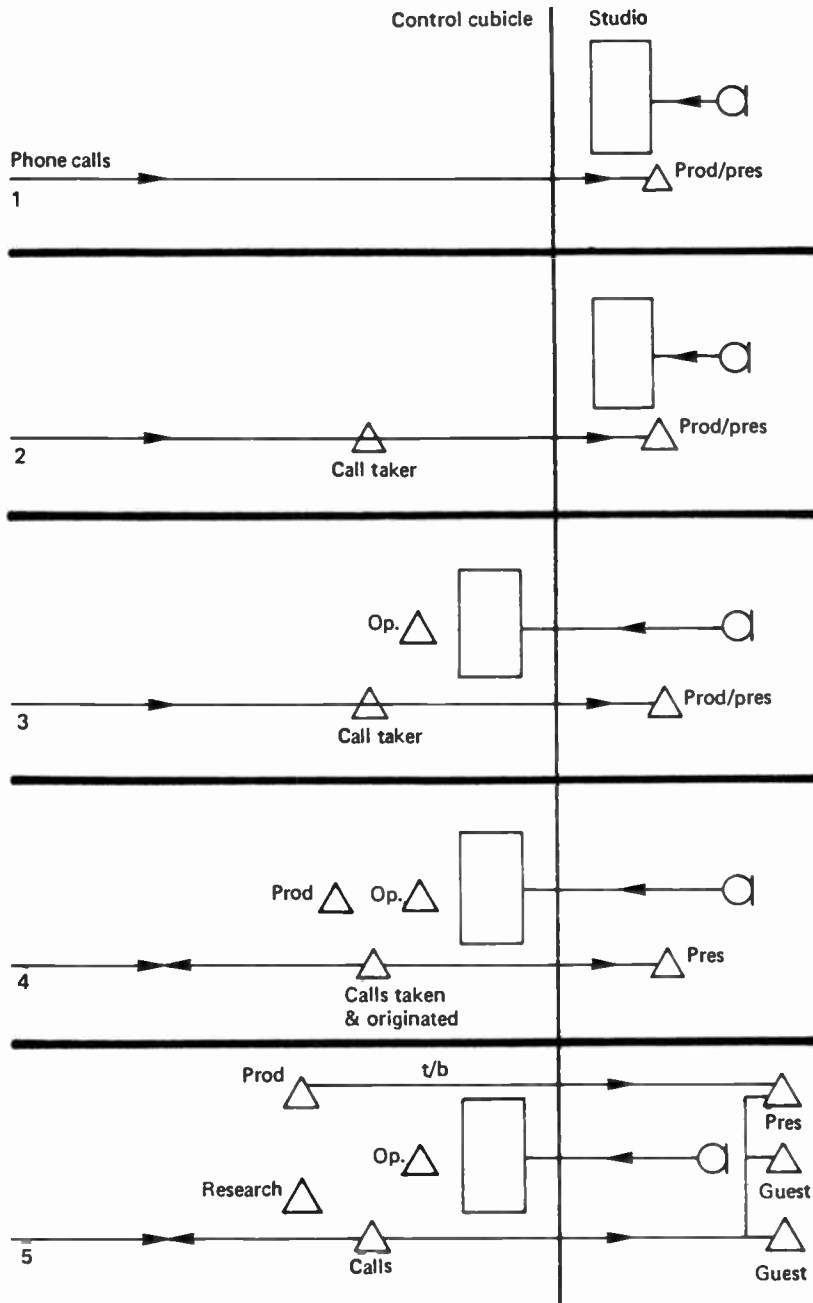
Fig. 11.1. Staffing a phone-in. 1. The total self-op. The presenter takes his own calls. 2. A 'call taker' screens the calls and provides information to the presenter in advance of each call. 3. Operator to control all technical operation e.g. discs, tapes, levels, etc., while producer/presenter concentrates on programme content. 4. Separate producer in control area to make programme decisions e.g. to initiate 'phone-out' calls. 5. Guest 'experts' in the studio with research support available.

call is held until the presenter wants to take it. Meanwhile the assistant has written down the details of the caller's name and the point he wishes to make and this is passed to the presenter. Since they are in separate rooms studio talkback will be used or, better, a third person involved to pass this information. This person is often the producer who will decide whether or not to reject the call on editorial or other grounds, to take calls in a particular order, or to advise the presenter on how individual calls should be handled. If the staffing of the programme is limited to two, the producer should take the calls since this is where the first editorial judgement is made. A computer is a useful device for providing visual talkback between call-taker and presenter. With the keyboard in the cubicle and the screen in the studio, the presenter can be given a considerable amount of advance information about each call.

Choosing the calls

The person vetting the calls quickly develops an ear for the genuine problem, the interesting point of view, the practical, or the humorous. Such people *converse*. They have something to say but can listen as well as speak, they tend to talk in short sentences and respond quickly to questions put to them. These things are soon discovered in the initial off-air conversation. Similarly there are people who one might prefer not to have on the programme:

- the 'regulars' who are always phoning in;
- the abusive, perverted, offensive, or threatening caller;
- the overtalkative and uninterruptable;
- the boring, dull or slow;
- those with a speech defect, unless the programme is specifically designed for this topic;
- those with speech patterns or accents which make intelligibility particularly difficult;
- the sycophantic, who only want to hear you say their name on the air.

Of course the programme must have the idiosyncratic as well as the 'normal', and perhaps anger as well as conciliation. But without being too rude there are many ways of ending a conversation, either on or off the air:

'I'm sorry we had someone making that point yesterday . . .'
'I can't promise to use your call, it depends how the programme goes . . .'
'There's no one here who can help you with that one . . .'
'I'm afraid we are not dealing with that today . . .'
'This is a very bad line, I can't hear you . . .'
'You are getting off the subject, we shall have to move on . . .'
'We have a lot of calls waiting . . .'
or simply
'Right thank you for that — Goodbye . . .'

The good presenter will have the skill to turn someone away without turning them off, but in moments of desperation it is worth remembering that even the most loquacious person has to breathe.

The role of the presenter

The primary purpose of the programme is democratic — to let people have their say and express their views on matters which concern them. It is equivalent to the 'letter to the editor' column of a newspaper or the soap-box orator stand in the city square. The role of the presenter or host is not to take sides — although some radio stations may adopt a positive editorial policy — it is to stimulate conversation so that the matter is made interesting for the listener. He must be well versed in the law of libel and defamation and be ready to terminate a caller who becomes obscene, overtly political, commercial or illegal in accordance with the programme policy.

Very often such a programme succeeds or fails by the personality of the host presenter — quick thinking with a broad general knowledge, interested in people, well versed in current affairs, wise, witty, and by turn as the occasion demands genial, sharp, gentle, possibly even rude. All this combined with a good characteristic radio voice, the presenter is a paragon of broadcasting.

Reference material

The presenter may be faced with a caller actually seeking practical advice and it is important for the producer to know in advance how far the programme should go in this direction, otherwise it may assume expectations for the listener which cannot be fulfilled. Broadcasters are seldom recruited for their practical expertise outside the medium and there is no reason why they should be expected spontaneously to answer specialist questions. However the availability in the studio of suitable reference material will enable the presenter to direct the caller to the appropriate source of advice or information. Reference sources may include telephone directories, names and addresses of local councillors, members of parliament or other elected representatives, government offices, public utilities, social services, welfare organisations and commercial PR departments. This information is usually given on the air; but it is a matter of discretion. In certain cases it may be preferable for the presenter to hand the caller back to the secretary who will provide the appropriate information individually. If there is a great deal of factual material needed then a fourth person will be required to do the immediate research.

Studio operation

At the basic level it is possible for the presenter himself to undertake the operation of the studio control desk. But as facilities are added, it becomes necessary to have a specialist panel operator, particularly where there is no automatic equipment to control the sound levels of the different sources. In this respect an automatic 'voice over' unit for the presenter is particularly useful, so that when he speaks the level of the incoming call is decreased. It must however be used with care if he is to avoid sounding too dominating.

Additional telephone facilities

If the equipment allows, the presenter may be able to take two calls simultaneously so setting up a discussion between callers as well as with himself. The advice and co-operation of the telephone service is required prior to the initiation of any phone programme. This is because there may well have to be safeguards taken to prevent the broadcasting function from interfering with the smooth running of the telephone service. These may take the form of limitations imposed on the broadcaster in how he may use the public telephone in programmes, or possibly the installation of special equipment either at the telephone exchange or at the radio station.

Use of 'delay'

The listening interest of this type of programme depends to an extent on the random nature of the topics discussed and the consequent possibility of the unexpected or outrageous. There is a vicarious pleasure to be obtained from a programme not wholly designed in advance. But it is up to the presenter to ensure that there is reasonable control. However as an additional safeguard, it is possible to introduce a delay time between the programme and the transmission — indeed some radio stations and broadcasting authorities insist on it. Should any caller become libellous, abusive or obscene a delay device, of say ten seconds, enables that part of the programme to be deleted before it goes on the air. The programme, usually a short term recording off magnetic tape, is faded out and is replaced by the 'live' presenter's voice. With a good operator, this substitution can be made without it being apparent to the listener. Returning from the 'live' to the 'delayed' programme is more difficult and it is useful to have on hand news, music or other breaks to allow the presenter time to return to another call. If the caller is occasionally using words which the producer regards as offensive these can be 'bleeped out' by replacing them with a tone source as they reach the air. Again, good operation is essential. Overall however, a radio station gets the calls it deserves and given an adequate but not oppressive screening process, the calls will in general reflect the level of responsibility at which the programme itself is conducted.

The specific subject

Here, the subject of the programme is selected in advance so that the appropriate guest expert, or panel of experts, can be invited to take part. It may be that the subject lends itself to the giving of factual advice to individual questions, for example child care, motoring, medical problems, gardening, pets and animals, antiques, holidays, cooking, citizens' rights. Or the programme may be used as an opportunity to develop a public discussion of a more philosophical nature, for instance the state of the economy, political attitudes, education or religious belief.

A word of warning however about giving specific advice.

Doctors should not attempt diagnosis over the 'phone, much less prescribe drugs in individual cases. What tends to be most useful is general information
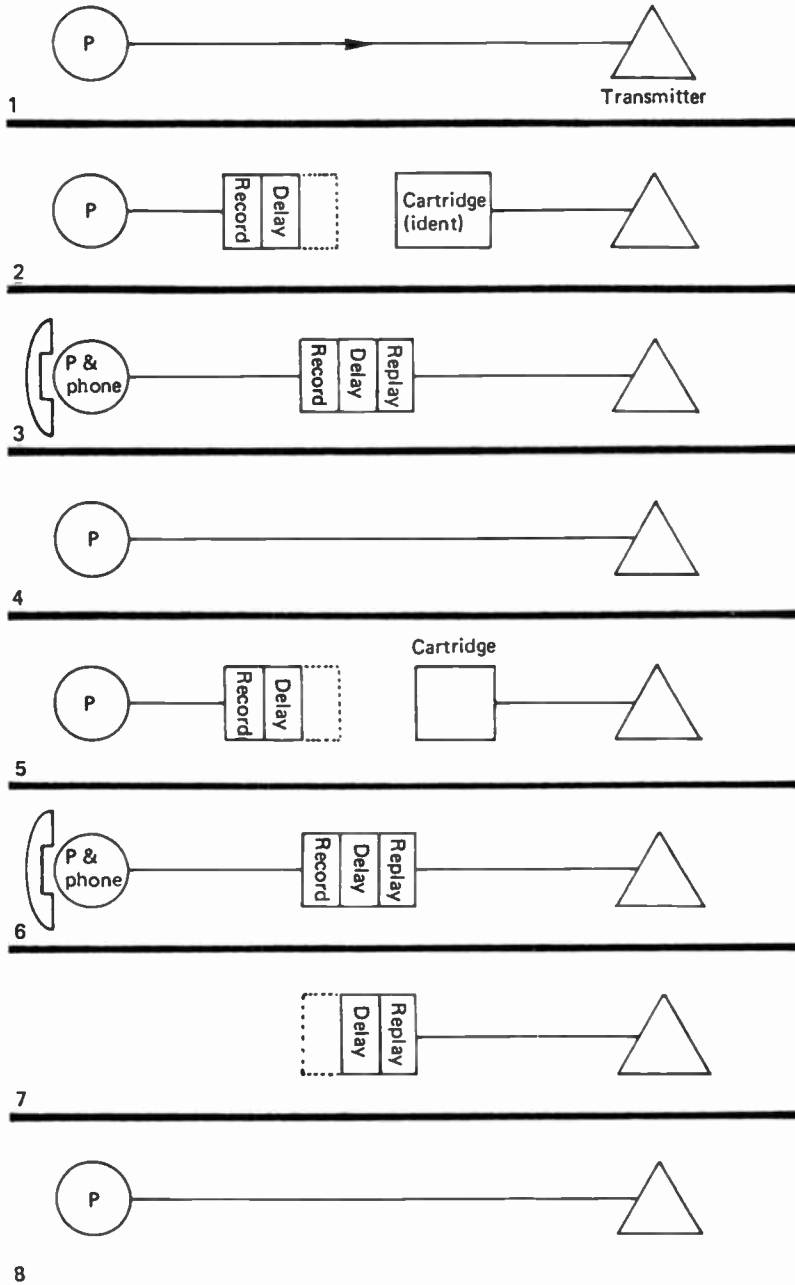
Fig. 11.2. The use of delay in a phone-in. 1. The presenter P is fed directly to the transmitter. 2. To introduce a delay the presenter is recorded and held on a short-term — 10 second — tape loop. The programme output is maintained for this duration by an identification cartridge. 3. As the cartridge ends, the programme continues using the output of the tape delay. The transmission is now 10 seconds behind 'reality'. 4. If a caller says something which has to be cut, the delayed tape output is replaced by the presenter 'live'. 5. To reinstate the delay the procedure is as 2 but using a different cartridge. 6. The programme continues through the delay device. 7. The presenter brings the programme to an end allowing the delay device to finish the transmission. 8. Normal 'live' presentation.

about illness, the side-effects of drugs, what to expect when you go into hospital, the stages of pregnancy, children's diseases, reclaiming medical costs on social welfare, and so on.

Of course there will be difficult calls and the producer should discuss his programme policy beforehand with his guests rather than having to decide it live on-air. For example how will you deal with cancer, AIDS and the terminally ill? At what point might you rule out a call as being too embarrassing, disgusting, or voyeuristic? When is the caller just sending you up?

The legal phone-in too can provide a wide range of useful subjects rooted in actual practice; employment law, motor insurance claims, marriage and divorce, wills, the rights of victims, disputes between landlord and tenant, land claims, house purchase, the responsibilities of children, arguments between neighbours — noise, nuisance, fences, trees, etc. A lawyer, like the doctor, should be wary of providing specific solutions over the phone — the caller is unlikely to give all the facts, especially those not supporting his or her case. There is also a real danger of being used as a second opinion in a case already in front of the courts, or where the caller is dissatisfied with the advice of his own lawyer. The professional guest will know when to respond with: 'I can't comment on your actual case without the details, but in general . . .' The point of whether a radio service can be sued for giving wrong advice is of interest here. The answer will be 'no', so long as the programme does not try to imitate the private consultation. The producer serves the public best by providing advice of general applicability, illustrating how the law operates in specific areas.

'Early lines'

In order to obtain questions of the right type and quality, the phone lines to the programme may be opened some time before the start of the transmission — say half an hour. The calls are taken by a secretary or programme assistant who notes the necessary details and passes the information to the producer who can then select the calls he wants for the programme. For the broadcast these are originated by the studio on a phone-back basis.

The combination of 'early' lines and 'phone-back' gives the programme the following advantages:

(1) The calls used are not random but are selected to develop the chosen theme at a level appropriate to the answering panel and the aim of the programme.
(2) The order in which the calls are broadcast is under the control of the producer and so can represent a logical progression of the subject.
(3) The studio expert, or panel, has advance warning of the questions and can prepare more substantial replies.
(4) The phone-back principle helps to establish the credentials of the caller and serves as a deterrent to irresponsible calls. The programme itself may therefore be broadcast 'live' without the use of any delay device.
(5) At the beginning of the programme there is no waiting for the first calls to

come in, it can start with a call of strong general interest already
established.
(6) Poor or noisy lines can be redialled by the studio until a better quality line
is obtained.

Consumer affairs

The consumer phone-in is related to the 'specific subject' but its range of
content is so wide that any single panel or expert is unlikely to provide
detailed advice in response to every enquiry. As the range of programme
content increases, the type of advice given tends to become more general,
dealing with matters of principle rather than the action to be taken in a specific
case. For example, a caller complains that an electrical appliance bought
recently has given persistent trouble — what should they do about it? An
expert on consumer legislation in the studio will be able to help distinguish
between the manufacturer's and the retailer's responsibility, or whether the
matter should be taken up with a particular complaints council, electricity
authority or local government department. To provide a detailed answer
specific to this case requires more information. What were the exact
conditions of sale? Is there a guarantee period? Is there a service contract?
Was the appliance being used correctly?

The need to be fair

Consumer affairs programmes rightly tend to be on the side of the
complainant, but it should never be forgotten that a large number of
complaints disintegrate under scrutiny and it is possible that such fault as
there is lies with the user. Championing 'the little man' is all very well, but
radio stations have a responsibility to shopkeepers and manufacturers too.
Once involved in a specific case the programme must be fair, and be seen to be
fair. Two further variations on the phone-in help to provide this balance:

(1) *The phone-out*. A useful facility while taking a call is to be able to originate
a second call and have them both on the air simultaneously. In response to
a particular enquiry, the studio rings the appropriate head of sales, PR,
department, or council/government official to obtained a detailed answer,
or at least an undertaking that the matter will be looked into.
(2) *The running story*. The responsibility to be fair often needs more
information than the original caller can give or than is immediately
available and an enquiry may need further investigation outside the
programme. While the problem can be posed and discussed initially, it
may be that the subject is one which has to be followed up later.

Linking programmes together

Unlike the 'specific subject' programme which is an individual 'one-off', the
broad consumer affairs programme may run in series — weekly, daily or even

morning and afternoon. A complex enquiry may run over several programmes and while it can be expensive of the station's resources, it can also be excellent for retaining and increasing the audience. For the long term benefit of the community, and the radio station, the broadcaster must assure himself that such an investigation is performing a genuine public service.

As with all phone-in programmes consideration must be given to recording the broadcast output in its entirety as a check on what was said — indeed this may be a statutory requirement imposed on the broadcaster. People connected with a firm which was mentioned but who heard of the broadcast at second-hand may have been given as exaggerated account of what transpired. An ROT (recording off transmission) enables the station to provide a transcript of the programme and is a wise precaution against allegations of unfair treatment or threat of legal proceedings — always assuming of course that the station has been fair and responsible!

Personal counselling

With all phone-in programmes, the studio presenter is talking to the individual caller but has constantly to bear in mind the needs of the general listener. The material discussed has to be of interest to the very much wider audience who might never phone the station but who will identify with the points raised by those who do. This is the nature of broadcasting. However once the broadcaster declares that he will tackle personal problems, sometimes at a deeply psychological and emotionally disturbing level, he cannot afford to be other than totally concerned for the welfare of the individual caller. For the duration, his responsibilities to the one exceed those to the many. Certainly, the presenter cannot terminate a conversation simply because it has ceased to be interesting or because it has become too difficult. Once a radio service says 'bring your problems here', it must be prepared to supply some answers.

This raises important questions for the broadcaster. Is he exploiting individual problems for public entertainment? Is the radio station simply providing the opportunities for the aural equivalent of the voyeur? Or is there sufficient justification in the assumption that without even considering the general audience, at least some people will identify with any given problem and so be helped by the discussion intended for the individual? It depends of course on how the programme is handled, the level of advice offered, and whether there is a genuine attempt at 'caring'.

To what extent will the programme provide help outside its own air time? The broadcaster cannot say 'only bring your depressive states to me between the transmission times of 9 to 11 at night'. Having offered help, what happens if the station gets a call of desperation during a music show? The radio station has become more than simply a means of putting out programmes, it has developed into a community focus to which people turn in times of personal trouble. The station must not undertake such a role lightly, and it must have sufficient contacts with community services that it can call on specialist help to take over a problem which it cannot deal with itself. But how can the Programme Director ensure that the advice given is responsible? Because of all the types of programme which a station puts out, this is the one

where real damage may be done if the broadcaster gets it wrong. Discussing problems of loneliness, marriage, and sex, or the despair of a would-be suicide, has to be taken seriously. It is important to get the caller to talk and to enlist his support for the advice given, and for this purpose a station needs its trained counsellors.

The presenter as listener

As with all phone-in programmes the presenter in the studio cannot see the caller. He is denied all the usual non-verbal indicators of communication — facial expression, gesture, etc. This becomes particularly important in a counselling programme when the caller's reaction to the advice given is crucial. The person offering the advice must therefore be a perceptive listener — a pause, a slight hesitation in what the caller is saying may be enough to indicate whether he is describing a symptom or a cause, or whether he has yet got to the real problem at all. For this reason many such programmes will have two people in the studio — the presenter, who will take the call initially and discuss the nature of the problem — and the specialist counsellor who has been listening carefully and who takes over the discussion at whatever stage he feels necessary. Such a specialist may be an expert on marriage guidance, a psychiatrist, a minister of religion, or doctor.

Non-broadcasting effort

It is important that the programme also has off-air support — someone to talk further with the caller or to give names, addresses or phone numbers which are required to be kept confidential. The giving of a phone number over the air is always a signal for some people to call it, so blocking it as an effective source for the one person the programme is trying to help. Again, the broadcaster may need to be able to pass the problem to another agency for the appropriate follow-up.

The time of day for a broadcast of this type seems to be especially critical. It is particularly adult in its approach and is probably best at a time when it may be reasonably assumed that few children will be listening. This indicates a late evening slot — but not so late as to prevent the availability of unsuspected practical help arising from the audience.

Anonymity

Often a programme of this type specialising in personal problems allows the caller to remain unidentified. His name is not given over the air, the studio counsellor referring to him by his Christian name only or by an agreed pseudonym. This convention preserves what most callers need — privacy. It is perhaps surprising that people will call a radio station for advice, rather than ask their family, friends or specialist, simply because they do not have to meet anyone. It can be done from a position of security, perhaps in familiar surroundings where they do not feel threatened.

People with a real problem seldom ring the station in order to parade it publicly — such exhibitionists should be weeded out in the off-air screening and helped in some other way. The genuine seeker of help calls the station because he already knows it as a friend and as a source of unbiased personal and private advice. He knows he need not act on that advice unless he agrees with it. This is a function unique to radio broadcasting. It is perhaps a sad comment when a caller says 'I've rung you because I can't talk to anyone about this', but it is in a sense a great compliment to the radio station to be regarded in this way. As such it must be accepted with responsibility and humility.

Phone-in checklist

The following list summarises what is needed for a phone-in programme:

(1) Discuss the programme with the telephone service and resolve any problems caused by the additional traffic which the programme could generate. Do you want all the calls, even the unanswered ones, to be counted?
(2) Decide the aim and type of the programme.
(3) Decide the level of support staff required in the studio. This may involve a screening process, phone-back, immediate research, operational control and phone-out.
(4) Engage guest speakers.
(5) Assemble reference material.
(6) Decide if 'delay' is to be used.
(7) Arrange for 'Recording Off Transmission'.
(8) Establish appropriate 'follow-up' links with other, outside, agencies.

The vox pop

'Vox populi' is the voice of the people, or 'man in the street' interview. The use of the opinions of 'ordinary' members of the public adds a useful dimension to the coverage of a topic which might otherwise be limited to a straight bulletin report or a studio discussion among officials or experts. The principle is for the broadcaster using a portable tape recorder to put one, possibly two specific questions on a matter of public interest to people selected by chance, and to edit together their replies to form a distillation of the overall response. While the aim is to present a sample of public opinion, the broadcaster must never claim it to be statistically valid, or even properly representative. It can never be anything more than — 'the opinions of some of the people we spoke to this afternoon'. This is because gathering material out on the streets for an afternoon magazine programme will almost certainly over-represent shoppers, tourists and the unemployed; and be low on businessmen, motorists, night shift workers and farmers! Since the interviewing is done at a specific time and generally at a single site, the sample is not really even random — it is merely unstructured and no-one can tell what the views obtained actually represent. So no great claim should be made for the simple 'vox pop' on the basis of its being truly 'the voice of the people'.

It is easier to select a specific grouping appropriate to a particular topic — for example early risers, commuters, children or lorry drivers. If the question is to do with an increase in petrol prices, one will find motorists, together with some fairly predictable comment, on any garage forecourt. Similarly, a question on medical care might be addressed to people coming out of a hospital. Incidentally, many apparently public places are in fact private property and the broadcaster must remember that he has no prescriptive right to work there without permission.

As the question to which reaction is required becomes more specific, the group among which the interviews are carried out may be said to be more representative. Views on a particular industrial dispute can be canvassed among the pickets at the factory gate, opinions on a new show sought among the first night audience. Nevertheless it is important in the presentation of 'vox pop' material that the listener is told where and when it was gathered. There must be no weighting of the interview sample of which the listener is unaware. Thus the introductory sentence—'We asked the strikers themselves what

they thought' — may mislead by being more comprehensive than the actual truth. A more accurate statement would be: 'We asked some of the strikers assembled at the factory gate this morning what they thought'. It is longer, but brevity is no virtue at the cost of accuracy.

Phrasing the question

Having decided to include a 'vox pop' in the programme the producer, or the reporter working to him, must decide carefully the exact form of words to be used. The question is going to be addressed to someone with little preparation or 'warm-up' and so must be relatively simple and unambiguous. Since the object is to obtain opinions rather than a succession of 'yes/no' answers, the question form must be carefully constructed. Once decided, the same question is put each time otherwise the answers cannot sensibly be edited together. A useful question form in this context is: 'What do you think of . . .'. This will elicit an opinion which can if necessary be followed with the interviewer asking 'why' — this supplementary to disappear in the editing.

An example

What do you think of the proposal to raise the school leaving age?

  It sounds all right but who's going to pay for it?
  I think it's a good idea, it'll keep the youngsters out of mischief.
  It'll not do *me* any good, will it?
  Bad in the short term, good in the long.
  (Why?)
  (Well) it'll cause an enormous upheaval over teachers' jobs and classrooms
    and things like that, but it's bound to raise standards overall eventually.
  I've not heard anything about it.
  The cost! — and that means higher taxes all round.
  I don't think it'll make much difference.
  (Why?)
  Because for those children who want to leave and get a job it'll be a waste
    and the brighter ones would have stayed on anyway.
  I think it's a load of rubbish, there's too much education and not enough
    work.

It is important that the question is phrased so that it contains the point to which reaction is required. In this example reference is made to the proposal to raise the school leaving age to which people can respond even if they had not heard about it. This is much better than asking 'What do you think of the Government's new education policy?'

In addition to testing opinion, the 'vox pop' can be used to canvass actual suggestions or collect facts, but where the initial response is likely to be short, a follow-up is essential. This question can be subsequently edited out. For example: Who is your favourite TV personality? The answer is followed by asking: Why? Another example: How often do you go to the cinema? — and then: Is this less often than you used to go? — or: Why would you say this is?

It is undoubtedly true that the more complex and varied the questioning, the more difficult will be the subsequent editing. The 'vox pop' producer must remember that he is not conducting an opinion poll or assembling data, he is making interesting radio which has to make sense in its limited context. The second example here may be useful in allowing the listener to compare his frequency of cinema-going with that of other people. But the producer must ask himself whether his intention would be equally well met, and more simply obtained, by the question 'What do you think of the cinema these days?'

A characteristic of the 'vox pop' is that in the final result, the interviewer's voice does not appear. The replies must be such that they can be joined together without further explanation to the listener and hence the technique is distinguished from simply a succession of interviews. The conversations should not be so complex that the interviewee's contribution cannot stand on its own.

Choosing the site

If the questioning is to be carried out amongst a specific group, this may itself dictate the place — on the docks, children leaving school, at the airport, etc. If the material is to be gathered generally, the site or sites chosen will be limited by technical factors, so as to permit easy editing at a later stage. These are to do with a reasonably low but essentially constant background noise level.

The listener expects to hear some background actuality and it would be undesirable to exclude it altogether. However, in essence, the broadcast is to consist of snatches of conversation in the form of remarks made off-the-cuff in a public place, and under these conditions immediate intelligibility is more difficult to obtain than in the studio. A side street will be quieter than a main road but a constant traffic background is preferable to intermittent noise. For this reason the interviewing site should not be near a bus stop, traffic lights or other road junction — the editing process becomes intrusively obvious if buses are made to disappear into thin air and lorries arrive from nowhere. Similarly, the site should be free from any sound which has a pattern of its own, such as music, public address announcements, or a chiming clock. Editing the speech so that it makes sense will be difficult enough without having to consider the effect of chopping up the background. A traffic-free pedestrian precinct or shopping arcade is often suitable, but a producer should avoid always returning to the same place — one of the attractions of the 'vox pop', in the general form as well as in the individual item, is its variety.

The tape machine

Since the recording is to be heavily edited, a reel to reel machine is preferable although the cassette type is generally smaller, lighter and easier to carry. Recordings made on a cassette will need to be copied unless computer editing is a practical possibility.

The machine and its microphone are tested before leaving base, and on site a further check made to ensure an adequate speech level against the background noise. Some ten seconds of general atmosphere should be recorded to provide spare background for the fades in and out. From here on, the recording level control should not be altered otherwise the level of the

background noise will vary. In order to maintain the same background level it is preferable to use a machine with a manual rather than an automatic recording control. Any AGC should therefore be switched out. Different speech volumes are compensated for by the positioning of the microphone relative to the speaker, and of course the normal working distance will be considerably less than in a studio.

To simplify the editing, only the actual replies need be recorded; any preamble and the questions themselves result in wasted tape. A machine with a rapid and unobtrusive means of starting is a considerable asset — some types may be kept running but held on a 'pause' key until required; others may be started by a switch on the microphone.

Putting the question

It is normal for the novice reporter to feel shy about his or her first 'vox pop' but cases of assault on broadcasters are relatively rare. It may be helpful to remember that the passer-by is being asked to enter the situation without the benefit of any prior knowledge and is probably far more nervous. However, the initiative lies with the interviewer and he needs to adopt a positive technique. He should explain quickly who he is and what he wants, put the question, and record the reaction.

First, the reporter should be obvious rather than secretive. He stands in the middle of the pavement with his machine over his shoulder holding the microphone for all to see. It is most useful for the microphone to carry an identifying badge so that the approaching pedestrian can already guess at the situation, and if necessary take avoiding action. No-one should be, or for that matter can be, interviewed against their will. Any potential but unwilling contributors should not be pursued or in any way harassed. In this sense, although the interviewer may receive the occasional rebuff, the contributors are only those who agree to stop and talk.

Seeing a prospective interviewee, the reporter approaches and says pleasantly — 'Good morning. I'm from Radio XYZ'. At this the passer-by will either continue, protesting at how busy he is, or he will stop, being reassured by the truth of the statement since it confirms the station identification badge. He may possibly also be interested at the prospect of being on the radio. The reporter continues—'Can I ask you what you think of the proposal to keep all traffic out of the city centre' — at which point he moves the microphone to within a foot or so of the contributor and switches on the recorder. In the chapter on interviewing, questions which began with 'Can I ask you' or 'Could you tell me', were generally disallowed on the grounds that they were superfluous; permission for the interview having already been granted, and that being unnecessary they were a waste of the listener's time. In the context of the 'vox pop' such a preamble is acceptable since it allows someone the courtesy of non co-operation, and in any case the phrase will disappear in the editing.

The normal reaction of the 'man in the street' will vary from total ignorance of the subject, through embarrassed laughter and a collecting of thoughts, to a detailed or impassioned reply from someone who knows the subject well. All of this can be useful but there is likely to be a wastage rate of at least 50 %. If

about ten replies are to be used, then twenty should be recorded. If the final tape is to be around two minutes — and a 'vox pop' would seldom if ever exceed this — a total of four or five minutes of response should be recorded. With a reel to reel recorder a visual check on the take-up spool will indicate when sufficient material has been gathered, by which time the interviewer will hope to have a diversity of views and some well-made argument.

Occasionally a group of people will gather round and begin a discussion. This may be useful, although inevitably some of it will be 'off mic'. A developing conversation will be more difficult to edit and the 'one at a time' approach is to be preferred, although particularly with children more revealing comment is often obtained if they are within a group talking among themselves.

Whatever the individual response, the interviewer remains friendly and courteous. He will obviously want to give a good impression of the radio station he represents and will avoid becoming sidetracked into a discussion of the subject itself, station policy or last night's programme. He thanks each contributor for taking the trouble to stop and talk, remembering that it is they who have done him a favour.

The editing

Spontaneity, variety, insight and humour — these are the hallmarks of the good 'vox pop'. Listening to the material back at the base studio, the first step is to remove anything which is not totally intelligible. This must be done immediately, before the editor's ear becomes attuned to the sound. It is a great temptation to include a prize remark however imperfectly recorded on the basis of its being intelligible after a few playings under studio conditions! The rejection of material which is not of first class technical quality is the first prerequisite to preventing the finished tape from becoming a confusing jumble. If two tape machines are available, editing by dubbing rather than cutting will often be the quicker method of removing unwanted material and rearranging the remainder into the desired order.

The first piece of the finished vox-pop needs to be a straightforward, clearly understood response to the question that will appear in the introductory cue material. The subsequent comments are placed to contrast with each other, either in the opinions expressed or their style. Men's voices will alternate with those of women, the young with the old, the local accent with the 'foreign', the 'pros' with the 'antis'. The interviewer's voice is not used, except that occasionally it may be useful to be reminded of the question half way through. What must be avoided of course is its continual repetition. Sometimes the answers themselves are similar in which case sufficient should be used to indicate a consensus but not to become boringly repetitious. A problem can arise over the well argued but lengthy reply which would be likely to distort the shape of the vox pop if used in its entirety. A permissible technique here is to cut it into two or three sections placing them separately within the final tape.

The editor needs a good comment to end on. Its nature will depend on the subject but it might be a view forcefully expressed, a humorous remark, or the kind of plain truth which often comes from a child. Good closing comments
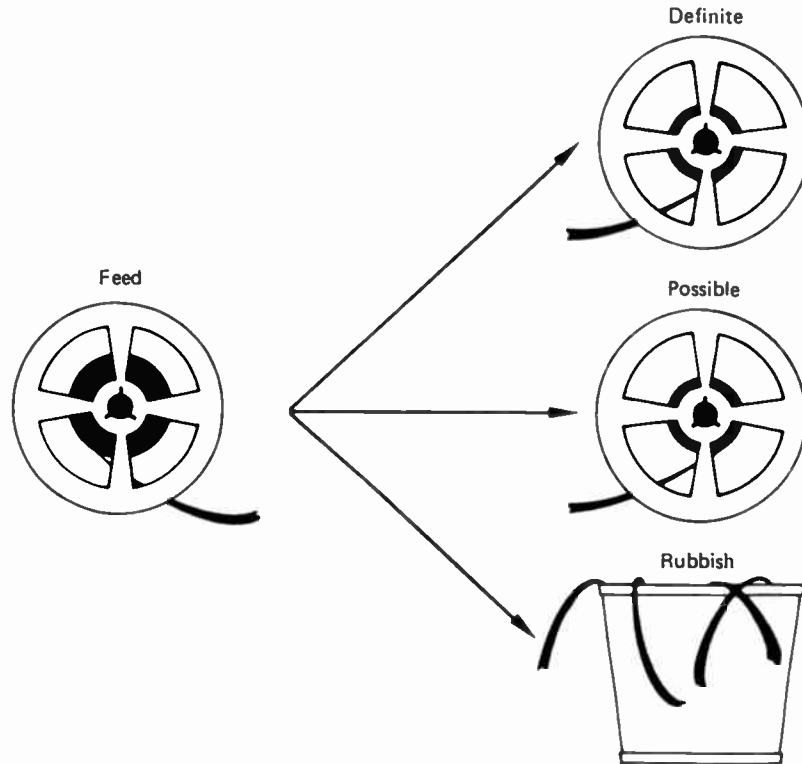
Fig. 12.1. Vox pop editing. The feed spool of the original recordings is sorted into three categories. Definite material of positive and interesting replies — 'possible' material of less good but usable replies — and the distorted or incomprehensible which is discarded. 'Possible' material is transferred to the 'definite' reel to adjust the balance of the final tape.

are not difficult to identify and the interviewer, when he has finished collecting his material, generally knows how his vox pop will end. The spare background noise is used as required to separate replies, with a few seconds at the beginning and at the end as a 'fade up' and 'fade down' under speech — so much better than 'banging it in' and 'chopping it off' on the air.

It should go without saying that the finished vox pop will broadly reflect the public response found by the interviewer. It is possible of course for the editing to remove all views of a particular kind so giving the impression that they do not exist. It may be that a producer would set out with the deliberate intention of demonstrating the overwhelming popularity of certain public attitudes — presumably those which accord with his own. Such manipulation, apart from betraying the trust which hopefully the listener has in him, is ultimately self-defeating. The listener does his own vox pops every day of his life — he will know whether or not the radio station is biased in its reflection of public opinion. Probably more than the broadcaster, the listener knows his own reality when he hears it.

Used properly the vox pop represents another colour in the broadcaster's palette. It provides contrast with studio material and in reflecting accurately what people are saying, it helps the listener to identify with the station and so enhances its credibility.

Listeners' letters

Radio is not a good medium by itself for establishing a genuine two-way contact. Listeners may feel that the broadcaster comes into their home and they may even get the impression that they know an individual presenter. However, this is at best a substitute companionship rather than a genuine personal interaction. The broadcaster/listener relationship — or perhaps that of the station/listener — can be made more real through the broadcaster's ability to reply to listener correspondence. It is a matter of station policy whether or not an individual presenter is encouraged to become involved in writing back to listeners. It is a time-consuming business and a hard-pressed station may not have the resources to do this. On the other hand if a programme offers help, particularly for individual personal needs, then as with a phone-in, it must clearly honour its promise by meeting such requests which may also arrive by fax or e-mail.

Programme correspondence incoming to the station may be classified under two general headings — letters intended for use on-air, and those requiring a response only by mail.

On-air use

This category includes complaints, music requests and dedications, competition replies or letters written directly to a programme 'letter spot'; anything clearly intended for publication, i.e. to be read on-air. In general they either offer advice to the audience at large or ask for help with a personal problem. Letters like these can be a useful resource for programme makers — they frequently raise questions of interest and. make comments of substance, and can easily provide the sole content for a specialist programme. They may be dealt with in a variety of ways:

(1) Read by the presenter, who then responds.
(2) Read by male/female readers, the programme presenter then responding.
(3) Read by the presenter who then interviews an expert or introduces a discussion on the subject.

(4) Letters on similar or related topics grouped together for subsequent response.
(5) A letter dramatised as a sketch to illustrate the point being made, followed by a response by the presenter, an interviewee, or by a discussion.
(6) Letter read by the presenter who without replying opens the discussion to the audience, inviting listeners to respond.

The producer of a letter spot may consider the following in arriving at the most appropriate format:

● To maximise listener involvement several letters should be dealt with in a single spot.
● A long letter may not be read in its entirety but extracts used to reflect accurately what the writer is saying.
● A letter with many questions should not monopolise a spot but could be used in parts, perhaps over several spots.
● To give variety of pace and vocal interest a spot may use more than one of the response forms listed above.
● Avoid reading out full addresses on the air or giving any information likely to endanger the writer (see p. 165).

It is important that programme presenters do not read letters or reply to them in a patronising way, but respond to them as to a valued friend. Broadcasters are neither omnisicient nor infallible and should always distinguish between a factual answer, best advice, and a personal opinion. Some basic, and essential reference sources — books, databases, available experts, etc. — will provide answers for questions like, why does the leaning tower of Pisa lean? Or, how do you remove bloodstains from cloth? But it is a quite different matter replying to questions about how to invest your money, a cure for cataract, the causes of a rising crime rate, or why a loving God allows suffering. Nevertheless, without being glib or superficial it is possible for such a letter to spark off an interesting and useful discussion, or for the presenter to give an informed and thought-out response with:

'On balance I would say that . . .'

or   'If you are asking for my own opinion I'd say . . . but let me know what you think.'

Research may have thrown up a suitable quote or piece of writing on the subject, which should of course always be attributed. Other phrases useful here are:

'Experts seem to agree that . . .'
'No one really knows, but . . .'

People write to radio stations either to get an issue aired publicly, or to get an authoritative reply. A letter is not simply programme fodder, but deserves the same level of consideration which its sender gave it. This becomes increasingly important for short-wave or long-distance broadcasters.

Off-air correspondence

Mail items not intended for broadcast include requests for listener verification or QSL cards, scripts, programme information and offers, merchandise purchasing, and programme follow-up ranging from specific advice to pastoral and personal counselling. Much of this can be dealt with by means of standard replies — perhaps with some details to be filled in — or by fact-sheets, information booklets and so on. It is the time-consuming one-off reply which poses the genuine problem.

Complaints in particular need special attention. It is tempting for a busy station to disregard them, and it has to be said that many are likely to seem unreasonable resulting from an extreme or limited point of view. Nevertheless, if broadcasters are not to appear careless over alleged error and off-hand with the listener, such letters deserve a prompt but considered response at the appropriate level — programme presenter or producer, programme management or senior management — and if found to be of substance, a correction made. If the matter is serious and the station is genuinely in the wrong, an apology should be broadcast in the same slot as the offending transmission. The listening public deserves the highest standard of communication and, done well, a correction by letter or on-air can enhance a programme's reputation not only for the truth, but in its respect for the audience.

A larger category, we hope, comprises those letters which query or seek clarification over something that has been said — or which wish to debate the issue further. This poses another question — is the broadcaster responsible for questions which a programme may have raised in a listener's mind? A small station may have to ignore such correspondence — it represents a drain on resources without providing any airtime. Besides, a presenter may claim that the view of the listener even after a provocatively contentious programme is none of his business and that once the programme is over, the matter is finished. Furthermore, a philosophical, political or theological question raised may be outside his competence to answer.

On the other hand a station may actively seek to develop the relationship with its listeners through follow-up. This is often best done not by the programme presenters or producer individually but by a separate group — either a specialist department of the station staff, or volunteers closely associated with the programme. Such broadcasting support services are extremely useful for educational and religious programmes in particular, where individual listeners may need direct personal help — perhaps struggling with learning a language, coming to terms with bereavement or coping with unemployment. Members of the replying group will need to be sensitive to any cultural differences which may exist between themselves and their correspondents. They will be selected as people experienced in a specialist field, but they will also rapidly develop their own expertise in this special form of one-to-one 'distance learning'. A computerised database enables the station to keep track of the correspondence and perhaps to anticipate further enquiries.

Another method is to put the listener in touch with a suitable college tutor, library, church, self-help group or other agency in his own vicinity. Question follow-up can then be pursued on a personal basis.

These are ways in which a station can extend its obligations as a public servant which radio communication alone cannot do. But it should not be undertaken lightly for it can be expensive in time, money and effort. It therefore requires the backing of a management policy which understands and values this additional form of listener contact.

Music programming

The filling of programme hours with recorded music is a universal characteristic of radio stations around the world. This is hardly surprising in view of the advantages discs have for the broadcaster. They represent a readily available and inexhaustible supply of high quality material of enormous variety that is relatively inexpensive, easy to use and enjoyable to listen to. Before looking in detail at some of the possible formats and what makes for a successful programme, there are three important preliminaries to consider.

Firstly, the matter of music copyright. Virtually every CD, cassette, and record label carries the words, 'all rights of the producer and of the owner of the recorded work reserved. Unauthorised public performance, broadcasting and copying of this record prohibited.' This is to protect the separate rights of the composer, publisher, performers and the recording company, who together enabled the disc to be made. The statement is generally backed by law — in Britain the Copyright Act of 1956. It would obviously be unfair on the original artists if there were no legal sanctions against the copying of their work by someone else and its subsequent remarketing on another label. Similarly, broadcasters who in part earn their living through the effort of recording artists and others, must ensure that the proper payments are made regarding their use of records. As part of a 'blanket' agreement giving 'authorised broadcasting use', most radio stations are required to make some form of return to the societies representing the music publishers and record manufacturers, indicating what has been played. In Britain these are, respectively, the Performing Right Society (PRS) and Phonographic Performance Ltd (PPL). It is the producer's responsibility to see that any such system is carefully followed.

Secondly, it must be said that in using records, broadcasters are apt to forget their obligation to 'live' music. Whatever the constraints on the individual station, some attempt should be made to encourage performers by providing opportunities for them to broadcast. Many recording artists owe their early encouragement to radio, and broadcasting must regard itself as part of the process which enables the first class to emerge. Having

reached the top, performers should be given the fresh challenge which radio brings.

Thirdly, top flight material deserves the best handling. It is easy to regard a record simply as a piece of plastic but on the air someone's reputation may be at stake. Basic operational technique must be fault-less — levels, accurate talk-overs, fades, etc. Most important is that music should be handled with respect to its phrasing. These points are enlarged upon in Chapter 2, on operational techniques.

The programme areas now discussed in detail are: music formats, requests and dedications, guest programmes, and the DJ show.

Clock format

Designing a music programme on a 1-hour clockface has several advant-ages. It enables the producer/presenter to see the balance of the show between music and speech, types of music, and the spread of commercials; it is a great help in maintaining consistency when another presenter has to take over; and it enables format changes to be made with the minimum of disruption. It is a suitable method to use regardless of the length of the programme. The clock provides a solid framework from which a presenter may depart if need be, and pick up again just as easily. It imposes a discipline but allows freedom.

Starting with the audience, the producer begins by asking questions. Who do I wish to attract? Is my programme to be for a particular age or demographic group? This will obviously affect the music chosen, and a reasonable rule of thumb assumes that the musical taste of many people was formed in their teens. For example, listeners in their forties are likely to appreciate the hits of 25 years ago. Of course there are many categories of music which have their own specialist format or may be used to contribute to a programme of wider appeal. Beware, however, of creating too wide a contrast — the result is likely to please no-one. The basic categories, which contain their own sub-divisions, can be listed as follows:

- Top 40
- Progressive rock
- Black soul/funk
- Rhythm and blues
- Disco-beat
- Jazz
- Folk
- Country
- Latin American
- Middle of the road
- Light classical, orchestral — operetta
- Classical, symphonic — opera etc.

Having established the broad category there are infinite combinations of tempo and sound with which to achieve the essential variety within any chosen consistency:
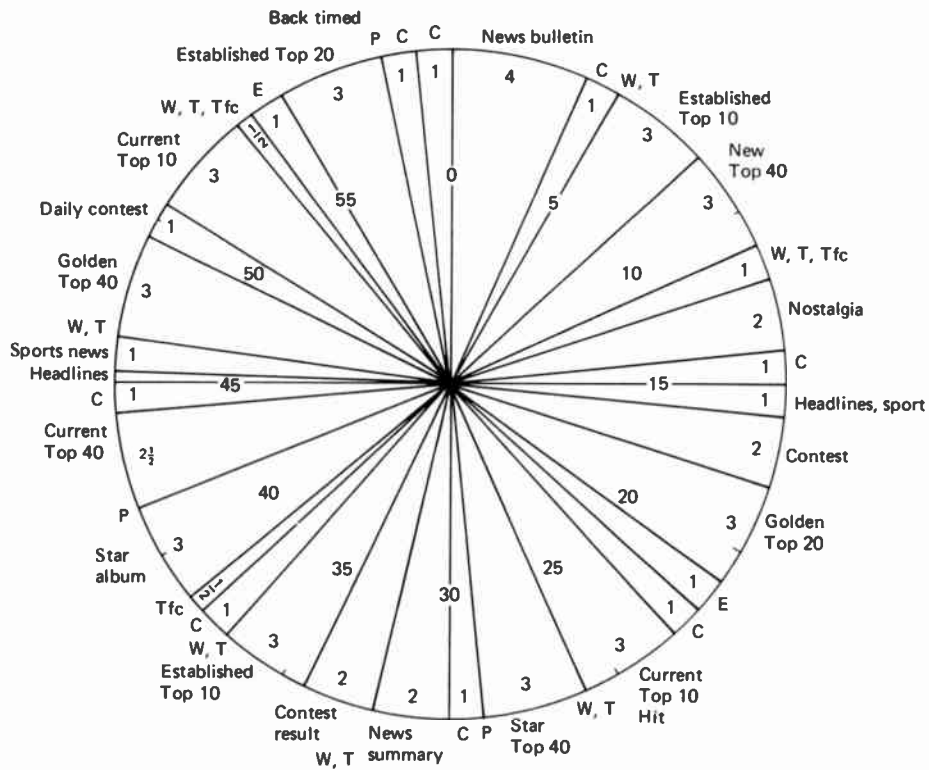
Fig. 14.1. A clock format illustrating the concept of a breakfast time programme on the basis of:

- News on the hour, summary on the half-hour, headlines at quarters.
- Eight minutes of advertising in the hour, employing news-adjacency.
- Music/speech ratio of about 60:40.
- Generally MOR sound using current hits, 'golden' or yesteryear top 40, star name, and nostalgia tracks.
- Speech includes current information, sports news, 'short' programme contest and station daily competition.

- tempo — slow, medium, med/bright, up-beat;
- vocal — male, female, duo, group, newcomer, star;
- era — twenties, thirties, forties, fifties, sixties . . . etc;
- sound — big band, string, military band, brass, orchestral, choral.

Lengthy formatted programmes need not be constructed to have a strong beginning and end; the skill lies in the presenter providing the listener with a satisfying programme over whatever time-period the show is heard. The breakfast show and drive-time programmes are likely to be heard by many people over a relatively short time-span, perhaps 20–30 minutes. The afternoon output will probably be heard in longer durations. The producer sets out to meet the needs of all his audience — so the two key questions are: Does the plan contain the essential elements in the estimated normal period of listening? Does it contain the necessary variety over a longer time-span?

Station practice indicates the following basic rules:

- Come out of news bulletins on a non-vocal up-tempo sound. You need to restore the music pace and avoid any unfortunate juxtaposition of news story and lyric.
- When programming new or unfamiliar music, place solid hits or known material on either side of it — 'hammocking'.
- Spread items of different types evenly up to the hour as well as on the downside.
- Mix items of different durations, avoid more than two items of similar length together.
- Occasionally break up the speech-music-speech sandwich by running discs back to back, i.e. use the segue or segue plus talk-over.
- Place regular items at regular times.

Computerised selection

Many stations regulate the use of music in a totally systematic way, for example to prevent the same tracks being used in adjacent programmes. Entering titles as data, a computer can be programmed to provide the right mix of material with music styles, performers, composers etc. appearing at the desired frequency. The scheduling is then in the hands of the computer programmer who decides the rotation of items, how many times a track will be played in a given period, and what type and length of music is appropriate for different times of day. The computer keeps a history of the music played which not only provides the official music returns, but is the source for answering listener enquiries.

A computerised system is used to generate a weekly playlist which is mandatory for presenters who are given no choice over their music. Less restricting is the playguide. This requires presenters to select a given percentage of their programme from material determined by the programme controller; the remainder they choose themselves. Station policy invariably lays down the extent of individual freedom in the matter of music choice.

Requests and dedications

In presenting a request show it is all too easy to forget that the purpose is still to do with *broad*casting. There is a temptation to think only of those who have written in, rather than of the audience at large. Until the basic approach is clarified, it is impossible to answer the practical questions which face the producer. For example, to what extent should the same record be played in successive programmes because someone has asked for it again? Is there sufficient justification in reading out a lengthy list of names simply because this is what appears on the request card? While the basis of the programme is clearly dependent on the initiative of the individual listener who requests a record, the broadcaster has a responsibility to all listeners, not least the great majority who do not write. The programme aims may be summarised:

(1) To entertain the general audience.
(2) To give especial pleasure to those who have taken the trouble to send a request.
(3) To foster goodwill by public involvement.

Programmes are given a good deal of individual character by the presenter who states his own guidelines. He may deal only in requests related to birthdays, weddings or anniversaries, or he may insist that each request is accompanied by a personal anecdote, joke or reminiscence to do with the music requested. References to other people's nostalgia can certainly add to the general entertainment value of the programme. The presenter should be consistent about this and it is important that style does not take over from content. The declared intention of the programme is to play records and it is therefore music rather than speech which remains the central ingredient.

A further variation is to make a point of including dedications as well as requests, i.e. cards not related to a specific piece of music but which can be associated with any item already included in the programme. By encouraging 'open' cards of this type, the programme can carry more names and listeners therefore have a greater chance of hearing themselves mentioned.

Having decided the character and format of the programme there are essential elements in its preparation.

Choosing music

With music items of $2\frac{1}{2}$–4 minutes each, there will be some eight or nine tracks in each half hour of non-advertising air time. This allows for about a minute of introduction, signature tunes, etc. Given the volume of letters and cards received, it soon becomes clear to what extent the actual requests can be met. The proportion which can be dealt with may be quite small and assuming that their number exceeds the capacity to play them, a selection process is necessary.

The criteria of selection will include the presenter's desire to offer an attractive programme overall, with a variety of music consistent with the programme policy. It may be limited to the current Top 40, to pop music

generally, or it may specifically deal with one area, for example gospel music. On the other hand, the choice may be much wider to include popular standards, light classical music or excerpts from symphonic works. The potential requester should know what kind of music a particular programme offers.

   Another principle of selection is to choose requests that are likely to suit the presenter's remarks. Those which will make for an interesting introduction, an important or unusual event, an amusing remark or a particularly topical reference. It is frequently possible to combine requests using comments from a number of cards in order to introduce a single piece of music. The danger here is to become involved in several lists of names which may delight those who like hearing themselves referred to on the air, but which can become boring to the general listener. It is however a useful method of including a name check while avoiding a particular choice of music either because to do so would be repetitious, or because it is out of keeping with the programme — or of course because the station does not have the record.

Item order

After selecting the music, a decision has to be made about its sequence. This should not be a matter of chance for there are positive guidelines in building an attractive programme. 'Start bright, finish strong' is an old music hall maxim and it applies here. A tuneful or rhythmic familiar up-tempo 'opener' with only a brief speech introduction will provide a good start with which the general listener can identify. A slower piece should follow and thereafter the music can be contrasted in a number of ways: vocal/non-vocal, female vocal/male vocal, group vocal/solo vocal, instrumental/orchestral, slow/fast, familiar/unfamiliar, and so on. It may help to lay the disks out physically on a table to see the programme overall and so determine the order which provides the most satisfactory arrangement. It is sensible to scatter the very popular items throughout the programme and to limit the material which may be entirely new. Careful placing is required with slow numbers which need to be followed by something brighter. The order in which music is played of course affects all music programmes whether or not they are based on the use of records.

Prefading to time

The last piece of music can be chosen to provide 'the big finish' and a suitable finale will often be a non-vocal item. This allows it to be faded-in under the presenter's introduction. It should have been timed to end a minute or so before the close of the programme, so leaving room for the final announcements and signature tune. 'Prefading to time' (not to be confused with 'prefade' — audition or pre-hear) or 'back timing' is the most common device for ensuring that record programmes run to time (see p. 27). The closing signature tune will almost certainly be prefaded to time.

In a similar way items within a programme, particularly a long one, can be subject to this technique to provide fixed points and to prevent the overall timing drifting.

Preparing letters and cards

Requests as received are not always legible and cannot be used in the studio without some form of preparation. This, the presenter should do himself. Some will type out the basic information to ensure clarity, others prefer to work directly from the original cards and letters. It is important that names and addresses are legible so that the presenter is not constantly stumbling, or sounding as though the problem of deciphering his correspondent's handwriting is virtually unsurmountable. In reality, this may often be the case, but a little preparation will avoid needlessly offending the people who have taken the trouble to write and on whom the programme depends. In this respect, particular care has to be taken over personal information such as names and ages, and it goes without saying that such things should be correctly pronounced. This also applies to streets, districts, hospitals, wards, schools and churches where an incorrect pronunciation — even though it be caused by illegible handwriting — immediately labels the presenter as a 'foreigner' and so hinders listener identification. Such mispronunciations should be strenuously avoided, particularly for the community broadcasting station, and prior reference to telephone directories, maps, and other local guides is essential.

Reading through the cards beforehand enables the presenter to spot dates, such as anniversaries, which will be past by the time of the broadcast. This can then be the subject of a suitable apology coupled with a message of goodwill, or alternatively the request can be omitted. What should not happen is for the presenter to realise on-air during his introduction that the event which the writer anticipates has already happened. Not only does this sound unprofessional, but it gives the impression that the presenter does not really know what he is talking about, and worse, does not care. Anything which hinders the rapport between listener and presenter will detract from the programme.

In order to accommodate more requests and dedications, cards can be grouped together, sharing a single piece of music. The music need not necessarily be precisely what was asked for, providing that the presenter makes it quite clear what he is doing. The piece should however be of a similar type to that requested, for example by the same artist.

Such preparation of the spoken material makes an important contribution to the presenter's familiarity with the programme content. While it may be his intention to appear to be speaking informally 'off the cuff', matters such as pronunciation, accuracy of information, relevance of content, and timing need to be worked on in advance. The art is to do all this and still retain a fresh, 'live', ad-lib sound. However, the experienced presenter knows that the best spontaneity contains an element of planning.
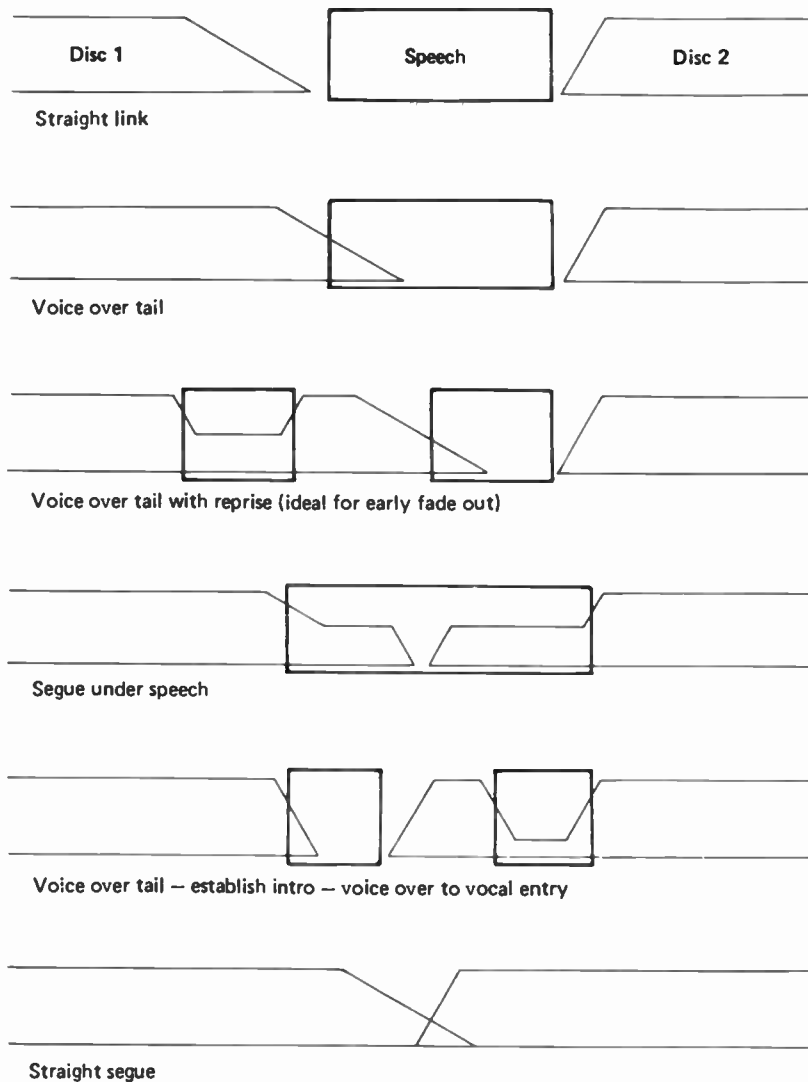
Fig. 14.2. Six ways of going from one music item to the next, with or without a speech link. The use of several different methods helps to maintain programme variety and interest.

Programme technique

On the air, each presenter must find his or her own style and be consistent to it. No one person or programme will appeal to everyone but a loyal following can be built up through maintaining a consistent approach. A number of general techniques are worth mentioning.

Never talk over vocals. Given adequate preparation, it is often pleasing to make an accurate talk-over of the non-vocal introduction to a record.

But talking over the singer's voice can be muddling, and to the listener may sound little different from interference from another station.

Avoid implied *criticism of the listener's choice* of music. The records may not coincide with your taste but they represent the broadcaster's intention to encourage public involvement. If a request is unsuitable, it is best left out.

Do not play less than one minute of anyone's request, or the sender will feel cheated. If the programme timing goes adrift it is generally better to drop a whole item than to compress. If the last item, or the closing signature tune, or both are 'prefaded to time' the programme duration will look after itself.

If by grouping requests together, there are several names and addresses for a single record, prevent the information from *sounding like a roll call*. Break up the list and intersperse the names with other remarks.

Develop the habit of talking *alternately* to the *general listener* and to the *individual listener* who asked for the record. For example:

'Now here's a card from someone about to celebrate 50 years of married bliss — that's what it says here and she's Mrs. Jane Smith of Highfield Road, Mapperley. Congratulations Mrs. Smith on your half century, you'd like to dedicate this record with all your love to your husband John. An example to the rest of us, — congratulations to you too, John. The music is from one of the most successful shows of the thirties . . .'

Avoid remarks which combined with the address, may pose any kind of *risk to the individual*.

'. . . I'm asked not to play it before six o'clock because there's nobody at home till then . . .'
'. . . she says she's living on her own but doesn't hear too well . . .'
'. . . please play the record before Sunday the 18th because we'll all be away on holiday after that . . .'
'. . . he says his favourite hobby is collecting rare stamps.'

To reduce such risks, some presenters omit the house detail, referring only to the street and town. However house numbers can generally be discovered by reference to voters' lists and other directories. Broadcasters must always be aware of the possible illegal use of personal information.

It is often a wise precaution to keep the cards and letters used in a programme for at least a week afterwards in order to deal with music enquiries or other follow-up which may be required.

Guest programmes

Here, the regular presenter invites a well-known personality to the programme and plays his or her choice of music. The attraction of hearing artists and performers talk about music is obvious but it is also of considerable interest to have the lives of others, such as politicians, sportsmen and businessmen, illuminated in this way.

The production decisions generally centre on the ratio of music to speech. Is the programme really an excuse for playing a wide range of

records or primarily a discussion with the guest but with musical punctuation? Certainly it is easy to irritate the listener by breaking off an interesting conversation for no better purpose than to have a musical interlude, but equally a tiny fragment only of a Beethoven symphony can be very unsatisfying. The presenter, through his combination of interview style and links into and out of the music, must ensure an overall cohesiveness to prevent the programme sounding 'bitty'. While it may be necessary to arrive at a roughly half and half formula, the answer could be to concentrate on the music where the guest has a real musical interest but to increase the speech content where this is not the case, using fewer but perhaps slightly longer music inserts.

Once again the resolution of such questions lies in the early identification of a programme aim appropriate to the target audience.

DJ programmes

The radio disc jockey defies detailed categorisation. His task is to be unique, to find and establish a distinctive formula different from all other DJs. The music content may vary little between two competing programmes and in order to create a preference the attraction must lie in the way it is presented. If he is to be successful therefore, the DJ's personality and programme style must not only make contact with the individual listener, but in themselves be the essential reason for the listener's attention. His style may be elegant or earthy, raucous or restrained, but for any one presenter it should be consistent and the operational technique first class.

The same rules of item selection and order apply as those already identified. The music should be sufficiently varied and balanced within its own terms of reference to maintain interest and form an attractive whole. Even a tightly formatted programme, such as a Top 40 show, will yield in all sorts of ways to imaginative treatment. The personal approach to this type of broadcasting differs widely and can be looked at under three broad headings.

The low profile DJ

Here the music is paramount and the presenter has little to say. His job is to be unobtrusive. The purpose of the programme may be to provide background listening and all that is required is the occasional station identification or time check. In the case of a classical music programme the speech/music ratio should obviously be low. The listener is easily irritated by a presenter who tries to take over the show from Beethoven and Bach. The low profile DJ has to be just as careful over what he says as his more voluble colleagues.

The specialist DJ

Experts in their own field of music can make excellent presenters. They spice their introduction with anecdotes about the artists and stories of happenings at recording sessions, as well as informed comment on performance comparisons and the music itself. Jazz, rock, opera and folk all lend themselves to this treatment. Often analytical in approach, the DJ's job is to bring alive the human interest inherent in all music. The listener should obviously enjoy the records played but half the value of the programme is derived from hearing authoritative, possibly provocative, comment from someone who knows the field well.

The personality DJ

This is the most common of all DJ types. He must do more than just play tracks with some spontaneous ad-libs in between. However popular the music, this simple form of presentation soon palls. The DJ must communicate his own personality, creating a sense of friendship with his audience. He therefore never embarrasses his listener, either through incompetence or bad taste — he must entertain. To do this well, programme after programme, requires two kinds of preparation.

The first is in deciding what to say and when. This means listening to at least some of the records beforehand to decide the appropriate places for a response to the words of a song, a jokey remark or other comment, where to place a listener's letter, quiz question or phone call. The chat between the records should be thought about in advance so that it does not sound pedestrian, becoming simply a repetitive patter. All broadcast talk needs some real substance containing interest and variety. This is not to rule out entirely the advantages of spontaneity and the 'fly by the seat of your pants' approach. The self-operating DJ, with or without a producer, is often capable of creating an entertaining programme, making it up as he goes along. Undoubtedly though, such a broadcaster is even better given some preparation time.

The programme may also contain identifications, weather and traffic information, commercials, time checks, trails for other programmes and news. It may contain so many speech items that it is better described as a sequence rather than a DJ show, and this is developed further in the next chapter. But no presenter should ever be at a loss as to what to do next. He must know in advance what he wants to say, and be constantly replenishing his stock of anecdotes. Where possible these should be drawn from his own observation of the daily scene. Certainly for the local radio DJ, the more he can develop a rapport with his own area, the more his listeners will identify with him. The preparation of the programme's speech content will also include the timing of accurate talkovers and any research.

When a DJ is criticised for talking too much, what is often meant is that he is not interesting enough, i.e. there are too many words for what he has to convey. It is possible to correct this by talking less, but similarly the criticism will disappear if the same amount of speech is used to carry less

waffle and more substance. Much of what is said may be trivial, but it should still be significant for the listener through its relevance and point of connection. So talk about things to which the listener can relate. Develop that rapport by asking — what information, what entertainment, what companionship does my listener need? If you don't know, go and meet some of them. And remember that there is a key factor in establishing your credibility, it's called professional honesty.

The second kind of preparation for a DJ, and where appropriate his producer, is in actually making additional bits and pieces of programme material which will help to bring the show alive. Probably recorded on tape, using cartridges for accurate cueing, these may consist of snatches of records, sound effects, funny voices on echo, chords of music, half or double speed tape and so on. Presenters may even create extra 'people', playing the roles themselves on the air, talking 'live' to their own recordings. Such characters and voices can develop their own personalities appearing in successive programmes to become very much part of the show. Only the amount of time which is set aside for preparation and the DJ's own imagination sets limits on what can be achieved in this way.

For the most part such inserts are very brief but they enliven a DJ's normal speech material adding an element of unpredictability and increasing the programme's entertainment value.

Whether the programme is complex or simple, the personality DJ should, above all, be fun to listen to. But while the show may give the impression of a spontaneous happening, sustained success is seldom a matter of chance. It is more likely to be found in a carefully devised formula and a good deal of preparation and hard work.

Magazines and sequences

Of all programme types, it is the regular magazine, or lengthy sequence, which can so easily become boring or trivial by degenerating into a ragbag of items loosely strung together. To define the terms, a magazine is usually designed with a specific audience in mind, and tightly structured with the emphasis on content. A sequence is generally longer — between 1 and 4 hours — often daily, using music with a wide audience appeal, and with an emphasis on the presentation. For both, the major problem for the producer is how best to balance the need for consistency with that of variety. Clearly there has to be a recognisable structure to the programme — after all, this is probably why the listener switched on in the first place. An obvious policy of marketing which applies to radio no less than to any other product, is to build a regular audience by creating positive listener expectations, and then to fulfil, or better still, exceed them. The most potent reason for tuning in to a particular programme is that the listener liked what he heard last time. This time, therefore, the programme must be of a similar mould, not too much must be changed. It is equally obvious however that the programme must be *new* in the sense that it must have fresh and updated content and contain the element of surprise. The programme becomes boring when its content is too predictable, yet it fails if its structure is obscure. It is not enough simply to offer the advice — 'keep the format consistent but vary the content'. Certainly this is important but there must be consistencies too in the intellectual level and emotional appeal of the material. From edition to edition there must be the same overall sense of style.

Since we have so far borrowed a number of terms from the world of print, it might be useful to draw the analogy more closely.

The newspapers and magazines we buy are largely determined by how we reacted to the previous issue. To a large extent purchases are a matter of habit and although some are bought on impulse, or by accident, changes in readership occur relatively slowly. Having adopted our favourite periodical, we do not care to have it tampered with in an unconsidered way. We develop a personal interest in the typography, page layout, length of feature article or use of pictures. We know exactly where to find the sports page, crossword or favourite cartoon. We take a paper which

appeals to us as individuals; there is an emotional link and we can feel distinctly annoyed should a new editor change the typeface, or start moving things around when, from the fact that we bought it, it was all right as it was. In other words the consistency of a perceived structure is important since it leads to a reassurance of being able to find your way around, of being able to use the medium fully. Add a familiar style of language, words that are neither too difficult nor too puerile, sentences which avoid both the pompous and the servile, captions which illuminate and not duplicate; and it is possible to create a trusting bond between the communicator and the reader, or in our case the listener. Different magazines will each decide their own style and market. It is possible for a single publisher, as it is for the manager of a radio station, to create an output with a total range aimed at the aggregate market of the individual products.

For the individual producer, his crucial decision is to set the emotional and intellectual 'width' of his programme and to recognise when he is in danger of straying outside it.

To maintain programme consistency then several factors must remain constant. A number of these are now considered.

Programme title

This is the obvious signpost and it should both trigger memories of the previous edition and provide a clue to content for the uninitiated. Titles such as 'Farm', 'Today', 'Sports Weekly', and 'Woman's Hour' are self-explanatory. 'Roundabout', 'Kaleidoscope', 'Miscellany', and 'Scrap-book' are less helpful except that they do indicate a programme containing a number of different but not necessarily related items. With a title like 'Contact', or 'Horizon', there is little information on content, and a subtitle is often used to describe the subject area. Sequences, like DJ programmes, are often known by the name of the presenter — 'The Jack Richards Show' — but a magazine title should stem directly from the programme aims and the extent to which the target audience is limited to a specialist group.

Signature tune

The long sequence is designed to be listened to over any part at random — to dip in and out of. A signature tune is largely irrelevant, except to distinguish it from the previous programme serving as an additional signpost intended to make the listener turn up the volume. It should also convey something of the style of the programme — lighthearted, urgent, serious, or in some way evocative of the content. Fifteen seconds of the right music can be a useful way of quickly establishing the mood. Magazine producers however should avoid the musical cliché. While 'Nature Notebook' may require a pastoral introduction, the religious magazine will often make strenuous efforts not to use opening music that is too churchy. If the aim is to attract an audience

which already identifies with institutionalised religion, some kind of church music may be fine. If on the other hand, the idea is to reach an audience which is wider than the churchgoing or sympathetic group, it may be better to avoid too strong a church connotation at the outset. After all, the religious magazine is by no means the same as the Christian magazine, or the church programme.

Transmission time

Many stations construct their daily schedule with a series of sequences in fixed blocks of 3 or 4 hours. It is obviously important to have the right presenter and the right style of material for each time slot. The same principle holds for the more specialist magazine. Regular programmes must be at regular times and regular items within programmes given the same predictable placing in each programme. This rule has to be applied even more rigorously as the specialisation of the programme increases.

For example a half hour farming magazine may contain a regular three minute item on local market prices. The listener who is committed to this item will tune in especially to hear it even though he may not bother with the rest of the programme. A sequence having a wider brief, designed to appeal to the more general audience, is more likely to be on in the background and it is therefore possible to announce changes in timing. Even so, the listener at home in the mid-morning wants the serial instalment, item on current affairs, or recipe spot at the same time as yesterday since it helps to orientate the day.

The presenter

Perhaps the most important single factor in creating a consistent style, the presenter regulates the tone of the programme by his approach to the listener. He or she can be outgoing and friendly, quietly companionable, informal or briskly businesslike, or knowledgeable and authoritative. It is a consistent combination of characteristics, perhaps with two presenters, which allows the listener to build a relationship with the programme based on 'liking' and 'trusting'. Networks and stations which frequently change their presenters, or programmes which 'rotate' their anchor people are simply not giving themselves a chance. Occasionally you hear the justification of such practice as the need 'to prevent people from becoming stale', or worse, 'to be fair to everyone working on the programme'. Most programme directors would recommend a six month period as the minimum for a presenter on a weekly programme, and three months for a daily show. Less than this and he may hardly have registered with the listener at all.

In selecting a presenter for a specialist magazine, the producer may find himself with a choice of either a good broadcaster, or an expert in the subject. Obviously the ideal is to find both in the same person, or through training to turn one into the other — the easier course is often to enable the latter to become the former. If this is not possible, an alternative is to

use both. Given a strict choice the person who knows his material is generally preferable. Credibility is a key factor in whether or not a specialist programme is listened to, and expert knowledge is the foundation, even though it may not be perfectly expressed. In other words, if we have a doctor for the medical programme and a gardener for the gardening programme, should there be children for the children's show, and a disabled person introducing a programme for the handicapped? In a magazine programme for the blind — there may be a bit more paper shuffling 'off mic', and the Braille reading may not be as fluent as with a sighted reader, but the result is likely to have much more impact and be far more acceptable to the target audience.

Linking style

Having established the presenter, or presenters, and assuming he or she will write, or at least rewrite, much of the script, the linking material will have its own consistent style. The way in which items are introduced, the amount and type of humour used, the number of time checks, and the level at which the whole programme is pitched will remain constant. The links of course refer to the various items, as discussed under the heading of 'Cue material', but they also enable the presenter to give additional information, personalised comment or humour. The 'link-person' is much more than a reader of cue material — announcements between items should extend beyond the simple 'this is' and 'that was'. It is interesting to speculate on the function of mortar in the building of a house. Does it keep the bricks apart or hold them together? It does both of course, and so it is with the presenter. Through this handling of the links he separates and delineates while at the same time creating a cohesive sense of style.

Information content

The more local a sequence becomes, the more specific and practical can be the information it gives. It may be carried either in the form of regular spots at known times or simply included in the links. If a programme sets out with the intention of becoming known for its information content, the spots must be distinctive, yet standardised in terms of timing, duration, style, 'signposting', introductory ident or sound effect.

The types of useful information will naturally depend on the particular needs of the audience in the area covered by the station. The list is wide-ranging and typical examples for inclusion in the daily programme are:

News reports	Time checks
Weather	River conditions (for anglers)
Traffic information	Mobile library services
Sports results	Tide times
Tonight's TV	Changes to ferry times
Late night chemists	Sea state — coastal waters

Road works for motorists	Shipping movements
Pollen count	Lighting-up times
Pavement works for the blind	What's on — entertainment
Rail delays	Top Twenty chart
Airport information	Review of papers/journals
Local flying conditions	Club meetings
Shopping prices	Fatstock prices for farmers
Financial market trends	Blood donor sessions
Racing information	Station identification

Programme construction

The overall shape of the programme will remain reasonably constant. The proportion of music to speech should stay roughly the same between editions, and if the content normally comprises items of from three to five minutes duration ending with a featurette of eight minutes, this structure should become the established pattern. This is not to say that a half-hour magazine could not spend fifteen minutes on a single item given sufficient explanation by the presenter. But it is worth pointing out that by giving the whole, or most of a programme, over to one subject, it ceases to be a magazine and instead becomes a documentary or feature. There is an argument to be made in the case of a specialist programme for occasionally suspending the magazine format and running a one-off 'special' instead, in which case this should of course be aimed at the same audience as the magazine it replaces. Another permissible variation in structure is where every item has a similar 'flavour' — as in a 'Christmas edition', or where a farming magazine is done entirely at an agricultural show.

Such exceptions are only possible where a standard practice has become established for it is only by having 'norms' that one is able to introduce the variety of departing from them.

Sequences are best designed in the clock format described in the previous chapter.

Programme variety

Each programme must create fresh interest and contain surprise. Firstly, the subject matter of the individual items should itself be relevant and new to the listener. Secondly, the treatment and order of the items need to highlight the differences between them and maintain a lively approach to the listener's ear. It is easy for a daily magazine, particularly the news magazine, to become nothing more than a succession of taped interviews. Each may be good enough in its own right, but heard in the context of other similar material, the total effect may be worthy but dull. In any case, long stretches of speech especially by one voice should be avoided. Different voices, locations, actuality, and the use of music bridges and stings should produce an overall effect of brightness and variety — not necessarily superficial, but something people actually look forward to.

Programme ideas

Producing a good programme is one thing, sustaining it day after day or week after week, perhaps for years, is quite another. How can a producer, with little if any staff assistance, set about the task of finding the items necessary to keep the programme going? Firstly, he is never off duty but is always wondering if anything he sees or hears will make an item. He records even the passing thought or brief impression, probably in a small notebook which he always carries. It is surprising how the act of writing down even a flimsy idea can help it to crystallise into something more substantial. Secondly, through a diary and other sources he has advance information on anniversaries and other future events. Thirdly he cultivates a wide range of contacts. This means that he reads, or at least scans, as much as he can; newspapers, children's comics, trade journals, parish magazines, the small ads, poster hoardings — anything which experience has shown can be a source of ideas.

He gets out of the studio and walks through his territory — easier in local radio than for a national broadcaster! He is a good listener, both to the media and in personal conversation. He is aware of people's problems and concerns, and of what makes them laugh. He encourages his contributors to come up with ideas and if he has little money to pay them, at least he makes sure they get the credit for something good. If you are too authoritarian or adopt a 'know it all' attitude, people will leave you alone. But by being available and open, people will come to you with ideas. Welcome correspondence. It is hard work but the magazine/sequence producer soon develops a flair for knowing which of a number of slender leads is likely to develop into something for his programme.

Having decided to include an item on a particular subject, the producer has several options on the treatment he can employ. A little imagination will prevent his programme from sounding 'samey' and he should consider the extent to which he can increase the variety of his programme by the use of the following radio forms.

Voice piece

A single voice giving information as with a news bulletin, situation report, or events diary. This form can also be used to provide eye-witness commentary, or tell a story of the 'I Was There' type of personal reminiscence.

A voice piece lacks the natural variety of the interview and must therefore have its own colour and vitality. In style it should be addressed directly to the listener — pictorial writing in the first person and colloquial delivery can make compelling listening. But more than this, there must also be a *reason* for broadcasting such an item. There needs to be some special relevance — a news 'peg' on which to hang the story. The most obvious one lies in its immediacy to current events. Topicality, trends or ideas relevant to a particular interest group, innovation and novelty, or a further item in a useful or enjoyable series are all factors to be used in promoting the value of items in a magazine.

Traffic & transport Weather in full Main news
Sports news update
What's on, promos, local/national events
Religious spot
News interview or discussion
Weather, traffic, events
Headlines
Current affairs interview or feature
Local information: farming/industry, jobs, shopping prices
Film & TV review
News interview
News update
Weather in full
Legal advice, listener enquiries
Today's anniversaries
Sport results, fixtures, interviews
News interview/discussion
Weather, traffic, events
Headlines
Profile/interview: person in the news
Financial news
Review of papers
News interview

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Fig. 15.1. The clock format applied to an all-speech, news-based, non-commercial, breakfast sequence. Typically programmed from 6.30 am to 9.00 am, it requires a range of news, weather, sport and information sources, plus five interviews in the hour — live, telephoned or on tape. With repeats this might total nine in the $2\frac{1}{2}$ hours. Interviewees will be drawn mainly from politicians, people in the news, officials, 'experts', and media observers. Large organisations will have their own correspondents and local stringers. Presentation will include station idents, time, temperature, promos and incidental information.

Interview

The types of interview (see Chapter 3) include those which challenge reasons, discover facts, or explore emotions. This sub-heading also includes the vox pop or 'man in the street' opinion interview. A further variation is the question and answer type of conversation done with another broadcaster — sometimes referred to as 'Q & A' or a two-way. Using a specialist correspondent in this way the result is often less formal, though still authoritative.

Discussion

Exploration of a topic in this form within a magazine programme will generally be of the bi-directional type consisting of two people with

opposing, or at least non-coincident, views. To attempt in a relatively brief item to present a range of views, as in the 'multi-facet' discussion, will often lead to a superficial and unsatisfactory result. If a subject is big enough or important enough to be dealt with in this way, the producer should ask himself whether it shouldn't have a special programme.

Music

An important ingredient in achieving variety, music can be used in a number of ways:

(1) As the major component in a sequence.
(2) An item, concert performance or record featured in its own right.
(3) A new item reviewed.
(4) Music which follows naturally upon the previous item. For example an interview with a pianist about to make his concert debut followed by an illustration of his work.
(5) Where there is a complete change of subject, music can act as a link — a brief music 'bridge' may be permissible. This is particularly useful to give 'thinking time' after a thoughtful or emotional item where a change of mood is required.

Music should be used as a positive asset to the programme and not merely to fill time between items. It can be used to supply humour or provide wry comment on the previous item, e.g. a song from 'My Fair Lady' could be a legitimate illustration after a discussion about speech training. Its use however should not be contrived merely because its title has a superficial relevance to the item. It would be wrong for example to follow a piece about an expedition to the Himalayas with 'Climb Every Mountain' from the Sound of Music. For someone who looks no further than the record sleeve there appears to be a connection, but the discontinuity of context would lead to accusations of poor judgement.

One of the most difficult production points in the use of the medium is the successful combination of speech and music. Music is much more divisive of the audience since listeners generally have positive musical likes and dislikes. It is also very easy to create the wrong associations, especially among older people, and real care has to be taken over its selection.

Sound effects

Like music, effects or actuality noises in a magazine can add enormously to what might otherwise be a succession of speech items. They stir the memory and paint pictures. An interview on the restoration of an old car would surely be accompanied by the sound of its engine and an item on new dental techniques by the whistle of a high-speed drill. The scene for a discussion on education could be set by some actuality of playground or classroom activity, and a voice piece on road accident figures would catch

the attention with the squeal of brakes. These things take time and effort to prepare and, if overdone, the programme suffers as it will from any other cliché. But used occasionally, appropriately and with imagination, the programme will be lifted from the mundane to the memorable. You do not have to be a drama producer to remember that one of the strengths of the medium is the vividness of impression which can be conveyed by simple sounds.

Listener participation

Daily sequences in particular like to stimulate a degree of audience involvement. Again, the producer has several ways of achieving this:

(1) *Requests* for music or for a particular subject to be discussed, or asking for a favourite item to be repeated.
(2) *Letters spot* which acts as a follow-up to the previous programmes, or a general correspondence column of the air.
(3) *Competitions* are a good method of soliciting response. These could be in reply to quizzes and on-air games with prizes offered, or simply for the fun of it.
(4) A *phone-in* spot in a live magazine helps the sense of immediacy and can provide feedback on a particular item. Placed at the end, it can allow listeners the opportunity of saying what they thought of the programme as a whole. Used in conjunction with a quiz competition it obviously allows for answers to be given and a result declared within the programme.
(5) A *'helpline'* is a useful item in a lengthy sequence — putting people with a specific need in touch with possible sources of help. For a small community station such links might vary from someone's search for a particular book or 'lost and found' information, to a noticeboard of job vacancies. Such requests are normally broadcast without charge but the station generally takes no responsibility for the outcome, a listener responding to an enquiry being put in touch with the originator off-air.
(6) *Casual visitors* to the radio station may be persuaded to become broadcasters for a short while and take part in a special spot, either live or by editing their recorded comments accumulated since the previous programme. Alternatively using a mobile facility such as a radio car, the programme can visit its listeners by dropping in on a home discussion group or factory meeting.

   Listener participation elements need proper planning but part of their attraction lies in the live unpredictability. The confident producer or presenter will know when to stay with an unpremeditated turn of events and extend an item which is developing unexpectedly well. He or she will have also determined beforehand the most likely way of altering the running order to bring the programme back on schedule. In other words in live broadcasting the unexpected always needs to be considered.

Features

A magazine will frequently include a place for a package of material dealing with a subject in greater depth than might be possible in a single interview. Often referred to as a featurette, the variety of possibility defies detailed description here, but the general form is either person centred — 'our guest this week is . . .'; or place centred — 'this week we visit . . .'; or topic centred — 'this week our subject is . . .'

Even the topical news magazine, in which variety of item treatment is particularly difficult to apply, will be able to consider putting together a featurette comprising interview, voice piece, archive material, actuality and links, even possibly music. For instance a report on the scrapping of an old wartime submarine could be run together with the reminiscences of its former skipper, describing some perilous exploit, with the appropriate sound effects in the background. Crossfade to breaker's yard and the sound of lapping water. This would be far more interesting than a straight report.

The featurette is a good means of distilling a complex subject and presenting its essential components. The honest reporter will take the crux of an argument, possibly from different recorded interviews, and present them in the context of his own links. They should then form a logical, accurate and understandable picture on which the listener can base an opinion.

Drama

The weekly or daily serial or book reading has an established place in many programmes. It displays several characteristics which the producer is attempting to embody — the same placing and introductory music, a consistent structure, familiar characters, and a single sense of style. On the other hand it needs a variety of new events, some fresh situations and people, and the occasional surprise. But drama can also be used in the one-off situation to make a specific point, for example in describing how a shopper should compare two supermarket products in order to arrive at a best buy. It can be far more effective than a talk by an official, however expert he might be. Lively, colloquial, simple dialogue, using two or three voices with effects behind it to give it location — in a store or factory, on a bus or at the hospital — this can be an excellent vehicle for explaining legislation affecting citizen rights, a new medical technique, or for providing background on current affairs. Scriptwriters however will recognise in the listener an immediate rejection of any expository material which has about it the feel of propaganda. The most useful ingredients would appear to be: ordinary everyday humour, credible characters with whom the listener can identify, profound scepticism and demonstrable truth.

Programmes for children use drama to tell stories or explain a point in the educational sense. The use of this form may involve separate production effort, but it can be none the less effective by being limited to the dramatised reading of a book, poem or historical document.

Item order

Having established the programme structure, set the overall style and decided on the treatment of each individual item, the actual order of the items can detract from or enhance the final result.

In the case of a traditional circus or variety performance in a theatre, the best item — the top of the bill — is kept until last. It is safe to use this method of maintaining interest through the show since the audience is largely captive and it underwrites the belief that whatever the audience reaction, things can only get better. With radio, the audience is anything but captive and needs a strong item at the beginning to attract the listener to the start of the show, thereafter using a number of devices to hold his interest through to the end.

The news magazine will probably start with its lead story and gradually work through to the less important. However if this structure is rigidly applied the programme becomes less and less interesting — what has been called a 'tadpole' shape. News programmes are therefore likely to keep items of known interest until the end, e.g. sport, stock markets and weather, or at least end with a summary for listeners who missed the opening headlines. Throughout the programme as much use as possible will be made of phrases like, 'more about that later'. Some broadcasters deliberately avoid putting items in descending order of importance in order to keep 'good stuff for the second half'; a dubious practice if the listener is to accept that the station's editorial judgement is in itself something worth having. A better approach is to follow a news bulletin with an expansion of the main stories in current affairs form.

The news magazine item order will be dictated very largely by the editor's judgement of the importance of the material, while in the tightly structured general magazine the format itself may leave little room for manoeuvre. In the more open sequence other considerations apply and it is worth noting once again the practice of the variety music bill. If there are two comedians they appear in separate halves of the show, something breathtakingly exciting is followed by something beautiful and charming, the uproariously funny is complemented by the serious or sad, the small by the visually spectacular. In other words, items are not allowed simply to stand on their own but through the contrast of their own juxtaposition and the skill of the compère they enhance each other so that the total effect is greater than the sum of the individual parts.

So it should be with the radio magazine. Two interviews involving men's voices are best separated. An urgently important item can be heightened by something of a lighter nature. A long item needs to be followed by a short one. Women's voices, contributions by children or old people, should be consciously used to provide contrast and variety. Tense, heated or other deeply felt situations need special care, for to follow with something too light or relaxed can give rise to accusations of trivialisation or superficiality. This is where the skill of the presenter counts for it is his choice of words and tone of voice which must adequately cope with the change of emotional level.

Variations in item style combined with a range of item treatment create endless possibilities for the imaginative producer. A programme which is

becoming dull can be given a 'lift' with a piece of music half way through, some humour in the links, or an audience participation spot towards the end. For a magazine in danger of 'seizing up' because the items are too long, the effect of a brief snippet of information in another voice is almost magical. And all the time the presenter keeps us informed on what is happening in the programme, what we are listening to and where we are going to next, and later. The successful magazine will run for years on the right mixture of consistency of style and unpredictability of content. It could be that apart from its presenter the only consistent characteristic is its unpredictability.

Examples

The following examples of the magazine format are not given as ideals but as working illustrations of the production principle. Commercial advertising has been omitted in order to show the programme structure more clearly but the commercial station can use its breaks to advantage, providing an even greater variety of content.

Example 1: Fortnightly half-hour industrial magazine

Structure	Running order	Actual timing
Standard opening (1' 15")	Signature tune	0 15
	Introduction	10
	Menu of content	15
	Follow-up to previous programmes	35
News (5 mins)	News round-up	5 05
	Link	15
Item	Interview on lead news story	3 08
	Link – information	30
Item	Voice piece on new process	1 52
	Link	15
Item	Vox pop – workers' views of safety rules	1 15
	Link	20
Trades Council spot (2½ mins)	Union affairs – spokesman	2 20
	Link	20
Participation spot (3 mins)	Listeners' letters	2 45
	Link – introduction	20

Discussion	Three speakers join presenter for discussion of current issue — variable length item to allow programme to run to time	6 20
Financial news (3 mins)	Market trends	3 00
Standard closing (50″)	Coming events	30
	Expectations for next programme	10
	Signature tune	10
		29′50″

In Example 1, the programme structure allows 1′15″ for the opening and 50″ for the closing. Other fixed items are a total of 8′00″ for news, 3′00″ for letters and 2′30″ for the Union spot. About 2′00″ are taken for the links. This means that just over half the programme runs to a set format leaving about 13′00″ for the two or three topical items at the front and the discussion towards the end.

So long as the subject is well chosen the discussion is useful for maintaining interest through the early part of the programme since it preserves at least the possibility of controversy, interest and surprise. With a 'live' broadcast it is used as the buffer to keep things on time since the presenter knows he must bring it to an end and get into the 'Market trends' four minutes before the end of the programme. The signature tune is 'prefaded to time' to make the timing exact. With a recorded programme the discussion is easily dropped in favour of a featurette which in this case might be a factory visit.

Example 2: Weekly 25-minute religious current affairs

Structure	Running order	Timing
Standard opening (15″)	Introduction	0 05
	Menu of content	0 10
Item	Interview — main topical interest	3 20
	Link	30
Item	Interview — woman missionary	2 05
	Link	10
Music (3 mins)	Review of gospel record release	2 40
	Link — information	55

Item	Interview (or voice piece) — forthcoming convention	2 30
	Link	05
Featurette (7 mins)	Personality — faith and work	7 10
	Link	15
News (5 mins)	News round—up and What's On events	4 45
Standard closing (15″)	Closing credits	15
		———
		24′55″

In Example 2, with no signature tune, the presenter quickly gets to the main item. Although in this edition all the items are interviews, they are kept different in character and music is deliberately introduced at the mid-point. The opening and closing take half a minute and the other fixed spots are allocated another fifteen minutes. If the programme is too long, adjustment can be made either by dropping some stories from the news or by shortening the music review. If it under-runs, a repeat of some of the record release can make a useful reprise at the end.

Example 3: Outline for a daily 2—hour afternoon sequence

Fixed times	Running order	Approximate durations
2.00	Sig. tune/intro — programme information/ sig. tune	1 min
	Music —	2
	Item — human interest interview	3
	Quiz competition (inc. yesterday's result)	3
	Music —	3
2.15	Listeners' letters	5
	Music —	3
	Voice piece — background to current affairs	2
	Music —	2
	Leisure spot — home improvements, gardening	3

	Humour on record	2
	Studio discussion — topical talking point	10
	Music —	3
	"Out and about" spot — visit to place of interest	5
	Music — (non vocal)	2
3.00	News summary, sport and weather	2
	Phone-in spot	15
	Music —	3
	Film/theatre/TV review — coming events voice piece	4
	Music —	3
3.30	Special guest — interview	10
	Music — (illustrative)	2
	Item — child care or medical interview	3
	Quiz result	2
	Music — (non vocal)	2
3.50	Serial story — dramatised reading	9
	Closing sequence; items for tomorrow, production credits, sig. tune	1

In Example 3 the speech/music ratio is regulated to about 3:1. A general pattern has been adopted that items become longer as the programme proceeds. Each half of the programme contains a 'live' item which can be 'backtimed' to ensure the timekeeping of the fixed spots. These are respectively the studio discussion and the special guest interview. Nevertheless the fixed spots are preceded by non-vocal music prefaded to time for absolute accuracy. Fifteen minutes is allowed for links. An alternative method of planning this running order is by the clock format illustrated on p. 175.

Production method

A regular magazine or sequence has to be organised on two distinct levels — the long term and the immediate. Long term planning allows for anniversaries, 'one-off editions', the booking of guests reflecting special events, or the running of related spots to form a series across several

programmes. On the immediate timescale, detailed arrangements have to be finalised for the next programmes.

In the case of the fortnightly or weekly specialist magazine of the type represented in Examples 1 and 2, it is a fairly straightforward task for the producer to make all the necessary arrangements in association with the presenter and a small group of contributors acting as reporters or inter-viewers. The newsroom or sources of specialist information will also be asked for a specific commitment. The important thing is that everyone knows his brief and his deadline. It is essential too that while the producer will make the final editorial decisions, all the contributors feel able to suggest ideas. Good ideas are invariably 'honed up', polished and made better by the process of discussion. Suggestions are progressed further and more quickly when there is more than one mind at work on them. Almost all ideas benefit from the process of counter-suggestion, development and resolution. Lengthy programmes of this nature are best produced by team-working with clear leadership. This should be the pattern encouraged by the producer at the weekly planning meeting, by the end of which everyone should know what they have to do by when, and with what resources.

The daily sequence illustrated by Example 3 is more complex and such a broadcast will require a larger production team. Typically, the main items such as the serial story and special guest in the second half will have been decided well in advance but the subject of the discussion in the first may well be left until a day or two beforehand in order to reflect a topical issue. A retrospective look at something recently covered, the further implica-tions of yesterday's story, a 'whatever happened to . . .?' spot — these are all part of the daily programme. Responsibility for collating the listeners' letters, organising the quiz, and producing the 'Out and about' item will be delegated to specific individuals, and the newsroom will be made respon-sible for the current affairs voice piece, the news, sport and weather package, and perhaps one of the other interviews. The presenter will write his own links and probably choose his own music to a general brief from the producer. The detail is regulated at a morning planning meeting, the final running order being decided against the format structure which serves as the guideline.

At less frequent intervals, say once a month, the opportunity should be taken to stand back to review the programme and take stock of the long term options. In this way it may be possible to prevent the onset of the more prevalent disease of the regular programme — getting into a rut — while at the same time avoiding the disruptive restlessness which results from an obsession with change. When you have become so confident about the success of the programme that you fail to innovate, you have already started the process of staleness which leads to failure. A good approach is constantly to know what you are up against. Identify your competition and ask 'What must I do to make my programme more distinguishable from the rest?'

Responding to emergency

Sooner or later all the careful planning has to be discarded in order to cope with emergency conditions in the audience area. Floods, snowfall, hurricane, earthquake, power failure, bush fire or major accident will cause a sequence to cancel everything except the primary reason for its existence — public service. It will provide information to isolated villages, link helpers with those in need, and act as a focus of community activity. 'Put something yellow in your window if you need a neighbour to call.' 'Here's how to attract the attention of the rescue helicopter which will be in your area at 10 o'clock . . .' 'The following schools are closed . . .' 'The army is opening an emergency fuel depot at . . .' 'A spare generator is available from . . .' 'Can anyone help an elderly woman at . . .?' The practical work that radio does in these circumstances is immense, its morale value in keeping isolated, and sometimes frightened, people informed is incalculable. Broadcasters are glad to work for long hours when they know that their service is uniquely valued.

The flexibility offered by the sequence format enables a station to cover a story, draw attention to a predicament, or devote itself totally to audience needs as the situation demands. Radio services should have their contingency plans continuously updated — at least reviewed annually — in order to be able to respond quickly to any situation. Programmers cannot afford to wait for an emergency before making decisions but must always be asking the question — 'what if . . .?'

Outside broadcasts (remotes)

As has been noted elsewhere, there is a tendency for broadcasters to shut themselves away in studios being enormously busy making programmes which do not originate from a direct contact with the audience. The outside broadcast, or 'remote', represents more than a desire to include in the schedule, coverage of outside events in which there is public interest. It is a positive duty for the broadcaster to escape from the confines of his building into the world which is both the source and the target for all his enterprise. The concert, church service, exhibition, civic ceremony, sporting event,
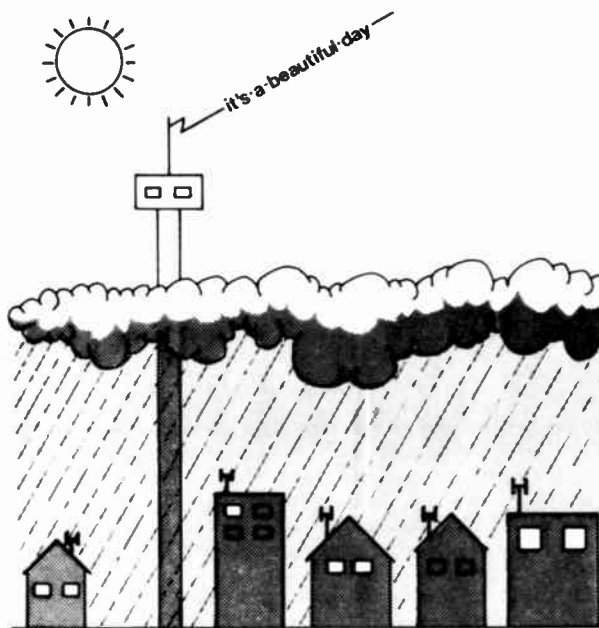
Fig. 16.1. The radio station must involve itself in its own community, otherwise it will appear irrelevant and out of touch.

public meeting, conference or demonstration; these demand the broadcaster's attention. But it is not only good for radio to reflect what is going on, it is necessary for the station's credibility to be involved in such things. Radio must not only go to where people are, it must come from the interests and activities of many people. If its sources are too few, it is in danger of appearing detached, sectional, elitist or out of touch. Thus the OB is essential to broadcasting's health.

Planning

The producer in charge, together with the appropriate engineering staff, must first decide how much coverage is required of a specific event. The programme requirement must be established and the technical means of achieving it costed. Is it to be 'live', or recorded on site? What duration is expected? Once there is a definite plan, the resources can be allocated — people, facilities, money and time.

It is also at this first stage that discussions must take place with the event organiser to establish the right to broadcast. It may be necessary to negotiate any fees payable, or conditions or limitations which he may wish to impose.

Visiting the site

A reconnaissance is essential, but it may take considerable imagination to anticipate what the actual conditions will be like 'on the day'. There are a number of questions which must be answered:

(1) Where and of what type are the mains electricity supply points? Is the supply correctly earthed? Do I need my own battery or generator power?
(2) Where is the best vantage point to see the most action? Will there have to be more than one?
(3) Will the sound mixing be done in the building, or in a radio OB vehicle outside?
(4) What on-site communications are required?
(5) How many microphones and what type will be needed?
(6) How long are the cable runs?
(7) Will a public address system be in use? If so, where are the speakers?
(8) What else will be present on the day? e.g. flags which obscure the view, vehicles or generators which might cause electrical interference, background music, other broadcasters.

Communications to base

If the programme is 'live', how is the signal to be sent to the controlling studio? What radio links are required? Is the site within available radio car range? Are land lines available? They may be expensive but will additional

Site plan

Location THE CHURCH HALL, HIGH STREET, EXLEY

Contact name JOHN SMITH   **Post** Caretaker   **Phone** 135531

Transmission /~~Recording~~   **Date** 1 JULY   **Time** 1900–2000

Rehearsal   **Date** 29 JUNE **Time** 2000–2230
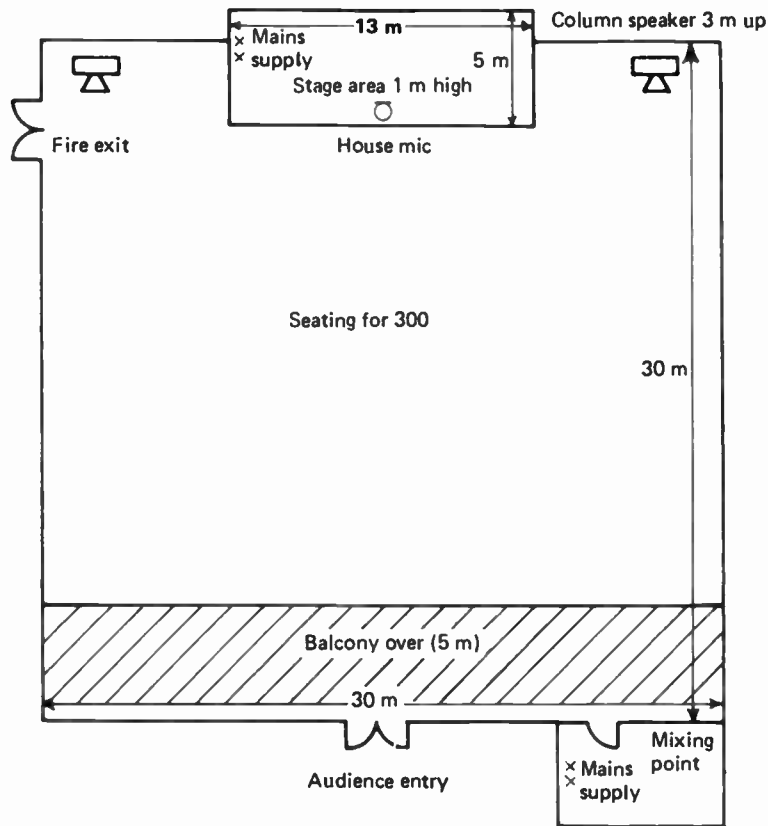
Fig. 16.2. A sketch plan drawn up during the site visit is an invaluable aid to further planning.

programme or control circuits need to be ordered from the Telecommunications Department? If so will the quality be good enough for music — or will the programme circuit have to be 'equalised'? These questions need to be discussed at an early stage, for, amongst other things, the answers will have a direct bearing on the cost of the programme.

Sooner or later an OB will be required from a hall, or from the middle of a field, where no lines exist. Such conditions are best realised well in advance so that either a radio-link can be obtained or the telephone authority asked to make the appropriate connections, and if necessary actually build a suitable route. A decision has to be made as to whether

only a one-way programme circuit is required — the broadcaster at the site must then be able to obtain his cue to go ahead by listening off-air — or whether a second two-way telephone or control line is also needed. Obviously this additional facility is to be preferred and for an OB of any length and where a number of broadcasts are made from the same site, it becomes essential. The same applies if radio links are used — is there to be a bi-directional control channel in addition to the programme circuit from OB to base? The specialist producer will certainly know about the mobile phone and ISDN options described earlier on p. 98. If all else fails however, it is a wise precaution to know the whereabouts of the nearest accessible telephone whether it is in a private house or office, or a public call box. Many a programme has been saved by having the right coins available!

People

By this stage it should be clear as to how many people will be involved at the OB site. Anything more than a simple radio car job may require a number of skills — producer, engineer, commentator, technical operator, secretary, driver, caterer, etc. A large event with the public present, such as an exhibition, may require the services of security staff, or a publicity specialist. The list grows with the complexity of the programme, as does the cost.

The exact number of people is an important piece of anticipation — getting it right depends on being able to visualise whether for example there is a script writing and typing requirement on-site. It will also depend on whether the working day is to be so long as to warrant the employment of duplicate staff working in shifts.

Equipment

This is best organised on a category basis by the individuals most closely involved:

(1) *Engineering:* microphones, cables, sound mixers, turntables, cart, cassette or CD players, tape recorders, amplifiers, loudspeakers, headphones, power cables and distribution boards, spare fuses, sticky tape, editing materials, recording tape, spare spools, tool kit, radio, spare batteries.
(2) *Programme:* records, tapes, carts, scripts.
(3) *Administrative:* tables, chairs, paper, typewriters or computer kit, pencils, torches, clipboards, money, stop-watches, string, publicity material, sign-writing materials.
(4) *Personal:* food and drink, special clothing, first aid kit, sleeping bags, etc.
(5) *Transport:* vehicles.

There are always things which get forgotten, but if they are really important, this only happens once.

Accommodation

In further discussion with the event organiser there has to be agreement on the exact location of the broadcasting personnel and equipment. There may be special regulations governing car parking or access to the site, in which case the appropriate passes and security badges need to be obtained.

In order to rig equipment it will be necessary to gain access well before the event — are any keys required? Who will be there? and what security exists to safeguard equipment once it is rigged? At this stage the producer must also satisfy himself as to the whereabouts of lavatories, fire exits, catering facilities, lifts and any special features of the site, e.g. steps, small doorways, awkward passages, non-opening windows, or unusual acoustics.

The audio mixer frequently remains outside in the OB vehicle or is in a room from which the action cannot be seen. Under these conditions it is extremely useful to have a tv camera feeding a monitor adjacent to the mixing desk so that the event can be followed — and anticipated, by the producer and engineer. The security and siting of the camera should be agreed with the event organiser in advance.

Programme research

Further discussion with the event organiser will establish the detailed timetable and list of participants. With an open-air event such as a parade or sports meeting, it is important to discover any alternative arrangements in case of rain. As much information as possible about who is taking part, the history of the event, how many people have attended on previous occasions, and so on, is useful preparatory material for the broadcast itself. Additional research may be necessary at this stage for the commentators — see under 'Commentary' (Chapter 17).

The producer is then in a position to draw up a running order and to tell everyone his or her precise role both on and off the air. The running order should give as much relevant information as possible including who is doing what, when, and details of cues and timings, where these are known.

Liaison with the base studio

Particularly in the case of a 'live' OB, staff at the base studio need to be kept informed. They should have copies of the running order and be involved in a discussion of any special fill-up material or other instructions in case of a technical failure. Arrangements should be made for a 'live' OB to be recorded at the base studio so that a possible feature can be made for a highlight or follow-up programme.

Publicity

The producer should ensure he has done everything he can to provide the appropriate advance publicity. This may be in the form of programme

billings, printed posters, a press release, or simply on-air trails and announcements. It is a matter of common experience that broadcasters go to immense pains to cover an important public event, but overlook the necessity of telling people about it in advance. It is true that some promoters claim that broadcast coverage keeps people away from attending the event itself, but on the other hand it is frequently the case that advance publicity will stimulate public interest and swell the crowds, many of whom will follow the action via radio.

Safety

In a situation where crowds of people are present and their attention is inevitably drawn to the spectacle they have come to see, the broadcaster has a special responsibility to ensure that his own operation does not present any hazards. The broadcaster is of course affected by, and must observe, any local bye-laws or other regulations which apply to the OB site. His equipment must not obstruct gangways or obscure fire exit notices, or the fire equipment itself.

Cables across pavements or passage-ways must either be covered by a ramp, or should be lifted clear of any possibility of causing an obstruction.

Microphones suspended over an audience must be securely fixed, not just with sticky tape which can become loosened with a temperature
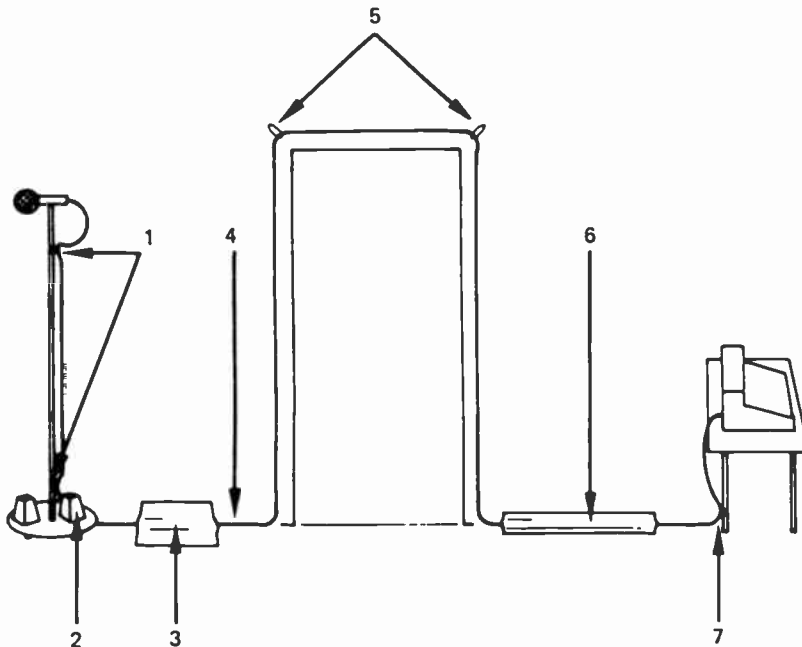
Fig. 16.3. Microphones and cables must be safely rigged. 1. Cable taped to mic stand. 2. Stand weighted. 3. Mat covers cable at walkway. 4. Cable laid without loops or knots. 5. Cable slung over doorways. 6. Cable taped to floor. 7. Cable made fast at mixer end.

change, but secured in such a way as to prevent any possibility of their being untied by inquisitive or malicious fingers. Safety chains should doubly secure any equipment rigged overhead.

Members of the public are generally curious of the broadcasting operation and all equipment must be completely stable, for instance microphone stands or loudspeakers should not be able to fall over. Nor of course must straying hands be able to touch mains electricity connections. A little fencing off may be necessary.

This will almost certainly be the case where a ground level public address system is in use. For a DJ show where the broadcaster is providing an on-site loudspeaker output, the sound intensity close to the speakers is often sufficient to cause temporary, and in some cases permanent, damage to ears. To prevent this some form of barrier three metres or so from the speaker is generally needed. A better alternative is to raise the speakers, fixing them securely well above head height.

Conflicts of approach

Engineers are essential to the broadcasting process and programme people ought to know that they wouldn't get far without them — especially at an outside broadcast. While producers might well be criticised for taking too little interest in technical matters, it also has to be said that some engineers have a tendency to over-complicate things. They can use far too many mics, or have an undue liking for technical gimmicks, and they do not always explain to the producer, as fully as they might, the problems and possibilities of the situation. Furthermore the mixing desk is often operated by a technician or specialist OB engineer and so the final mix — the programme sound — is not under the producer's direct control. So while an engineer at an OB may be aiming at studio speech quality and acoustically perfect sound, the producer may want much more the *event* — a sense of the occasion. Because of such differences of approach it is not surprising that arguments arise between producers and engineers. The problem is generally compounded by the stressful pressure of time.

A common difficulty with the broadcasting of live events is the frequent lack of any proper rehearsal. It is often not possible to listen to the mix, discuss it, make adjustments, and do it again. It is therefore essential that the producer discusses his or her objectives with the balance engineer well in advance and maintains close contact to resolve problems as they arise. Confronted by an engineer of many years experience the young producer is likely to feel daunted by the older person and unable to question anything said or done. By all means use that experience, depend on that competence and learn from it — but also develop the personal skills to challenge precedent and make changes if you feel it right. After all, in most broadcasting organisations it is the producer who is in charge — and responsible for the end result.

Tidiness

The broadcaster is working in a public place and both his appearance and his general behaviour will contribute to the station's image. This is recognised by the more senior staff but may not always be appreciated by freelance contributors. A small but important aspect of public relations is the matter of leaving the OB site in a sensibly tidy state. It is clearly undesirable to leave any equipment behind but this should also apply to the accumulated rubbish of a working visit — scripts, notes, food tins, plastic bags, empty boxes, etc. To be practical, a good OB site will be required again and it is not in the broadcaster's interests to be remembered for the wrong reasons.

Gratuities

It is common sense to recognise that the broadcaster's presence at an OB site is likely to cause extra effort for those who normally work there. It will not be necessary to consider this point in every case, and it may even be felt that where there is some special distinction attached to broadcasting it is possible to live off that good name. This temptation should be resisted, for every time that status is used in this way, it is likely to be diminished. A facility fee should be paid where local assistance is provided beyond the normal level, and to any outsiders who supplied some special service, for example, the use of a telephone, electricity or water, or the parking of vehicles. The amounts should obviously be related to the service provided — too much and one is open to charges of profligate wastage, too little and one quickly does more harm than good.

Commentary

Radio has a marvellous facility for creating pictures in the listener's mind. It is more flexible than television in that it is possible to isolate a tiny detail without waiting for the camera to 'zoom in' and it can create a breadth of vision much larger than the dimensions of a glass screen. The listener does more than simply eavesdrop on an event; radio, more easily than television or film, can convey the impression of actual participation. The aim of the radio commentator is therefore to recreate in the listener's mind not simply a picture but a total impression of the occasion. This is done in three distinct ways:

(1) The words used will be visually descriptive of the scene.
(2) The speed and style of their delivery will underline the emotional mood of the event.
(3) Additional 'effects' microphones will reinforce the action, or the public reaction to it.

Attitude to the listener

In describing a scene the commentator should have in mind 'a blind friend who couldn't be there'. It is important to remember the obvious fact that the listener cannot see. Without this it is easy to slip into the situation of simply chatting about the event to 'someone beside you'. The listener should be regarded as a friend because this implies a real concern to communicate accurately and fully. The commentator must use more than his eyes and convey information through all the senses, so as to heighten the feeling of participation by the listener. Thus for example temperature, the proximity of people and things, or the sense of smell are important factors in the overall impression. Smell is particularly evocative — the scent of newly mown grass, the aroma inside a fruit market or the timeless mustiness of an old building. Combine this with the appropriate style of delivery, and the sounds of the place itself, and you are on the way to creating a powerful set of pictures.

Preparation

Some of the essential stages are described under 'Outside Broadcasts' but the value of a pre-transmission site visit cannot be over-emphasised. Not only must the commentator satisfy himself as to his field of vision and whether the sun is in his eyes, but he must use the time to obtain essential facts about the event itself. For example in preparing for a ceremonial occasion he will need to discover:

(1) The official programme of events with details of timing, etc.
(2) The names of the flowers used for decoration, or the trees in the area.
(3) The history of the buildings and streets, and their architectural detail.
(4) The background of the people taking part — unseen as well as seen, for example organisers, caretakers.
(5) The titles of music to be played, and any special association it may have with the people and the place.

It adds immeasurably to the description of a scene to be able to mention the type of stonework used in a building, or that 'around the platform are fuchsias and hydrangeas'. The point of such detail is to use it as contrast with the really significant elements of the event so letting them gain in importance. Contrast makes for variety and for more interesting listening and mention of matters both great and small is essential, particularly for an extended piece. An eye for detail can also be the saving of a broadcast when there are unexpected moments to fill. There is no substitute for a commentator doing his homework.

In addition to personal observation and enquiry, useful sources of information will be the reference section of libraries or museums, newspaper cuttings, back copies of the event programme, previous participants, specialist magazines, and commercial or government press offices.

Having obtained all the factual information in advance, the commentator must assemble it in a form which he can use in the conditions prevailing at the OB. If he is perched precariously on top of a radio car in the rain, clutching a guardrail to steady himself and holding a microphone, stopwatch, and an umbrella, the last thing he wants is a bundle of easily windblown papers! Notes should be laid out on as few sheets as possible and held firmly on a clipboard. Cards may be useful since they are silent to handle. The important thing is their order and logic. The information will often be chronological in nature listing the background of the people taking part. This is particularly so where the participants appear in a predetermined sequence — a procession or parade, variety show, race meeting, athletics event, church service, or civic ceremony. Further information on the event or the environment can be on separate pages so long as they can be referred to easily. If the event is non-sequential, for instance a football match or public meeting, the personal information may be more useful in alphabetical form, or better still memorised.

Working with the base studio

The commentator will need to know the precise handover details. This applies both from the studio to himself, and from his own end cue for the return to the

studio. These details are best written down for they easily slip the memory. He should also be fully aware of the procedures to be followed in the event of any kind of circuit failure — the back-up music to be played, and who makes the decision to restore the programme. It may be necessary to devise some system of hand signals or other means of communication with technical staff, and he will want to know whether he will be able to hear 'talkback' in his headphones, etc. These matters are the 'safety nets' which enable the commentator to fulfil his role with a proper degree of confidence.

As with all outside broadcasts, the base studio should ensure that the commentary output is recorded. Not only will the commentator be professionally curious as to how it came over, but the material may be required for archive purposes. Even more important is that an event worthy of a 'live' OB will almost certainly merit a broadcast of edited highlights later in the day. Thus two recordings may be needed, a complete original and one which can be cut for subsequent rebroadcast.

Sport

First and foremost the sports commentator must know his sport and have detailed knowledge of the particular event. He should know the sequence which led up to it, its significance in any overall contest, the participants and something of their history. The possession of this background information is elementary, but what is not so obvious is how to use it. The tendency is to give it all out at the beginning in the form of an encyclopaedic but fairly indigestible introduction. Certainly the basic facts must be provided at the outset, but a much better way of using background detail is as the game itself proceeds, at an appropriate moment or during a pause in the action. This way the commentator sounds as though he is part of what is going on instead of being a rather superior observer.

Traditionally, for technical reasons, the commentator has often had to operate from inside a soundproof commentary position, isolated from his immediate surroundings. He can easily lose something of the atmosphere by creating his own environment and there is a strong argument in favour of the ringside seat approach, provided that he uses a noise-cancelling microphone and his communication facilities, such as headphone talkback, are secure.

Sports stadia seem to undergo more frequent changes to their layout than other buildings and unless a particular site is in almost weekly use for radio work, a special reconnaissance visit is strongly advised. It is easy to forego the site reconnaissance assuming that the place will be the same as it was six months ago. However unless there are strong reasons to the contrary, a visit and technical test should always be made.

Where the action is spread out over a large area as with motor racing, a full scale athletics competition or rowing event, more than one commentator is likely to be in action. Cueing, handovers, timing, liaison with official results — all these must be precisely arranged. The more complex an occasion, the more necessary is observance of the three golden rules for all broadcasts of this type:

(1) Meticulous production planning so that everyone knows what is *likely* to be asked of him.
(2) First class communications for control.
(3) Only one person in charge.

Fig. 17.1. The lip mic. The microphone has excellent noise-cancellation properties which makes it ideal for commentary situations. The mouthguard is held against the broadcaster's lip while the microphone is in use. There is a bass cut in the handle to compensate for the bass lift which results from working close to a ribbon microphone.

Communicating mood

The key question is 'what is the overall impression here?' Is it one of joyful festivity or is there a more intense excitement? Is there an urgency to the occasion or is it relaxed? At the other end of the emotional scale there may be a sense of awe, a tragedy or a sadness which needs to be reflected in a sombre dignity. Whatever is happening, the commentator's sensitivity to its mood, and to that of the spectators, will control his style, use of words and speed of delivery. More than anything else this will carry the impressions of the event in the opening moments of the broadcast. The mood of the crowd should be closely observed — anticipatory, excited, happy, generous, relaxed,

impressed, restive, sullen, tense, angry, solemn, sad. Such feelings should be conveyed in the voice of the commentator and their accurate assessment will help him to know when to stop and let the sounds of the event speak for themselves.

Co-ordinating the images

It is all too easy to fall short of an overall picture but to end up instead with some accurately described but separate pieces of jig-saw. The great art, and challenge, of commentary is to fit them together, presenting them in a logically co-ordinated way which allows your 'blind friend' to place the information accurately in his mind's eye. The commentator must include not only the information relating to the scene, but also something about how this information should be integrated to build the appropriate framework of scale. Having provided the context, other items can then be related to it. Early on, it should be mentioned where the commentator's own position is relative to the scene; also giving details of distance, size, foreground, left and right, etc. Movement within a scene needs a smooth, logical transition if the listener is not to become hopelessly disorientated.

Content and style

The commentator begins with a 'scene-set'. He says first of all where he is and why — this is best not given in advance by the continuity handover and duplication of this information must be avoided. The listener should be helped to identify with the location, particularly if it is likely to be familiar to him. The description continues from the general to the particular noting, as appropriate, the weather, the overall impression of lighting, the mood of the crowd, the colour content of the scene and what is about to happen. Perhaps two minutes or more should be allowed for this 'scene setting', depending on the complexity of the event, during which time nothing much may be happening. By the time the action begins the listener should have a clear visual and emotional picture of the setting, its sense of scale and overall 'feel'. Even so, the commentator must continually refer to the generalities of the scene as well as to the detail of the action. The two should be woven together.

Time taken for scene-setting does not of course apply in the case of news commentary where one is concerned first and foremost with what is happening. Arriving at the scene of a fire or demonstration, one deals first with the event and widens later to include the general environment. Even so, it is important to provide the detail with its context.

Many commentaries are greatly improved by the use of colour. Colour whether gaudy or sombre is easily recreated in the mind's eye and mention of purple robes, brilliant green plumage, dark grey leaden skies, the blue and gold of ceremonial, the flashes of red or the sparkling white surf — such specific references conjure up the reality much better than the short cut of describing a scene simply as multi-coloured.

In describing the action itself, the commentator must proceed at the same pace as the event, combining prepared fact with spontaneous vision. In the case of a planned sequence as a particular person appears, or slightly in
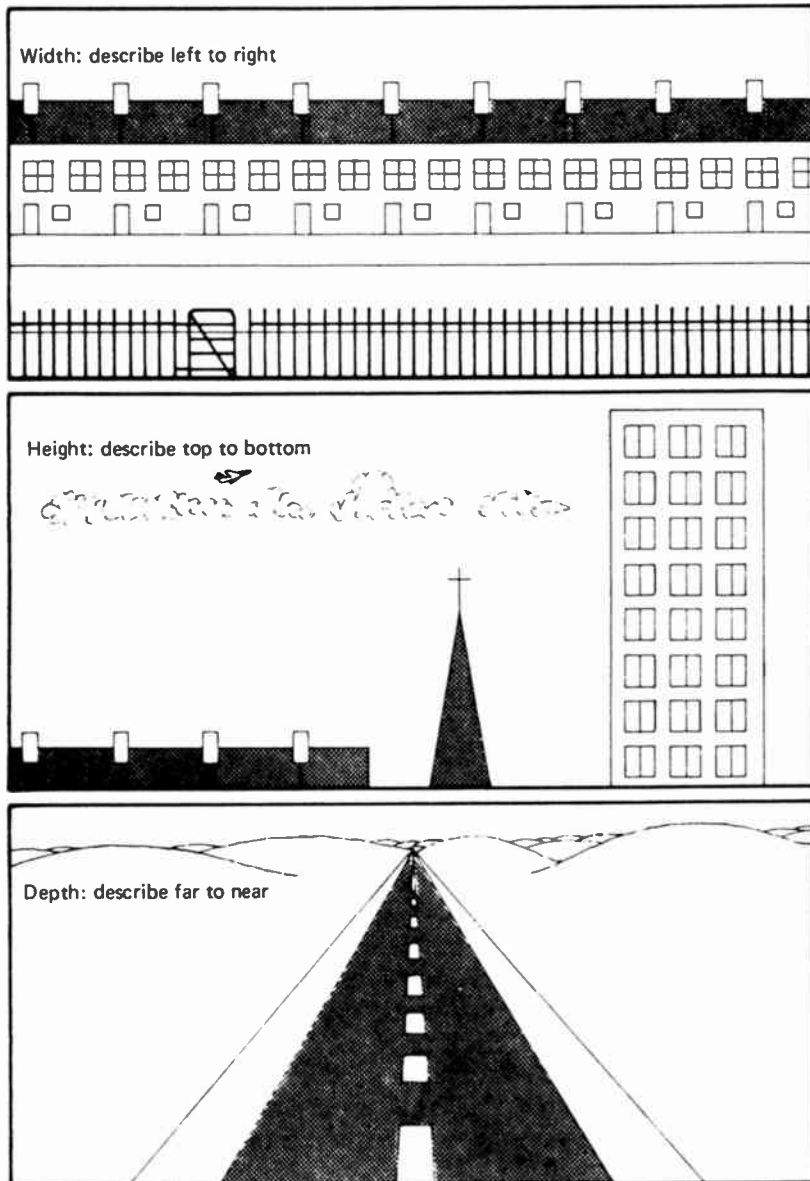
Fig. 17.2. The dimensions of commentary. The listener needs 3-dimensional information in which to place the action. Such orientation should not be confined to the scene-set but should be maintained throughout the commentary.

anticipation, reference is made to the appropriate background information, title, relevant history and so on. This is more easily said than done and requires a lot of practice — perhaps using a tape recorder to help perfect the technique.

Sports action

The description of sport, even more than that of the ceremonial occasion, needs a firm frame of reference. Most listeners will be very familiar with the layout of the event and can orient themselves to the action so long as it is presented to them the right way round. They need to know which team is playing from left to right; in cricket which end of the pitch the bowling is coming from; in tennis, who is serving from which court; in horse racing or athletics, the commentator's position relative to the finishing line. It is not sufficient to give this information at the beginning only, it has to be used throughout a commentary, consciously associated with the description of the action.

As with the ceremonial commentator, the sports commentator is keeping up with the action but also noticing what is going on elsewhere, for instance the injured player, or a likely change in the weather. Furthermore, the experienced sports commentator can increase interest for the listener by highlighting an aspect of the event which is not at the front of the action. For example, the real significance of a motor race may be the duel going on between the 4th and 5th place; the winner of a 10,000 metre race may already be decided but there can still be excitement in whether the athlete in second place will set a new European record or a personal best.

With slower games, such as cricket, the art is to use pauses in the action interestingly, not as gaps to fill but opportunities to add to the general picture or give further information. This is where another commentator or researcher can be useful in supplying appropriate information from the record books or with an analysis of the performance to date. Long stretches of commentary in any case require a change of voice, as much for the listener as for the commentators, and changeovers every 20–30 minutes are about the norm.

If for some reason the commentator cannot quite see a particular incident or is unsure what is happening, he should avoid committing himself — 'I think that . . .' A better, more positive way is — 'It looks as though . . .' Similarly it is unwise for a commentator to speculate on what a referee is saying to a player in a disciplinary situation. Only what can be seen or known should be described. It is easy to make a serious mistake affecting an individual's reputation through the incorrect interpretation of what may appear obvious. And it must be regarded as quite exceptional to voice a positive disagreement with a referee's decision. After all he is closer to the action and may have seen something which the commentator, with his general view, missed. The reverse can also be true but in the heat of the moment it is sensible policy to give referees and umpires the benefit of any doubt.

Scores and results should be given frequently for the benefit of listeners who have just switched on but in a variety of styles in order to avoid irritating those who have listened throughout. Commentators should remember that the absence of goals or points can be just as important as a positive scoreline.

Actuality and silence

It may be that during the event there are sounds to which the commentary should refer. The difficulty here is that the noisier the environment, the closer

on-microphone will be the commentator so that the background will be relatively reduced. It is essential to check that these other sounds can be heard through separate microphones otherwise references to 'the roar of the helicopters overhead', 'the colossal explosions going on around me' or 'the shouts of the crowd' will be quite lost on the listener. It is important in these circumstances for the commentator to stop talking and to let the event speak for itself.

There may be times when it is virtually obligatory for the commentator to be silent — during the playing of a national anthem, the blessing at the end of a church service, or important words spoken during a ceremonial. Acute embarrassment on the part of the over-talkative commentator and considerable annoyance for the listener will result from his being caught unawares in this way. A broadcaster unfamiliar with such things as military parades or church services must be certain to avoid such pitfalls by a thorough briefing beforehand.

The ending

Running to time is helped by having a stop-watch synchronised with the studio clock. This will provide for an accurately timed handback, but if open-ended, the cue back to the studio is simply given at the conclusion of the event.

It is all too easy after the excitement of what has been happening to create a sense of anti-climax. Even though the event is over and the crowds are filtering away, the commentary should maintain the spirit of the event itself perhaps with a brief summary, or with a mention of the next similar occasion. Another technique is radio's equivalent of the television wide-angle shot. The commentator 'pulls back' from the detail of the scene, concluding as he began with a general impression of the whole picture before ending with a positive and previously agreed form of words which indicates a return to the studio.

Many broadcasters prefer openings and closings to be scripted. Certainly if you have hit upon the neat, well turned phrase, its inclusion in any final paragraph will contribute appropriately to the commentator's endeavour to sum up both the spirit and the action of the hour.

An example

One of the most notable commentators was the late Richard Dimbleby of the BBC. Of many, perhaps his most memorable piece of work was his description of the lying-in-state of King George VI at Westminster Hall in February 1952. The printed page can hardly do it justice, it is radio and should be heard to be fully appreciated. Nevertheless it is possible to see here the application of the commentator's 'rules'. A style of language, and delivery, that is appropriate to the occasion. A 'scene-set' which quickly establishes the listener both in terms of the place and the mood. 'Signposts' which indicate the part of the picture being described. Smooth transitions of movement which take you from one part of that picture to another. Researched information, short sentences or phrases, direct speech, colour and attention to detail, all used with masterly skill to place the listener at the scene.

'It is dark in New Palace Yard at Westminster tonight. As I look down from this old, leaded window I can see the ancient courtyard dappled with little pools of light where the lamps of London try to pierce the biting, wintry gloom and fail. And moving through the darkness of the night is an even darker stream of human beings, coming, almost noiselessly, from under a long, white canopy that crosses the pavement and ends at the great doors of Westminster Hall. They speak very little, these people, but their footsteps sound faintly as they cross the yard and go out through the gates, back into the night from which they came.

They are passing, in their thousands, through the hall of history while history is being made. No one knows from where they come or where they go, but they are the people, and to watch them pass is to see the nation pass.

It is very simple, this lying-in-state of a dead king, and of incomparable beauty. High above all light and shadow and rich in carving is the massive roof of chestnut that Richard II put over the great hall. From that roof the light slants down in clear, straight beams, unclouded by any dust, and gathers in a pool at one place. There lies the coffin of the King.

The oak of Sandringham, hidden beneath the rich golden folds of the Standard; the slow flicker of the candles touches gently the gems of the Imperial Crown, even that ruby that King Henry wore at Agincourt. It touches the deep purple of the velvet cushion and the cool, white flowers of the only wreath that lies upon the flag. How moving can such simplicity be. How real the tears of those who pass and see it, and come out again, as they do at this moment in unbroken stream, to the cold, dark night and a little privacy for their thoughts.'

(Richard Dimbleby)

Coping with disaster

Sooner or later something will go wrong. The VIP plane crashes, the football stadium catches fire, terrorists suddenly appear, a peaceful demonstration unexpectedly becomes violent, or spectator stands collapse. The specialist war correspondent or experienced news reporter sent to cover a disaster knows how far to go in describing death and destruction. Sensitivity to the reactions of the listener in describing mutilated bodies or the bloody effect of shellfire is a matter which is developed through experience and a constant reappraisal of news values. But the non-news commentator must also learn to cope with tragedy. From the crashing of the Hindenburg airship in 1937, to the explosion of the space shuttle, commentators are required to react to the totally unforeseen, responding with an instant transition perhaps from national ceremony to fearful disaster. Certain kinds of events such as motor racing and airshows have an inherent capacity for accident, but when terrorists invade a peaceful Olympic Games village commentators normally used to describing the excitement of the track are called on to cope with tensions of quite a different magnitude.

Here is an example of BBC Sports commentator Peter Jones covering a football match at Hillsborough Stadium, Sheffield. The game had only just begun when more people crowding into the ground suddenly caused such a crush in the stands that supporters were climbing the fences and invading the pitch. The match was stopped and a few moments later;

'At the moment there are unconfirmed reports, and I stress unconfirmed reports of five dead and many seriously injured here at Hillsborough. Just to remind you what happened — after five minutes, at the end of the ground to our left where the Liverpool supporters were packed very tightly — and the report is that one of the gates in the iron fence burst open — supporters poured on the pitch. Police intervened and quite correctly the referee took the police advice and took both teams off. Since then we've had scenes of improvised stretchers with the advertising hoardings being torn up, spectators have helped, we've got medical teams, oxygen cylinders, a team of fire brigade officers as well to break down the fence at one end to make it easier for the ambulances to get through and we've got bodies lying everywhere on the pitch.'

(Courtesy BBC Sport)

Remembering that his commentary was being heard by the families and friends of people at the match, it was important here to describe the early casualty reports as 'unconfirmed' and also to avoid any attempt at identifying the cause of the situation, or worse, to apportion blame. Commentators do well to report only what they can personally see.

So what should the non-specialist do? Here are some guidelines:

- Keep going if you can. Don't be so easily deterred by something unusual that you hand back to the studio. Even if your commentary is not broadcast 'live' it could be crucial for later news coverage.
- There's no need to be ashamed of your own emotions. You are a human being too and if you are horrified or frightened by what is happening your own reaction will be part of conveying that to your listener. It's one thing to be professional, objective and dispassionate at a planned event, it is quite another to remain so during a sudden emergency.
- Don't put your own life, or the lives of others, in unnecessary danger. You may from the best of motives, believe that 'the show must go on', but few organisations will thank you for the kind of heroics which result in your death. If you are in a building which is on fire, say so and leave. If the bullets are flying or riot gas is being used in a demonstration take cover. You can then say what's happening and work out the best vantage point from which to continue.
- Don't dwell on individual anguish or grief. Keep a reasonably 'wide angle' and put what is happening in context. Remember the likelihood that people listening will have relatives or friends at the event.
- Let the sounds speak for themselves. Don't feel you have to keep talking, there is much value in letting your listener hear the actuality — gunfire, explosions, crowd noise, shouts and screams.
- Don't jump too swiftly to conclusions as to causes, and responsibility. Leave that to a later perspective. Stick with observable events, relay the facts as you see them.
- Above all arrive at a station policy for this sort of coverage well before any such event takes place. Get the subject on the agenda in order to agree emergency procedures.

Music recording

There are three questions which a producer must ask himself before becoming involved in the production of any music.

Firstly, is the material offered relevant to programme needs? The technically minded producer, audiophile or engineer can easily create reasons for recording a particular music occasion other than for its value as good programming. It may represent an attractive technical challenge, or be the sort of concert which at the time seems a good idea to have 'in the can'. Alternatively the desire to record a particular group of performers may outweigh considerations of the suitability of what they are playing. Sometimes musicians are visually persuasive but aurally colourless, or as with many club performers dependent on an atmosphere difficult to reproduce on radio. To embark on music with little prospect of broadcasting it is a speculative business and the radio producer should not normally commit resources unless he knows, perhaps only in outline, how he intends to use the material.

The second question asks whether the standard of performance is good enough for broadcasting. There cannot be a single set of objective criteria for standards since much depends on the programme's purpose and context. A national broadcaster will undoubtedly demand the highest possible standards; regionally and locally there is an obligation to broadcast the music-making of the area which will almost certainly be of less than international excellence. The city orchestra, college swing band, amateur pop group, all have a place in the schedules but for broadcasting to a general audience, as opposed to a school concert which is directed only to the parents of performers, there is a lower limit below which the standard must not fall. In identifying this minimum level, the producer has to decide whether he is primarily broadcasting the music, the musician, or the occasion. Certainly he should not go ahead without a clear indication of the likely outcome — new groups should be auditioned first, preferably 'live' rather than from a submitted tape. If the technical limits of performance are apparent, musicians should be persuaded to play items that lie within their abilities. Simple music well played is infinitely preferable to the firework display that does not come off.

And finally, is the recording or broadcast within the technical capability of the station? Even at national level there are limits to what can be expended on

a single programme. Numbers and types of microphones, the best specification for stereo lines, special circuits, engineering facilities at a remote OB site, the availability of more than one echo source and so on — these are considerations which affect what the listener will hear and will therefore contribute to his appreciation of the performer. The broadcaster has an obvious obligation to artists to present them in the most appropriate manner without the intervention of technical limits. This presupposes that the producer knows exactly what is involved in any given situation, that for example he understands the implications of a 'live' concert where the members of a pop group sing as they play, where public address relay is present, or hyper-cardioid, variable pattern or tie-clip microphones are required to do justice to a particular sound balance. Small programme-making units should avoid taking on more than they can adequately handle, and instead should stay within the limits of their equipment and expertise. Much better for a local station to refuse the occasional music OB as beyond its technical scope than it should broadcast a programme which it knows could have been improved on given better equipment. Alternatively if a station is not equipped or staffed to undertake outside music recording, it could consider contracting the work out to a specialist facilities company, with the station retaining editorial control.
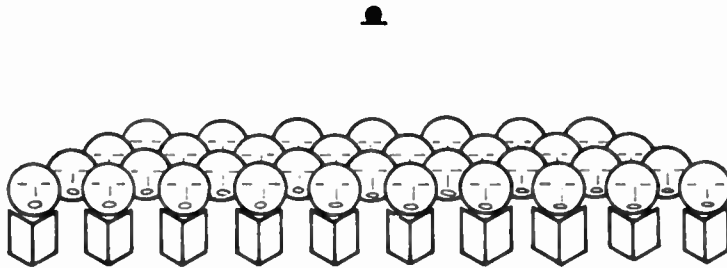
Choir – 34 performers = 1 mic
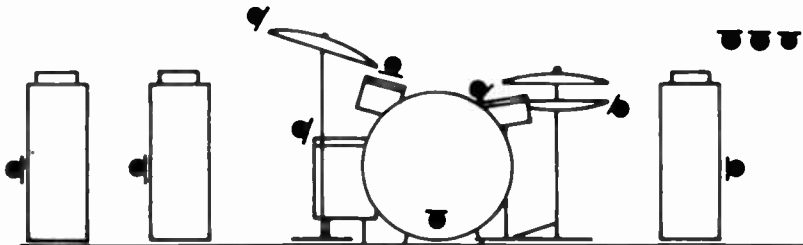
Pop Group – 4 performers = 12 mics

Fig. 18.1. The technical complexity of broadcasting live music is not related to how many performers there are. The producer must decide whether adequate programme standards can be achieved within the available resources.

The remainder of this chapter is directed to help producers in their understanding of the technical factors of music recording.

The philosophy of music balance is divided into two main groups — firstly, the reproduction of a sound which is already in existence, and secondly, the creation of a synthetic overall balance which exists only in the composer's or arranger's head and subsequently in the listener's loudspeaker.

Reproduction of internal balance

Where the music produced results from a carefully controlled and self-regulating relationship between the performers, it would be wrong for the broadcaster to alter what the musicians are trying to achieve. For example the members of a string quartet are sensitive to each other and adjust their individual volume as the music proceeds. They produce a varying blend of sound which is as much part of the performance as the notes they play or the tempo they adopt. The finished product of the sound already exists and the art of the broadcaster is to find the place where his microphone(s) can most faithfully reproduce it. Other examples of internally balanced music are symphony orchestras, concert recitalists, choirs and brass bands. The dynamic relationship between the instruments and sections of a good orchestra is under the control of its conductor; the broadcaster's task is to reproduce this interpretation of the music. He should not create a new sound by boosting the woodwind or unduly accentuating the trumpet solo. Since the conductor controls the internal balance by what he hears, it is in this area that one searches initially for the 'right' sound. Using a 'one-mic balance' or stereo pair, the rule of thumb is to place it with respect to the conductor's head — 'three metres (10 feet) up and three metres (10 feet) back'.

Similarly the conductor of a good choir will on his own assessment regulate the balance between the soprano, contralto, tenor and bass parts. If the choir is short of tenors and this section needs reinforcing, this adjustment can of course be made in the microphone balance. But this is at once to create a sound not made simply by the musicians and raises interesting questions about the lengths to which broadcasters may go in repairing the deficiencies of performers.

It is possible to 'improve' a musician's tone quality, to clarify the diction of a choir or to correct an unevenly balanced group. The ultimate in such cosmetic treatment is to use the techniques of the recording studio to so enhance a performer's work that it becomes impossible for him ever to appear 'live' in front of an audience, a not unknown situation. But while it is entirely reasonable to make every possible adjustment in order to obtain the best sound from a school orchestra, it would be unthinkable to tamper with the performance of an artist who had a personal reputation. It is in the middle ground, including the best amateur musicians, where the producer is required to exercise his judgement — to do justice to the artist but without making it difficult for the performer in other circumstances.

The foregoing assumes that the music is performed in a hall that has favourable acoustics. Where this is not the case, steps have to be taken to correct the particular fault. For example in too 'dry' an acoustic, some artificial reverberation will need to be added, preferably on-site at the time of

recording, although it is possible for it to be added later. Alternatively a 'space' microphone can be used to increase the pick-up of reflected sound. If the hall is too reverberant or the ambient noise level, from air-conditioning plant or outside traffic, is unacceptably high, the microphone should be moved closer to the sound source. If this tends to favour one part at the expense of another, further microphones are added to restore full coverage. The best sound quality from most instruments and ensembles is to be found not simply in front of them, but above them. A good music studio will have a high ceiling and the microphone for an internally balanced group will be kept well above head height. As mentioned previously, the standard starting procedure is to place a main microphone 'three metres up and three metres back' from the conductor's head, with a second microphone perhaps further back and a little higher. The outputs of the two microphones are then compared. The one giving the better overall blend without losing the
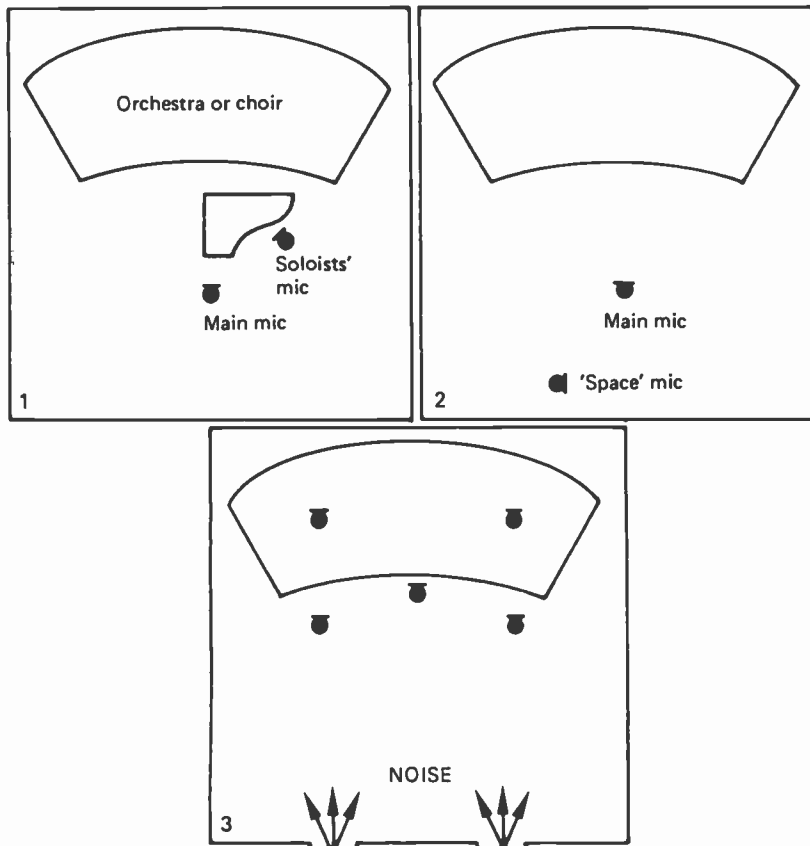
Fig. 18.2. Basic considerations for mic placing with an internally balanced group. 1. Mic balance suitable under low noise conditions in a good acoustic. A soloist's mic or occasional 'filler' mic may be added. 2. In too 'dry' an acoustic a space mic is added to increase the pick-up of reflected sound. 3. Under conditions of unacceptable ambient noise the microphones are moved closer to the source and increased in number to preserve the overall coverage. It may be necessary to add artificial reverberation.

detail then remains and the other microphone is moved to another place for a second comparison. An alteration in distance of even a few centimetres can make a significant difference to the sound produced. To avoid the effects of either the reinforcement or the phase cancellation of the reflected sound, microphones are best placed asymetrically within a hall, off the centre line. Similarly one avoids the axis of a concave surface such as a dome.

The process of comparison continues until no further improvement can be obtained. It is essential that such listening is done with reference to the actual sounds produced by the musicians. It is important that producers and sound balance engineers do not confine themselves to the noises produced by their monitoring equipment, good though they may be, but listen in the hall to what the performers are doing.

Having achieved the best placing for the main microphone, soloists', 'filler' or 'space' mics may be added. These additional microphones must not be allowed to take over the balance nor should their use alter the 'perspective' during a concert. For a group that is balanced internally the only additional control is likely to be a compression of the dynamic range as the music proceeds. An intelligent anticipation of variations in the dynamics of the sound is required and although a limiter/compressor will avoid the worst excesses of overload, it can also iron out all artistic subtlety in the performance. There is no substitute for a manual control that takes account of the information from the musical score and is combined with a sensitive appreciation of what comes out of the loudspeaker.

The aim is to broadcast the music together with whatever atmosphere may be appropriate. To secure the confidence of the conductor, bandmaster or
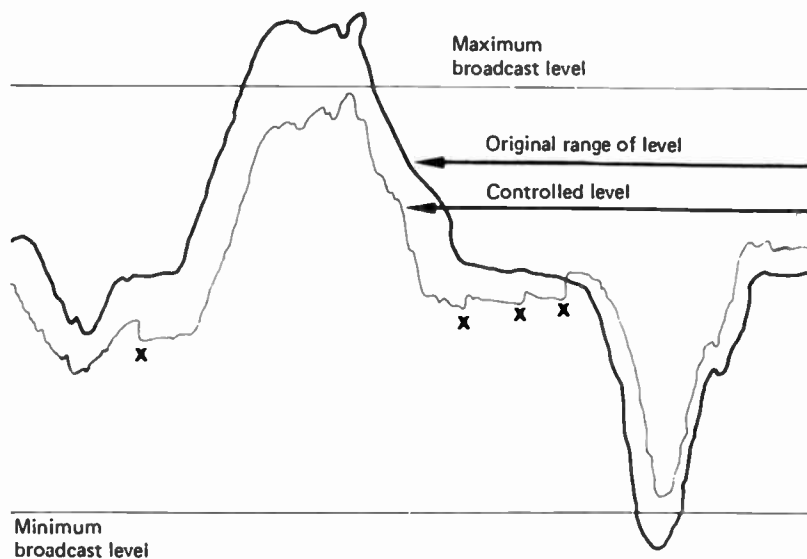
Fig. 18.3. Dynamic compression. The range of loudness in the studio can easily rise above the maximum and fall below the minimum levels acceptable to the broadcast system. By anticipating a loud passage the main fader is used to reduce the level before it occurs. Similarly the level prior to a quiet part is increased. Faders generally work in small steps, each one introducing a barely perceptible change (X).

leader, it is good practice to invite him into the sound mixing and monitoring area to listen to the balance achieved during rehearsal. It should be remembered that since he normally stands close to the musicians, he is used to a fairly high sound level and the playback of rehearsal recordings should take this into account. Recordings should never be played back into the room in which they were made since this can lead to an undue emphasis of any acoustic peculiarity. A balance should also be monitored at low level, at what more closely resembles domestic listening conditions. This is particularly important with vocal work when the clarity of diction may suffer if the final balance is only judged at high level.

Creation of a synthetic balance

Whereas the reproduction of an existing sound calls for the integration of performance and acoustic using predominantly one microphone, the creation of a synthetic balance, which in reality exists nowhere, requires the use of many microphones to separate the musical elements in order to 'treat' and reassemble them in a new way. For example, a concert band arrangement calling for a flute solo against a backing from a full brass section would be impossible unless for the duration of the solo the flute can be specially favoured at the expense of the brass. Achieving this relies on the ability to separate the flute from everything else in such a way that it can be individually emphasised without affecting the sound from other instruments. The factors involved in achieving this separation are: studio layout, microphone types, source treatment, mixing technique, and recording technique.

Studio layout

The physical arrangement of a music group has to satisfy several criteria, some of which may conflict:

(1) To achieve 'separation', quiet instruments and singers should not be too close to loud instruments.
(2) The spatial arrangement must not inhibit any stereo effect required in the final balance.
(3) The conductor or leader must be able to see everyone.
(4) The musicians must be able to hear themselves and each other.
(5) Certain musicians will need to see other musicians.

The producer should not force players to adopt an unusual layout against their will since the standard of performance is likely to suffer. He must resolve any difficulty by suggesting alternative means of meeting the musical requirements. For example a rhythm section of piano, bass, drums and guitar needs to be tightly grouped together so that they can all see and hear each other. If there is a tendency for them to be picked up on the microphones of adjacent instruments they may need to be screened off. If this in turn affects their, or other musicians' ability to see or hear, the sight-line can be restored by the use of screens with inset glass panels, and aural communication maintained by means of headphones fed with whatever source is required.
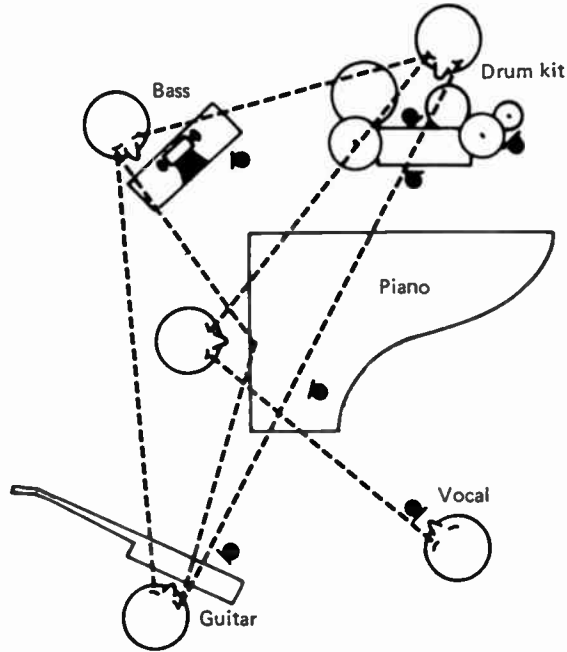
Fig. 18.4. Studio layout. The musicians need to see each other and the microphones placed so as to avoid undue pick-up of other instruments.

Working from a floor-plan may inhibit thinking in three dimensions. The solution to a sight-line problem may be to use rostra or staging to raise, say, a brass section—this can improve the separation by keeping it off other mics, which are pointing downwards.

Left to themselves, musicians often adopt the layout usual to them for cabaret or stage work. This may be unsuitable for broadcasting and it is essential that the producer knows the instrumentation detail beforehand in order to make positive suggestions for the studio arrangements. He must know whether bass and guitar players have an electric or acoustic instrument. Also how much 'doubling' is anticipated, that is, one musician playing more than one instrument, sometimes within the same musical piece, and whether the players are also to sing. This information is also useful in knowing how many music stands to provide.

It is preferable to avoid undue movement in the studio during recording or transmission but it may be necessary to ask a particular musician to move to another microphone, for example for a solo. It is also usual to ask brass players to move into the microphone slightly when using a mute. This avoids opening the fader to such an extent that the separation might be affected.

Microphones for music

As an aid in achieving separation, the sound recordist's best friend is the directional microphone. The physical layout in the studio is partly arrived at

in the light of what microphones are available. A ribbon microphone with its figure of eight directivity pattern is most useful for its lack of pick-up on the two sides. Used horizontally just above a flute or piano, it is effectively dead to other instruments in the same plane. A cardioid microphone gives an adequate response over its front 180° and will reject sounds arriving at the back — good for covering a string section. A hyper-cardioid microphone will narrow the angle of acceptance giving an even more useful area of rejection. Condenser or electret types of microphone with variable directivity patterns are valuable for the flexibility they afford in being adjustable — often by remote control — to meet particular needs.

The presenter of a live music show with an audience will probably need his or her mic to be fed to a Public Address system as well as to the broadcaster's mixer. Careless PA suffers from the all too familiar howl-round problem, but a personal radio-mic is a great help — provided that the sound mixer can see the stage, perhaps by a video link. The producer should also decide if the presenter needs talkback via an earphone.

The wide operatic platform can be covered by a suspended stereo pair, or a row of three, front-of-stage mics. The low 'boundary effect' mic is particularly effective in this context.

The closer a microphone is placed to an instrument the greater the relative balance between it and the sounds from other sources. However while separation is improved, other effects have to be considered:

(1) The pick-up of sound very close to an instrument may be of inferior musical quality. It can be uneven across the frequency range or sound 'rough' due to the reproduction of harmonics not normally heard.
(2) There may be an undue emphasis of finger noise or the instrument's mechanical action.
(3) The volume of sound may produce overload distortion in the microphone, or in the subsequent electronics.
(4) Movement of the player relative to the microphone becomes very critical, causing significant variations in both the quantity and quality of the sound.
(5) Close microphone techniques require more microphones and more mixing channels thus increasing the complexity of the operation and the possibility of error.

The choice and placing of microphones around individual instruments is a matter of skill and judgement by the recording engineer. But no matter how complex the technical operation, the producer must also be aware of other considerations. He must not allow the changing of microphones, alterations to the layout, the running of cables or audio feeds to interfere unduly with the music-making or human relations aspects. It is possible to be technically so pedantic as to inhibit the performance. If major changes in the studio arrangements are required, it is much better to do them while the musicians are given a break. Under these circumstances the broadcaster has an obvious additional responsibility to safeguard instruments left in the studio.

The ultimate in separation is to do away with the microphone altogether. This is possible with certain electric instruments where their output is available via an appropriately terminated lead, as well as acoustically for the benefit of the player and other musicians. The lead should be connected
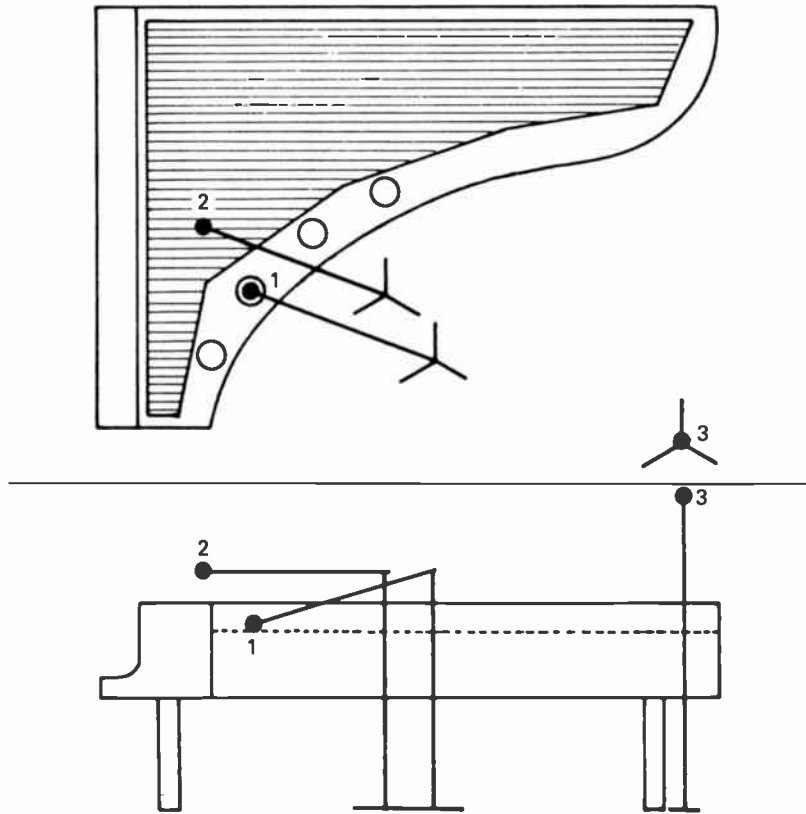
Fig. 18.5. Piano balance. Typical microphone positions for different styles of music. 1. Emphasises percussive quality for pop music and jazz. 2. Broader intermediate position for light music. 3. Full piano sound for recitals and other serious or classical music.

through a 'direct inject' box to a normal microphone input cable. Used particularly in conjunction with electric guitars, the box obviates the hum, rattles and resonances often associated with the alternative method, namely placing a microphone in front of the instrument's loudspeaker.

A further point in the use of any electrically powered instrument is that it should be connected to a studio power socket through a mains isolating transformer. This will protect the power supply in the event of a failure within the instrument and will exclude the possibility of an electrocution accident — so long as the studio equipment and the individual instrument are correctly wired and properly earthed. Faulty wiring or earthing arrangements can cause an accident for example in the event of a performer touching simultaneously two 'earths' ('grounds') — his instrument and a microphone stand — which in fact are at a different potential. While comparatively rare it is a matter which needs attention in the broadcasting of amateur pop groups using their own equipment.

A number of treatments may be applied to individual sound sources, some of which can affect the separation. These include frequency control, dynamic control, and echo.

Frequency control[1]

The tone quality of any music source can be altered by the emphasis or suppression of a given portion of the frequency spectrum. Using a graphic equaliser or other frequency discriminating amplifier, a singer's voice is given added 'presence' and clarity of diction is improved by a lift in the frequency response in the octave between 2.8 kHz and 5.6 kHz. A string section can be 'thickened' and made 'warmer' by an increase in the lower and middle frequencies, while brass is given greater 'attack' and a sharper edge by some 'top lift'. It should be noted however that in effectively making the microphone for the brass section more sensitive to the higher frequencies, spill-over from the cymbals is likely to increase and separation in this direction is therefore reduced. Fairly savage control is often applied to jazz or rhythm piano to increase its percussive quality. It is also useful on a one-microphone balance, particularly on an outside broadcast, to reduce any resonance or other acoustic effect inherent in the hall.

Dynamic control

This can be applied automatically by inserting a compressor/limiter device in the individual microphone chain. Once set, the level obtained from any given source will remain constant — quiet passages remain audible, loud parts do not overload. It becomes impossible for the flute to be swamped by the brass. Because of the economics of popular music, commercial recording companies have attained a high degree of sophistication in the use of dynamic control. This is unlikely to be reached by broadcasters who are not able to go to such lengths in recording their music. However devices of this type can save studio time and their progressive application is likely. Variations include a 'voice-over' facility which enables one source to take precedence over another. Originally intended for DJs, its obvious use is in relation to singers and other vocalists but it can be applied to any source relative to any other. Computerised music desks can be programmed to store in a memory the changing mix required throughout a performance. In the final take the basics can be left to take care of themselves.

Echo

The various means of adding the echo effect more correctly described as reverberation are echo room, mechanical plate or spring, tape echo, and digital effects unit.

An *echo room* is a bare room with a live acoustic, often in the basement of the studio building. It contains a loudspeaker fed with the appropriate source, and facing away from it a microphone, mono or stereo as required, which will pick up the loudspeaker output after its reflection from the wall surfaces. The output of the microphone is returned to the mixing desk as the echo source. An echo room should also contain several small obstructions — such as disused or broken furniture — to break up the natural standing wave patterns.

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[1] Sometimes referred to as EQ or equalisation. See Glossary.
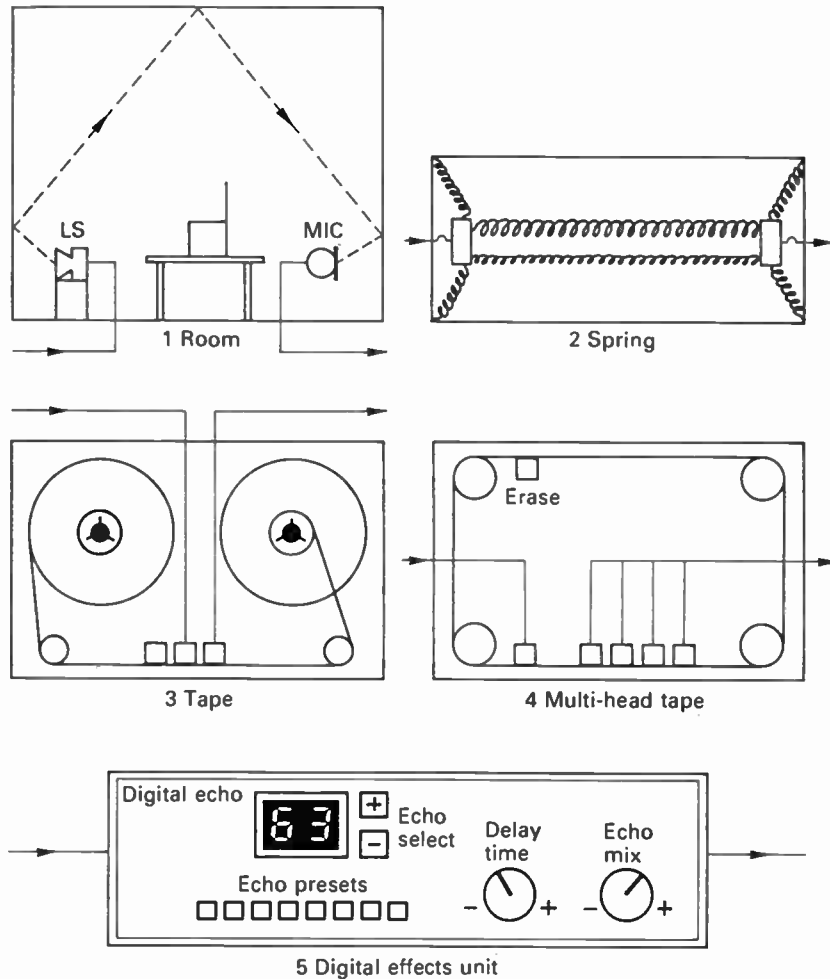
Fig. 18.6. Methods of creating echo. Echo device is fed with a programme signal which it delays. The reverberant output is returned to the mixing desk.

In the absence of a permanent installation, an echo room may be rigged in a reverberant stair well or lavatory, so long as it is not in use!

The output from the source can be made to vibrate a *mechanical plate or spring*, the vibrations travelling through it to a transducer which converts them back into electrical energy, returning as echo to the mixing desk. Equivalent to a two-dimensional room, the reverberation time is adjustable depending on the mechanical damping applied. Some such devices are in portable form and have useful OB applications.

A crude form of echo, known as *tape echo*, is possible by feeding an output to a studio tape machine which records it; the playback head reproducing it a moment later acting as the echo source. The actual delay will depend on the tape speed and the distance between the record and replay heads. Recording machines designed expressly to produce reverberation effects have several

replay heads with variable spacing to avoid the 'flutter' which can occur when all the sound is returned after a single constant delay.

The *digital effects unit* reproduces any kind of echo electronically by a number of controls and presets which affect the duration, type and mix of the reverberation. It is also possible to alter the frequency response, thereby producing any acoustic from a 'boxy' telephone booth to a cave or cathedral.

When echo is added to solo singers' voices it is wise to let them listen on headphones since they will almost certainly want to adjust their phrasing to suit the new sound.

Mixing technique

Before mixing a multi-microphone balance, each channel should be checked for delivering its correct source, with adequate separation from its neighbours, having the desired amount of 'treatment', and producing a clear distortion-free sound. It is a sensible procedure to label the channel faders with the appropriate source information — solo vocal, piano, trumpets and so on. For a stereo balance it is necessary to be clear about the placing of each instrument in the stereo picture. Stereo microphones are physically adjusted to spread their output across the required width of the picture, and the mono microphone 'pan-pots' set so that their placing coincides with that provided by any stereo microphone covering the same source. It is possible to create a stereo balance using only monophonic microphones by 'spotting' them across the stereo picture, but it is an advantage to have at least one genuine stereo channel, even if it is only the echo source.

Microphones should be mixed first in their 'family' groups. The rhythm section, strings or brass, is individually mixed to obtain an internal balance. The sections are then added to each other to obtain an overall mix. Large music desks allow their channels to be grouped together so that sections can be balanced relative to each other by the operation of their 'group' fader without disturbing the individual channel faders. Successful mixing requires a logical progression for if all the faders are opened to begin with, the resulting confusion can be such that it is very difficult to identify problems. It is important to arrive at a trial balance fairly quickly since the ear will rapidly become accustomed to almost anything. The overall control is then adjusted so that the maximum level does not exceed the permitted limit.

The prime requirement for a satisfying music balance is that there should be a proper relationship between melody, harmony and rhythm. Since the group is not internally balanced, listening on the studio floor will not indicate the required result. Only the person with his hands on the faders and listening to the loudspeaker is in a position to arrive at a final result. The melody will almost certainly be passed around the group, and this will need very precise manipulation of the faders. If the strings take the tune from an up-beat, their faders must be opened further *from that point* — no earlier otherwise the perspective will alter. At the end of that section the faders must be returned to their normal position to avoid loss of separation. It is probable that alterations to a source making use of echo will need a corresponding and simultaneous variation in the echo return channel. It is a considerable help
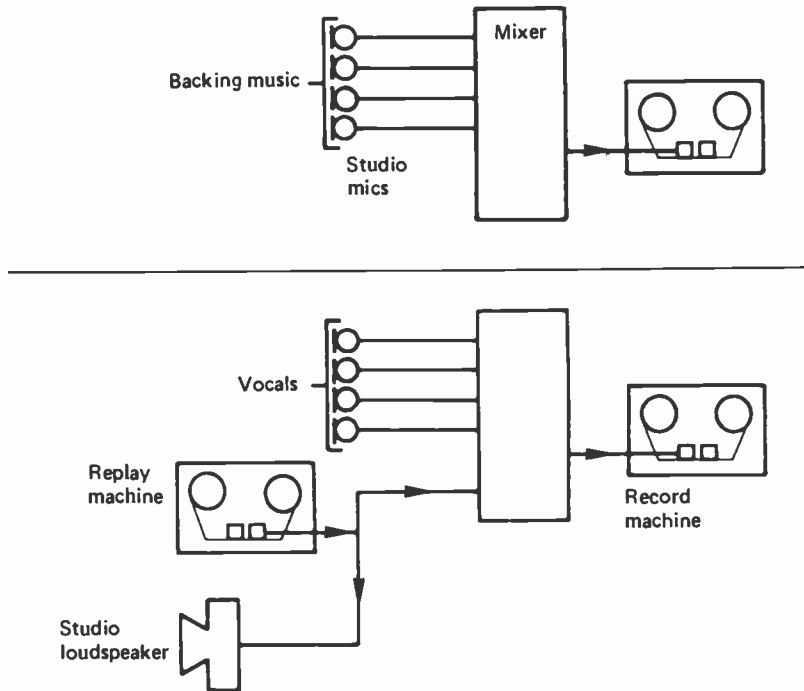
Fig. 18.7. Simple double tracking. The musicians first record a 'backing track'. This is then replayed so that it is heard on the studio loudspeaker (or headphones) while at the same time mixed with the output of the studio microphones. In this example the final recording consists of eight performances, although of course the process can be repeated further.

therefore to have an elementary music score or 'lead sheet' which indicates which instrument has the melody at any one time. If this is not provided by the musical director, the producer should ensure that notes are taken at the rehearsal — for example how many choruses there are of a song, at what point the trumpets put their mutes in, and perhaps more importantly, when they take them out again, when the singer's microphone has to be 'live' and so on. A professional music balance operator quickly develops a flair for reacting to the unexpected but, as with most aspects of broadcasting, some basic preparation is only sensible.

It is important that faders that are opened to accentuate a particular instrument are afterwards returned to their normal setting. Unless this is done it will be found that all the faders are gradually becoming further and further open with a compensating reduction of the overall control. This is clearly counter-productive and leads to a restriction in flexibility as the channels run out of 'headroom'.

As with all music balance work, the mixing must not take place only under conditions of high level monitoring. The purpose of having the loudspeaker turned well up is so that even small blemishes can be detected and corrected. But from time to time the listening level must be reduced to domestic proportions to check particularly the balance of vocals against the backing, and the acceptable level of applause. The ear has a logarithmic response to

volume and is far from being equally sensitive to all the frequencies of the musical spectrum. This means that the perceived relationship between the loudness of different frequencies heard at high level is not the same as when heard at a lower level. Unless the loudspeaker is used with domestic listening in mind as well as for professional monitoring there will be a tendency as far as the listener at home is concerned to underbalance the echo, the bass, and the extreme top frequencies. For this reason many professional studios check the final mix on a simple domestic loudspeaker.

Recording technique

The successful handling of a music session requires the co-operation of everyone involved. There are several ways of actually getting the material recorded and the procedure to be adopted should be agreed at the outset.

The first method is obviously to treat a recording in the same way as a live transmission. One starts when the red light goes on and continues until it goes out. This will be the procedure at a public concert when, for example, no retakes are possible.

Secondly, a studio session with an audience present. Minor faults in the performance or mixing will be allowed to pass but the producer must decide when something has occurred that necessitates a retake. The audience may be totally unaware of the problem but he will have lightly and briefly to explain the existence of 'a gremlin' and detail quickly to the musical director the need to retake from point A to point B.

Thirdly, without an audience the musicians can agree to use the time as thought best. This may be to rehearse all the material and then to record it, or to rehearse and record each individual item. In either case breaks can be taken as and when decided by the producer in consultation with the musical director. A music producer must of course be totally familiar with any agreements with the performers' unions which are likely to affect how a session is run.

Fourthly, to record the most material in the shortest time or to accommodate special requirements, the music may be 'multi-tracked'. This means that instead of arriving at a final mix, the individual instruments, or groups of channels, are recorded on perhaps 24 separate tracks of a 50 mm wide tape. These are subsequently mixed in a 'reduction' session without the performers present. The facility to multi-track enables musicians to record their contribution without the necessity of having everyone present simultaneously. It also permits 'doubling', that is, the performing of more than one role in the same piece of music. This double-tracking is most often used for an instrumental group who also sing. The musicians first play the music — either conventionally recorded or multi-tracked, and when this is played back to them on headphones in the form of a 'sync output' actually generated by the record heads, they add the vocal parts. These are recorded on separate tracks or mixed with the music tracks to form a final recording. The process can be repeated to enable singers to sing with themselves as many times as is required to create the desired sound. An added advantage of multi-tracking is that any mistake does not spoil the whole performance — a retake may only be required to correct the individual error.
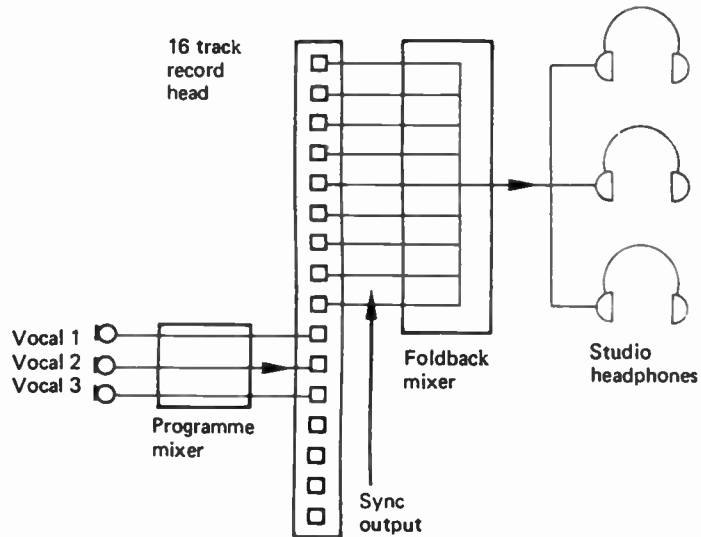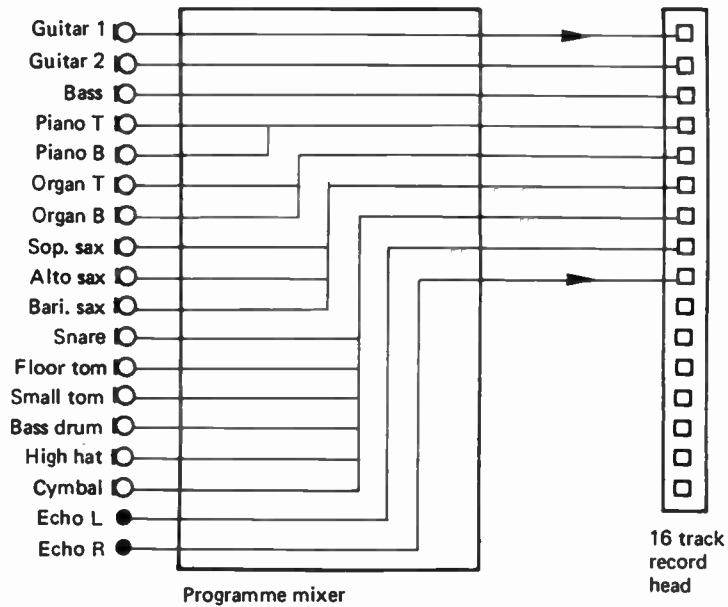
Fig. 18.8. Multi-track recording. In this example the 18 original sources are first recorded as nine separate tracks. A further three vocal tracks are then added, the singers listening to the output of the record heads to maintain synchronisation. The 12 tracks are subsequently mixed together in a reduction session to make the final recording.

Since recording at different times represents total separation, multi-tracking techniques can solve other problems. For instance the physical separation or screening of loud instruments such as a drum kit can be avoided by recording the rhythm section separately. It is an especially useful technique

to apply to music recording which has to be done in a small non purpose-built studio, and even a 4-track recorder can help to produce a more professional sound.

Unless special noise-reduction facilities or DAT recording is employed, the re-recording of ordinary analogue tape tracks will increase the hiss level on the final recording. It is essential therefore that the best equipment is used and the original recordings are made at the highest tape speed available. A point worth noting by studios unable to afford the latest in sophisticated stereo recording equipment is that a good domestic video recorder connected to a digital processor is capable of excellent results.

Production points

Essentially the producer's job is to obtain a satisfactory end product within the time available. He should avoid running into overtime which with professional musicians is expensive. Neither should he be an oppressively hard taskmaster so that the session ends with time to spare, and everyone is relieved to get out. The producer must remember that all artists need encouragement and he has a positive duty to contribute to their giving the best performance possible.

He avoids using the general talkback into the studio to make disparaging comments about individual performers. Instead, he directs all his remarks to the conductor or group leader via a special headphone feed, or better still by going into the studio for a personal talk.

He fosters a professionally friendly atmosphere and sounds relaxed even when under pressure. He is often the mediator between the performers and the technical staff, he explains delays and agrees new timescales. He anticipates the need for breaks and rest periods. During these times it is often sensible to invite the MD or group leader into the control cubicle to hear the recorded balance and discuss any problems.

He avoids displaying a musical knowledge which, while attempting to impress, is based on uncertain foundations. 'Can we have a shade more "arco" on the trombones?' is a guaranteed credibility loser.

He makes careful rehearsal notes for the recording or transmission, and takes details of the final timings and any retakes for subsequent editing.

When an audience is present he decides how it is best handled and what kind of introduction and warm-up is appropriate. He may have to do this himself.

He resolves the various conflicts which arise — whether the air conditioning or heating is working properly, whether the lights are too bright or whether the banging in another part of the building can be stopped. He remembers other needs — ashtrays, drinking water, lavatories, telephones.

When a retake is required, he makes a positive decision and communicates it quickly to the musical director. The producer exercises the broadcaster's normal editorial judgement and is responsible for the quality of the final programme.

He ensures that the musicians are paid — those performers who signed a contract and made the music and, through the appropriate agencies, those who wrote, arranged and published the work still in copyright.

After the session he says thank you — to everyone.

19

Drama — some principles

The radio medium has a long and distinguished history of turning thoughts, words and actions into satisfying pictures within the listener's mind by using the techniques of drama. But there is no need for the producer to think only in terms of the Shakespeare play — the principles of radio drama apply to the well-made commercial, a programme trail, dramatised reading, five-minute serial or two-minute teaching point in a programme for schools. Since the size and scope of the pictures created are limited only by the minds which devise and interpret them, the medium in its relationship to drama is unique, and any radio service is the poorer for not attempting to work in this area.

As an illustration of the effective simplicity of the use of sound alone, listen now to the celebrated example by Stan Freberg who gave it as part of his argument for selling advertising time on radio.

MAN: Radio? Why should I advertise on radio? There's nothing to look at ... no pictures.

GUY: Listen, you can do things on radio you couldn't possibly do on TV.

MAN: That'll be the day.

GUY: Ah huh. All right, watch this. (Clears throat). OK people, now when I give you the cue, I want the 700-foot mountain of whipped cream to roll into Lake Michigan which has been drained and filled with hot chocolate. Then the Royal Canadian Air Force will fly overhead towing the 10-ton maraschino cherry which will be dropped into the whipped cream, to the cheering of 25,000 extras. All right ... cue the mountain ...

SOUND: Groaning and creaking of mountain into big splash.

GUY: Cue the Air Force!

SOUND: Drone of many planes.

GUY: Cue the maraschino cherry ...

SOUND: Whistle of bomb into bloop! of cherry hitting whipped cream.

GUY: Okay, twenty-five thousand cheering extras ...

SOUND: <u>Roar of mighty crowd. Sound builds up and cuts off</u>
          <u>sharp!</u>

GUY: Now ... you wanta try that on television?

MAN: Well ...

GUY: You see ... radio is a very special medium, because it
          stretches the imagination.

MAN: Doesn't television stretch the imagination?

GUY: Up to 21 inches, yes.

[Courtesy Freberg Ltd]

A story can offer a framework for the understanding — or at least an interpretation — of life's events. Often a mirror in which we can see ourselves — our actions, motives, and faults — and the outcomes and results can contribute to our own learning. Drama is about conflict and resolution, relationships and feelings and people being motivated by them, both driving and driven by events. What happens should be credible, the people believable, and the ending have a sense of logic however unusual and curious so that the listener does not feel cheated or let down.

The aim with all dramatic writing is for the original ideas to be re-created in the listener's mind and since the end result occurs purely within the imagination, there are few limitations of size, reality, place, mood, time or speed of transition. Unlike the visual arts where the scenery is provided directly, the listener to radio supplies his own mental images in response to the information he is given. If the 'signposts' are too few or of the wrong kind, the listener becomes disorientated and cannot follow what is happening. If there are too many the result is likely to be obvious and 'corny'. Neither will satisfy. The writer must therefore be especially sensitive to how his audience is likely to react — and since the individual images may stem largely from personal experience, of which the writer of course knows nothing, this is not easy. But it is the ageless art of the storyteller — saying enough to allow listeners to follow the thread but not so much that they do not want to know what is to happen next or cannot make their own contribution.

The writer must have a thorough understanding of the medium and the production process, while the producer needs a firm grasp of the writing requirements. If they are not one and the same person, there must be a strong collaboration. There can be no isolation, but if there is to be a dividing line, let the writer put everything down knowing how it is to sound, while the producer turns this into the reality of a broadcast knowing how it is to be 'seen' in the mind's eye.

The component parts with which both are working are speech, music, sound effects, and silence.

The idea

Before committing anything to paper, it is essential to think through the basic ideas of plot and form — once these are decided, a great deal follows

naturally. The first question is to do with the material's suitability for the target audience, the second with its technical feasibility.

Assuming that the writer is starting from scratch and not adapting an existing play, he should be clear as to his broad intention — to make people laugh, to comment on or explain a contemporary situation, to convey a message, to tell a story, to entertain. How can he best enable the listener to 'connect' with his intention? Does he want him to identify with one of the characters? Should the basic situation be one with which the listener can easily relate?

The second point at this initial stage is to know whether the play has to be written within certain technical or cost limitations. To do something simple and well is preferable to failing with something complicated. There seems little point in writing a play which calls for six sound effects turntables or CD players, echo, a variety of acoustics, distorted voice-over, and a crowd chanting specific lines of script, if the studio facilities are not able to meet these demands. Of course with ingenuity even a simple studio can provide most if not all of these devices. But the most crucial factor is often simply a shortage of time. There may be limitations too in the capabilities of the talent available. The writer for example should beware creating a part which is emotionally exceptionally demanding only to hear it inadequately performed. Writing for the amateur or child actor can be very rewarding in the surprises which their creative flowering may bring, but it can also be frustrating if you automatically transfer into the script the demands and standards of the professional stage.

Thus the writer must know at the outset how to tailor his play for the medium, what he is attempting to put over, how he expects his audience to relate to the material, and whether what he wants is technically and financially possible. From here there are three possible starting points — the story, the setting or the characters.

Story construction

The simplest way of telling a story is to:

(1) Explain the situation.
(2) Introduce 'conflict'.
(3) Develop the action.
(4) Resolve the conflict.

Of course there may be complications and sub-plots but the essence of a good story is to want to find out 'what happens in the end'. Who committed the crime? Were the lovers reunited? Did the cavalry arrive in time? The element which tends to interest us most is the resolution of conflict and since this comes towards the end, there should be no problem of maintaining interest once into the 'rising action' of the play. And at the end, it is not necessary to tie up all the loose ends — to dot every 'i' and cross every 't' in a neat and tidy conclusion. Life seldom works that way. It is often better to have something unsaid, leaving the listener still with a question, an issue, or a motivation to think about. Parables are stories which deliberately do not go straight from A to B, but take a parabolic
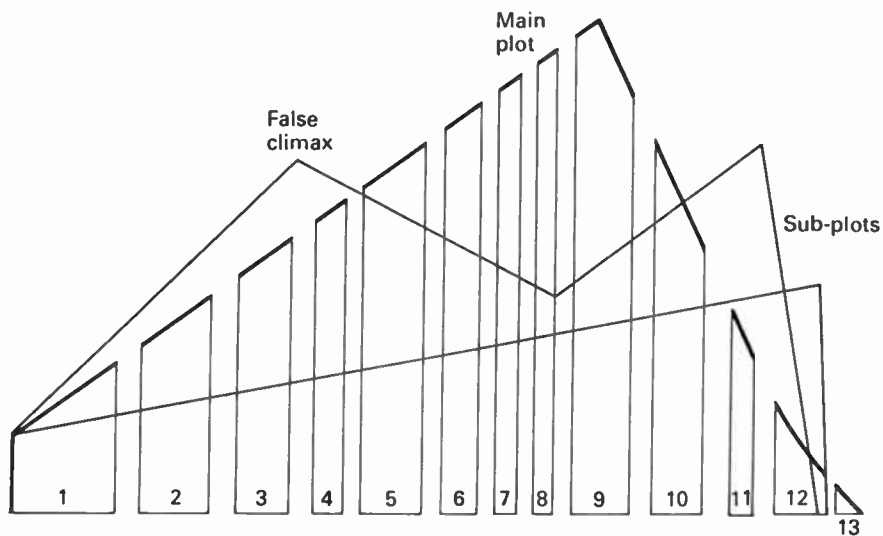
Fig. 19.1. A plot diagram to illustrate the shortening scene length as the action rises to its climax:

1–2   introduction, setting and context, characterisation established;
3–5   conflict, events resulting from characters in the situation;
6–8   rising action, complication, suspense;
9   maximum tension, crisis, climax;
10–11   falling action, resolution;
12–13   denouement, twist.

route leaving the hearer to work out the implications of it all. This is one of the fascinations of the story form.

In radio, scenes can be shorter than in the theatre, and intercutting between different situations is a simple matter of keeping the listener informed about where he is at any one time. This ability to move quickly in terms of location should be used positively to achieve a variety and contrast which itself adds interest. The impact of a scene involving a group of fear-stricken people faced with impending disaster is heightened by its direct juxtaposition with another, but related, group unaware of the danger. If the rate of intercutting becomes progressively faster and the scenes shorter, the pace of the play increases. This sense of acceleration, or at least of movement, may be in the plot itself but a writer can inject greater excitement or tension simply in his handling of the scene length and in their relation to one another. Thus the overall shape of the play may be a steady development of its progress, heightening and increasing. Or it may revolve around the stop-go tempo of successive components. Interest through contrast may be obtained by a variety of means, for example:

(1) Change of pace: fast/slow action, noisy/quiet locations, long/short scenes.
(2) Change of mood: tense/relaxed atmosphere, angry/happy, tragic/dispassionate.

(3) Change of place: indoors/open air, crowded/deserted, opulent/poverty stricken.

The radio writer is concerned with images created by sound alone; if he wants colour and mood he must paint them with the words he uses and choose locations that are aurally evocative.

On a personal note to illustrate the impact of contrast within a play, I recall a moment from a drama on the life of Christ. The violence and anger of the crowd demanding his execution is progressively increased, the shouting grows more vehement. Then we hear the Roman soldiers, the hammering of nails and the agony of the crucifixion. Human clamour gives way to a deeper, darker sense of tragedy and doom. Christ's last words are uttered, a crash of thunder through to a climax of discordant music gradually subsiding, quietening to silence. A pause. Then slowly — bird song.

How wrong it would have been to spoil that contrast by using the narrator, as elsewhere in the play.

The setting

Situation comedy drama often begins with a setting which then becomes animated with characters. The storyline comes later driven by the circumstances, generally a series of predicaments in which the characters find themselves. Fortunately radio can provide almost any setting at will — a royal household in ancient Egypt, a space capsule journeying to a distant planet, or a ranch house in outback Australia. The setting, plus one or two of the principal characters, may be the key theme holding a series of plays — or advertisements — together. It is important that the time and place is well researched so that credibility is maintained for those listeners who are expert in the particular situation.

Within a play the setting can obviously vary considerably and one of the devices used to create interest is to have a strong contrast of locale in adjacent scenes, for example to move from an opulent modern office peopled by senior managers to a struggling rural hospital affected by their decisions. Changes of location are very effective when run in parallel with changes in disposition or mood.

Characterisation

The writer is likely to want the play — or 30 second ad — to be peopled with real-life characters to whom the listener can relate. This does not mean that the setting has to be the same as the domestic circumstances of the audience — far from it. For whatever the setting the listener will meet people he can recognise — fallible, courageous, argumentative, greedy, fearful, compassionate, lazy, and so on. Characterisation is a key ingredient and it is important to sketch out a pen portrait of each character. This helps to stabilise them as people and it is easier to give them convincing dialogue. Here are some headings:

- their age, sex, where they live and how they talk;
- height, weight, colouring, and general appearance;
- their social values, sense of status, beliefs;
- the car they drive, the clothes they like, how much money they have;
- their family connection, friends — and enemies;
- the jokes they make — or not, how trusting they are, how perceptive;
- their moods, orientations, preferences and dislikes.

Characters have faults, they fall apart in crises; they will appear illogical because their words and their deeds won't always coincide. They will reveal themselves in what they say, but even more in what they do. One of the necessary tensions in compelling drama is the inner conflict that exists in human beings — the inconsistencies between what I want to do, what I ought to do, and what I actually do. Saints will have their failings and even the worst sinners may have their redeeming features under certain circumstances. Substantial characters convey real human complexity and the writer cannot accurately portray them until he knows them. When characterisation is fully in place the writer may let the characters almost write themselves since they know how they are likely to react to a set of events driven by the story. Writers and producers should tell actors as much as they can about the characters — their personality, typical behaviour, and disposition.

Dialogue

'Look out, he's got a gun'. Lines like this, unnecessary in film, television or theatre where the audience can see that he has a gun, are essential in radio as a means of conveying information. The difficulty is that such 'point' lines can so easily sound contrived and false. All speech must be the natural colloquial talk of the character by whom it is uttered. In reproducing a contemporary situation, a writer can do no better than to take his notebook to the market place, restaurant or party and observe what people actually say, and their manner of saying it. Listen carefully to the talk of shoppers, eavesdrop on their conversation in the train. It is the stuff of your reality. And amid the talk, silence can be used to heighten a sense of tension or expectation. Overlapping voices convey anger, passion, excitement or crisis. Not only do radio characters say what they are doing, but people reveal their inner thoughts by helpfully thinking aloud, or saying their words as they write a letter. These are devices for the medium and should be used with subtlety if the result is to feel true to life.

Producers should beware writers who preface a scene with stage directions: 'The scene is set in a lonely castle in the Scottish Highlands. A fire is roaring in the grate. Outside a storm is brewing. The Laird and his visitor enter.'

Such 'picture setting' designed for the reader rather than the listener should be crossed out and the dialogue considered in isolation. If the words themselves create the same scene, the directions are superfluous; if not, the dialogue is faulty:

```
Laird:   (Approaching) Come  in,  come  in.  It  looks  like  a
         storm is on the way.
Visitor:(Approaching) Thank  you.  I'm  afraid  you're  right.
         It  was  starting  to  rain  on  the  last  few  miles  of
         my journey.
Laird:   Well  come  and  warm  yourself  by  the  fire;  we  don't
         get many visitors.
Visitor:You  are  a  bit  off  the  beaten  track,  but  since  I
         was  in  the  Highlands  and've  always  been  fascinated
         by  castles  I  thought  I  would  call  in — I  hope  you
         don't mind.
Laird:   Not at all, I get a bit lonely by myself.
Visitor:(Rubbing  hands)  Ah,  that's  better.  This  is  a  lovely
         room — is this oak panelling as old as it looks?
                              etc. etc.
```

The producer is able to add considerably to such a scene in its casting, in the voices used — for example in the age and accents of the two characters, and whether the mood is jovial or sinister.

In addition to visual information, character and plot, the dialogue must remind us from time to time of who is speaking to whom. Anyone 'present' must either be given a line or be referred to, so that they can be included in the listener's mental picture:

```
Andrew: Look  John,  I  know  I  said  I  wouldn't  mention  it
        but ... well  something's  happened  I  think  you
        should know about.
John:   What is it Andrew? What's happened?
```

The use of names within the dialogue is particularly important at the beginning of the scene.

Characters should also refer to the situation not within the immediate picture so that the listener's imagination is equipped with all the relevant information:

```
Robins: ... And how precisely do you propose to escape? There
        are  guards  right  outside  the  door,  and  more  at  the
        entrance of the block. Even if we got outside, there's
        a  barbed  wire  fence  two  storeys  high — and  it's  all
        patrolled  by  dogs.  I've  heard  them.  I  tell  you  there
        isn't a chance.
Jones:  But  aren't  you  forgetting  something — something
        rather obvious?
```

An obvious point which the writer does not forget is that radio is not only blind, but unless the drama is in stereo, it is half deaf as well. Movement and distance have to be indicated, either in the acoustic or other production technique, or in the dialogue. Here are three examples:

```
(off mic) I think I've found it, come over here.

Look, there they are — down there on the beach. They must
be half a mile away by now.

(softly) I've  often  thought  of  it  like  this — really
close to you.
```

We shall return later to the question of creating the effects of perspective in the studio.

To achieve a flow to the play, consecutive scenes can be made to link one into the other. The dialogue at the end of one scene points forward to the next:

```
Voice 1: Well, I'll see you on Friday — and remember to
         bring the stuff with you.
Voice 2: Don't worry, I'll be there.
Voice 1: Down by the river then, at 8 o'clock — and mind
         you're not late.
```

If this is then followed by the sound of water, we can assume that the action has moved forward to the Friday and that we are down by the river. The actual scene-change is most often through a fade-out of the last line — a line incidentally, like the second half of the one in this last example, words we can afford to miss. There is a moment's pause, and a fade up on the first line of the new scene. Other methods are by direct cutting without fades, or possibly through a music link. The use of a narrator will almost always overcome difficulties of transition so long as the script avoids clichés of the 'meanwhile, back at the ranch' type.

A narrator is particularly useful in explaining a large amount of background information which might be unduly tedious in conversational form or where considerable compressions have to be made, for example in adapting a book as a radio play. In these circumstances the narrator can be used to help preserve the style and flavour of the original, especially in those parts which have a good deal of exposition and description but little action:

```
Narrator: Shortly afterwards, Betty died and John, now
          destitute and friendless, was forced to beg on
          the streets in order to keep himself from starva-
          tion. Then one afternoon, ragged and nearing
          desperation, he was recognised by an old friend.
```

When in doubt, the experienced writer will almost certainly follow the simplest course remembering that the listener will appreciate most what he can readily understand.

Script layout

Following the normal standard of scripts intended for broadcast use, the page should be typed on one side only to minimise handling noise, the paper being of a firm 'non-rustle' type. The lines should be triple spaced to allow room for alterations and actors' notes, and each speech numbered for easy reference. Directions, or details of sound effects and music, should be bracketed, underlined, or in capitals so that they stand out clearly from the dialogue. The reproduction of scripts should be absolutely clear and there should be plenty of copies so that spares are available.

An example of page layout is shown opposite.

1.		(INDOOR ACOUSTIC)
2.	BRADY:	Why isn't Harris here yet? — You people at the Foreign Office seem to think everyone has got time to waste
3.	SALMON:	I don't know, Colonel, it's not like him to be late.
4.	BRADY:	Well it's damned inconsiderate, I've a good mind to ...
5.	FX:	KNOCK AT DOOR
6.	SALMON:	(RELIEVED) That's probably him. (GOING OFF) I'll let him in.
7.	FX:	DOOR OPENS OFF
8.	HARRIS:	(OFF) Hello, John.
9.	SALMON:	(OFF) Thank goodness you've arrived. We've been waiting some time. (APPROACH) Colonel Brady I don't think you've met Nigel Harris. He's our representative ...
10.	BRADY:	(INTERRUPTING) I know perfectly well who he is, what I want to know is where he's been.
11.	HARRIS:	Well, I've been trying to get us out of trouble. It's bad news I'm afraid. The money we had ready for the deal has gone, and Holden has disappeared.
12.	BRADY:	This is preposterous! Are you suggesting he's taken it?
13.	HARRIS:	I'm not suggesting anything, Colonel, but we know that last night he was at Victoria Station, — and bought a ticket for Marseilles.
14.	SALMON:	Marseilles? By train?
15.	HARRIS:	By train. At this moment I should think he, and the money, are half-way across Europe.
16.	FX:	TRAIN WHISTLE APPROACH AND ROAR OF TRAIN PASSING.
17.	FX:	CROSSFADE TO INTERIOR TRAIN RHYTHM CONTINUES UNDERNEATH.
18.	STEWARD:	(APPROACHING) Take your last sitting for lunch please. (CLOSER) Last sitting for lunch. Merci, Madame.

1.	FX:	COMPARTMENT DOOR SLIDES OPEN
2.	STEWARD:	(CLOSE) Last sitting for lunch, Sir. Excusez moi, Monsieur, — will you be wanting lunch? Monsieur? (TO SELF) C'est formidable. Quite a sleeper. (LOUDER) Excuse me Sir, — Allow me to remove the newspaper.
3.	FX:	PAPER RUSTLE
4.	STEWARD:	Will you be ... (GASP) Oh ... Terrible ... Terrible.
5.	FX:	TRAIN NOISE PASSING AND FADES INTO DIS-TANCE.
6.	FX:	PHONE RINGS. RECEIVER PICKED UP. RINGING STOPS.
7.	BRADY:	Hello.
8.	VOICE:	(DISTORT) Is that Colonel Brady?
9.	BRADY:	Yes. Who's that?
10.	VOICE:	(DISTORT) It doesn't matter but I thought you ought to know he's dead.
11.	BRADY:	Who's dead? Who is this?
12.	VOICE:	(DISTORT) Oh you know who's dead all right, — and I've got the money.
13.	BRADY:	You've got what money? Who are you?
14.	VOICE:	You'll know soon enough. I'll be in touch ...
15.	FX:	TELEPHONE CLICK. DIALLING TONE.
16.	BRADY:	Hello, hello ... oh blast it.
17.	FX:	RECEIVER SLAMMED DOWN.
18.	FX:	OFFICE INTERCOM BUZZER.
19.	SECRETARY:	(DISTORT) Yes, Sir?
20.	BRADY:	Joan, I want you to get hold of Salmon and Harris — can you do that?
21.	SECRETARY:	(DISTORT) Yes, Sir — they went back to the Foreign Office.
22.	BRADY:	Well I want them — at once. And get me on tonight's plane, — to Marseilles.
23.	CD:	MUSIC TO END.

The actors

Casting a radio drama, whether it is a one hour play or a short illustration, will nearly always end by being a compromise between who is suitable and who is available. Naturally, the producer will want the best performers but this is not always possible within the constraints of money. It is also difficult to assemble an ideal cast at one place, and possibly several times, for rehearsal and recording, and this to coincide with the availability of studio space. Again, it may be that two excellent players are available, but their voices are too similar to be used in the same piece. So there are several factors which will determine the final cast.

Actors new to radio have to recognise the limitations of the printed page, which is designed to place words in clearly readable lines. It cannot overlay words in the same way that voices can, and do:

```
Voice one: The cost of this project is going to be 3 or 4 mil-
           lion — and that's big money by anyone's reckoning.
Voice two: But that's rubbish, why I could do the job for ...
Voice one: (Interrupting) Don't tell me it's rubbish, anyway
           that's the figure and it's going ahead.
```

Although this is what might appear on the page, voice two is clearly going to react to the cost of the project immediately on hearing the figures — half way through voice one's first line. The script writer may insert at that point (react) or (intake of breath) but generally it is best left to the imagination of the actor. Actors sometimes need to be persuaded to act, and not to become too script-bound. Then voice one interrupts. This does not mean that he waits until voice two has finished his previous line before starting with the "Don't tell me . . ." He starts well before voice two breaks off, say on the word 'could'. The two voices will overlay each other for a few words thereby sounding more natural. Real conversation does this all the time.

On the matter of voice projection, the normal speaking range over a conversational distance will suffice — intimate and confidential, to angry and hysterical. As the apparent distance is increased, so the projection also increases. In the following example, the actor goes over to the door and ends the line with more projection than he was using at the start. The voice gradually rises in pitch throughout the speech.

```
Voice: Well I must go. (DEPARTS) I shan't be long but there are
       several things I must do. (DOOR OPENS, OFF) I'll be back
       as soon as I can. Goodbye. (DOOR SHUTS).
```

In moving to the 'dead' side of the microphone the actor's actual movement may have been no more than a metre. The aural impression given may be a retreat of at least five metres. It is important that such 'moves' are made only during spoken dialogue otherwise the actor will appear to have 'jumped' from a near to a distant position. Of course moving off-mic, which increases the ratio of reflected to direct sound, can only serve to give an impression of distance in an interior scene.

When the setting is in the open air, there is no reflected sound and distance has to be achieved by a combination of the actor's higher
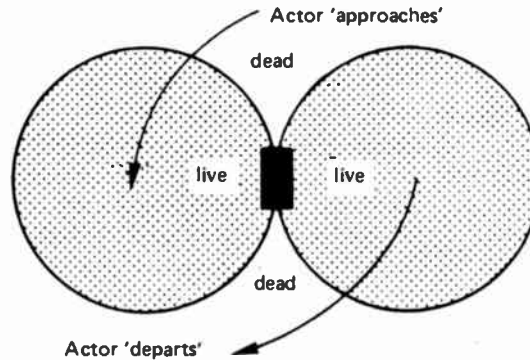
Fig. 19.2. Movement on mic. The shaded circles are the normal areas of pick-up on both sides of a bi-directional microphone. An actor 'approaching' says his lines as he moves from the dead side to the live side, reducing his voice projection as he does so. Effective for indoor scenes.

voice-projection and the small volume derived from a low setting of the microphone channel fader. By this means it is possible to have a character shouting to us from 'over there', having a conversation with another person 'in the foreground' who is shouting back. Such a scene requires considerable manipulation of the microphone fader with no overlay of the voices. A preferred alternative is to have the actors in separate rooms, each with his own microphone and with a headphone feed of the mixed output.

The acoustic

In any discussion of monophonic perspective, distance is a function which separates characters in the sense of being near or far. The producer must always know where the listener is placed relative to the overall picture. Generally, but not necessarily, 'with' the microphone, the listener placed in a busily dynamic scene will need some information which distinguishes his following the action by moving through the scene, from his simply watching it from a static position.

Part of this distinction may be in the use of an acoustic which itself changes. Accompanied by the appropriate sound effects a move out of a reverberant courtroom into a small ante-room, or from the street into a telephone box, can be highly effective. There are four basic acoustics comprising the combinations of the quantity, and duration of the reflected sound:

(1) No reverberation	Outdoor	Created by fully absorbent 'dead' studio
(2) Little reverberation but long reverberation time	Library or large well-furnished room	Bright acoustic or a little reverberation added to normal studio

(3) Much reverberation but short reverberation time	Telephone box, bathroom	Small enclosed space of reflective surfaces — 'boxy' acoustic
(4) Much reverberation and long reverberation time	Cave, 'Royal Palace', concert hall	Artificial echo added to normal studio output

Frequency discrimination applied to the output of the echo device will add the distinctive coloration of a particular acoustic. The characteristic of a normal drama studio with a 'neutral' acoustic would limit the reverberation time to about 0.2 seconds. Associated with this would be a 'bright' area with a reverberation time of, say 0.6 seconds, and a separate cubicle
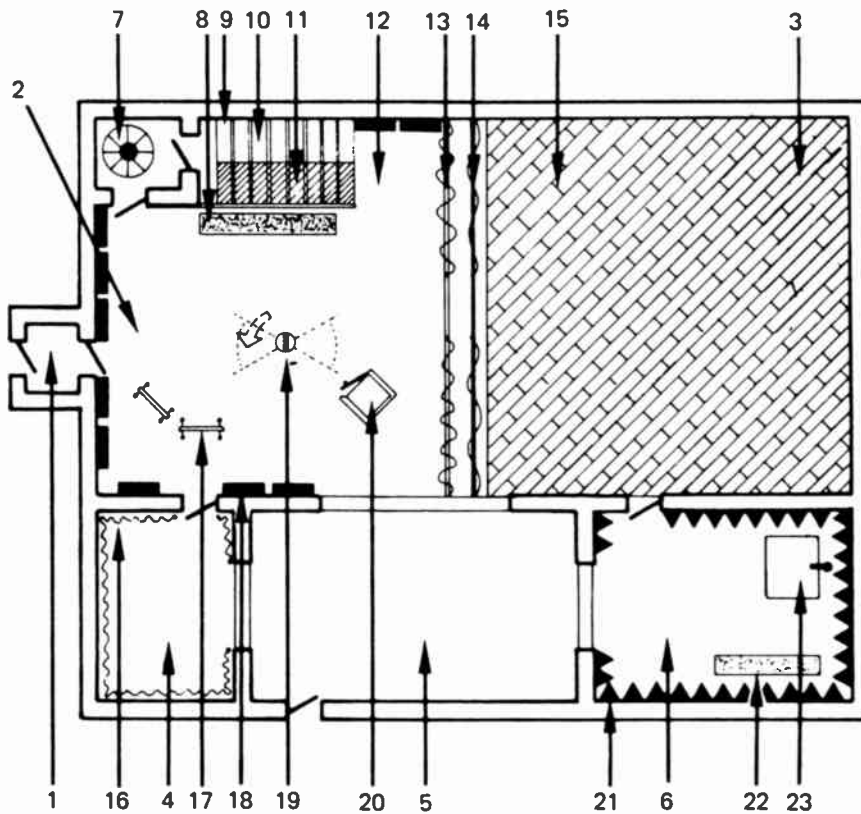
Fig. 19.3. Features of a drama studio. 1. Entrance through sound lobby. 2. Studio 'dead' end. 3. Studio 'live' end. 4. Narrator's studio. 5. Control cubicle with windows to all other areas. 6. Dead room — outdoor acoustics. 7. Spiral staircase — iron. 8. Gravel trough. 9. Sound effects staircase. 10. Cement tread stairs. 11. Wooden tread stairs. 12. Carpet floor. 13. Soft curtain drapes. 14. 'Hard' curtain — canvas or plastic. 15. Wood block floor. 16. Curtains. 17. Movable acoustic screen. 18. Acoustic absorber — wall box. 19. Bi-directional microphone. 20. Sound effects door. 21. Acoustic wedges — highly absorbent surface. 22. Sand or gravel trough. 23. Water tank.

for a narrator. The key factor is flexibility so that by using screens, curtains and carpet, a variety of acoustic environments may be produced.

The use of tie-clip mics for actors avoids any pick-up of studio acoustic and allows considerable freedom of movement. Crossfading between a studio mic and a tie-clip mic with a suitable drop in vocal projection provides a very credible 'think piece' in the middle of dialogue.

Sound effects

When the curtain rises on a theatre stage the scenery is immediately obvious and the audience is given all the contextual information it requires for the play to start. So it is with radio, except that to achieve an unambiguous impact the sounds must be refined and simplified to those few which really carry the message. The equivalent of the theatre's 'backdrop' are those sounds which run throughout a scene — for example rain, conversation at a party, traffic noise or the sounds of battle. These are most likely to be pre-recorded and reproduced from records, compact disc, cart or tape. The 'incidental furniture' and 'props' are those effects which are specially placed to suit the action — for instance dialling a telephone, pouring a drink, closing a door or firing a gun. Such sounds are best made in the studio at the time of the appropriate dialogue, if possible by the actors themselves — for example lighting a cigarette or taking a drink — but by someone else if hands are not free due to their holding a script.

The temptation for a producer new to drama is to use too many effects. While it is true that in the real world the sounds we hear are many and complex, radio drama in this respect purveys not what is real but what is understandable. It is possible to record genuine sounds which divorced from their visual reality convey nothing at all. The sound of a modern car drawing up has very little impact, yet it may be required to carry the dramatic turning point of the play. In the search for clear associations between situation and sound, radio over the years has developed conventions with generally understood meanings. The urgently stopping car virtually demands a screech of tyres, slamming doors and running footsteps. It becomes a little larger than life. Overdone, and it becomes comical.

Some other sounds which have become immediately understood are:

(1) Passage of time — clock ticking
(2) Night time — owl hooting.
(3) On the coast — seagulls and seawash.
(4) On board sailing ship — creaking of ropes.
(5) Early morning — cock crowing.
(6) Out of doors, rural — birdsong.

The convention for normal movement is to do without footsteps. These are only used to underline a specific dramatic point.

Background sounds may or may not be audible to the actors in the studio, depending on the technical facilities available. It is important

however for actors to know what they are up against, and any background sounds should be played over to them to help them visualise the scene and judge their level of projection. This is particularly important if the sounds are noisy — the cockpit of a light aircraft, a fairground or battle. If an actor has to react to a sound reproduced from a record or tape he will require a feed of the output either to his headphones or through a loudspeaker. The normal studio speaker is of course cut when any mic channel is opened, but an additional loudspeaker fed from the grams, CD and tape sources can remain on, unaffected by this muting. This facility is called *foldback*, and has the advantage not only that the cast can hear the effects, even though their own mics are live, but that any sounds reproduced in this way and picked up on the studio microphones will share the same acoustic as the actors' voices. Producers working in drama will soon establish their own methods of manufacturing studio sounds. The following are some which have saved endless time and trouble:

(1) Walking through undergrowth or jungle — a bundle of recording tape rustled in the hands.
(2) Walking through snow — a roll of cotton wool squeezed and twisted in the hands, or two blocks of salt rubbed together.
(3) Horses' hooves — halved coconut shells are still the best from pawing the ground to a full gallop. They take practice though. A bunch of keys will produce the jingle of harness.
(4) Pouring a drink — put a little water into the glass first so that the sound starts immediately the pouring begins.
(5) Opening champagne — any good sound assistant ought to be able to make a convincing 'pop' with their mouth, otherwise blow a cork from a sawn-off bicycle pump. A little water poured on to Alka-Seltzer tablets or fruit salts close on-mic should do the rest.
(6) A building on fire — cellophane from a cigarette packet rustled on-mic plus the breaking of small sticks.
(7) Marching troops — a marching box is simply a cardboard box approximately 20 × 10 × 5 cm, containing some small gravel. Held between the hands and shaken with precision it can execute drill movements to order.
(8) Creaks — rusty bolts, chains or other hardware are worth saving for the appropriate aural occasion. A little resin put on a cloth and pulled tightly along a piece of string fastened to a resonator is worth trying.
(9) In the case of a costume drama some silk or taffeta material rustled near the mic occasionally is a great help in suggesting movement.

The essential characteristic for all electronic or acoustic sound-making devices is that they should be simple, reliable and consistent. And if the precise effect cannot be achieved, it is worth remembering that by recording a sound and playing it back at a different speed, it can be altered in 'size' or made unrelatable to the known world. Hence the fantasy sounds varying from dinosaurs to outer space. Voices too can be made 'unhuman' by the use of a digital effects unit or 'harmoniser'. Unlike the recorded tape method a voice can be made lighter or deeper without affecting its speed of delivery. Time spent exploring the possibilities of digital effects will pay dividends for the drama producer.

In making a plea for authenticity and accuracy, it is worth noting that such attention to detail saves considerable letter-writing to those among the audience who are only too ready to display their knowledge. Someone will know that the firing of the type of shot used in the American War of Independence had an altogether characteristic sound, of course certain planes used in the Australian Flying Doctor services had three engines not four, and whoever heard of an English cuckoo in February?! The producer must either avoid being too explicit, or he must be right.

Music

An ally to the resourceful producer, music can add greatly to the radio play. However if it is over-used or badly chosen, it becomes only an irritating distraction. The producer must decide in which of its various roles music is to be used:

(1) As a 'leitmotif' to create an *overall style*. Opening and closing music plus its use within the play as links between some of the scenes will provide thematic continuity. The extracts are likely to be the same piece of music, or different passages from the same work, throughout.
(2) Music chosen simply to *create mood* and establish the atmosphere of a scene. Whether it is 'haunted house' music or 'a day at the races', music should be chosen that is not so familiar that it arouses in the listener his own preconceived ideas and associations. In this respect it pays the producer to cultivate an awareness of the lesser known works in his library.
(3) Reiterative or relentless music can be used to mark the *passage of time*, thus heightening the sense of passing hours, or seconds. Weariness or monotony is economically reinforced.

In using music to be deliberately evocative of a particular time and place, the producer must be sure of his research. Songs of the First World War, or ballads of Elizabethan England — there is sure to be at least one expert listening ready to point out errors of instrumentation, words or date. To use a piano to set the mood of a time when there was only the harpsichord and virginals is to invite criticism.

The drama producer must not only search the shelves of the music library but should sometimes consider the use of specially written material. This need not be unduly ambitious or costly — a simple recurring folk song, or theme played on a guitar or harmonica can be highly effective. There are considerable advantages in designing the musical style to suit the play, and having the music durations to fit the various introductions and voice-overs.

Production technique

Producers will devise their own methods and different plays may demand an individual approach, as will working with children or amateurs as

opposed to professional actors. However the following is a practical outline of general procedure:

(1) The producer works with the writer, or on the script alone re-writing for the medium, and making alterations to suit the transmission time available.

(2) He casts the play, issues contracts, distributes copies of the script, arranges rehearsal or recording times.

(3) He, or his team, assembles the sound effects, books the studio, arranges for any special technical facilities or acoustic requirements, and chooses the music.

(4) The cast meets, not necessarily in the studio, for a read through. Awkward wordings may be altered to suit individual actors. The producer gives points of direction on the overall structure and shape of the play and the range of emotion required. This is to give everyone a general impression of the piece. Scripts are marked with additional information such as the use of cue lights.

(5) In the studio, scenes are rehearsed on-mic, with detailed production points concerning inflection, pauses, pace, movement, etc. The producer should be careful not to cause resentment by 'over-direction', particularly of professional actors. The producer may by all means say what effect he thinks a particular line should achieve. He can however undermine an actor if he goes as far as telling him precisely how it should be delivered. Sound effects, pre-recorded or live in the studio are added. The producer's main task is to encourage the actors and to listen carefully for any additional help they may need or for any blemish that should be eradicated.

(6) As each scene is polished to its required perfection, a recording 'take' is made. Are the pictures conjured up at the original reading of the script being brought to life? Is the atmosphere, content and technical quality exactly right? Necessary retakes are made and the script marked accordingly.

(7) The tape is edited using the best 'takes', removing fluffs and confirming the final duration.

(8) The programme is placed in the transmission system and the remaining paperwork completed.

There are many variations on this pattern of working. Here are three alternative approaches:

- Do away with the studio. If the play is suitable, then for example the recording can be made out of doors among the back alleys and railway tracks of the city — a *radio verité*?
- There is no need to think only in terms of the conventional play. A highly effective yet simple format is to use a narrator as the main storyteller with only the important action dialogue spoken by other voices. Few but vivid effects complement this radio equivalent of the strip cartoon — excellent as a children's serial.
- Dialogue on its own can be a simple and powerful means of explaining a point — two farmers discussing a new technique for soil improvement — or illustrating a relationship, such as a father and daughter

arguing about what she should wear. Given the right people it doesn't even have to be scripted — give them the basic idea and let them ad-lib it.

A producer finding his way into the drama field is well advised to listen to as many radio plays and serials as possible. He will gather ideas and recognise the value of good words simply spoken.

In realising the printed page into an aural impression, he must not expect that the visual images in his mind at the start will be exactly translated into the end result. Actors are not puppets to be manipulated at will, they too are creative people and will want to make their own individual contribution. The finished play is an amalgam of many skills and talents, it is a 'hand-made', 'one-off' product which hopefully represents a richer experience than was envisaged by any one person at the outset.

Documentary and feature programmes

The terms are often used as if they were interchangeable and there is some confusion as to their precise meaning. But here are exciting and creative areas of radio and because of the huge range which they cover, it is important that the listener knows exactly what is being offered. The basic distinctions of type are to do with the initial selection and treatment of the source material. A documentary programme is wholly fact, based on documentary evidence — written records, attributable sources, contemporary interviews and the like. Its purpose is essentially to inform, to present a story or situation with a total regard for honest, balanced reporting. The feature programme on the other hand need not be wholly true in the factual sense, it may include folk song, poetry or fictional drama to help illustrate its theme. The feature is a very free form where the emphasis is often on portraying rather more indefinable human qualities, atmosphere or mood.

The distinctions are not always clear cut and a contribution to the confusion of terms is the existence of hybrids — the feature documentary, the semi-documentary, the drama documentary and so on.

It is often both necessary and desirable to produce programmes which are not simply factual, but are 'based on fact'. There will certainly be times when through lack of sufficient documentary evidence, a scene in a true story will have to be invented — no actual transcript exists of the conversations that took place during Columbus' voyage to the New World. Yet through his diaries and other contemporary records, enough is known to piece together an acceptable account which is valid in terms of reportage. While some compromise between what is established fact and what is reasonable surmise is understandable in dealing with the long perspective of history, it is important that there is no blurring of the edges in portraying contemporary issues. Fact and fiction are dangerous in combination and their boundaries must be clear to the listener. A programme dealing with a murder trial, for example, must keep to the record; to add fictional scenes is to confuse, perhaps to mislead. Nevertheless it is a perfectly admissible programme idea to interweave serious fact, even a court case, with contrasting fictional material, let us say songs and nursery rhymes; but it must then be called a feature not a documentary. Ultimately what is important is not the subject or its treatment, but that we all understand what is meant by the terms used. It is essential that

the listener knows the purpose of the broadcaster's programme — essentially the difference between what is true and what is not. If the producer sets out to provide a balanced, rounded, truthful account of something or someone — that is a documentary. If he does not feel so bound to the whole truth and his original intent is to give greater reign to the imagination, even though the source material is real — that is a feature.

The documentary

Very often subjects for programmes present themselves as ideas which suddenly become obvious. They are frequently to do with contemporary issues such as race relations, urban development, pollution and the environment, medical research. A programme might explore in detail a single aspect of one of these subjects which broadly attempts to examine how society copes with change. Other types of documentary deal with a single person, activity or event — the discovery of radium, the building of the Concorde aeroplane, the life of a notable figure or the work of a particular factory, theatre group or school.

Essentially these are all to do with people, and while statistical and historical fact is important, the crucial element is the human one — to underline motivation and help the listener understand why certain decisions were made, and what makes people 'tick'.

The main advantage of the documentary approach over that of the straightforward talk is that the subject is made more interesting and brought alive by involving more people, more voices and a greater range of treatment. It should entertain while it informs, and as it illuminates provoke further thought and concern.

Planning

Following on the initial idea is the question of how long the programme should be. It may be that the brief is to produce for a 30 minute or one hour slot, in which case the problem is one of selection, of finding the right amount of material. Given a subject that is too large for the time available, a producer has the choice either of dealing with the whole area fairly superficially, or reducing the topic range and taking a particular aspect in greater depth. It is, for example, the difference between a 20 minute programme for schools on the life of Chopin, and the same duration or more devoted to the events leading up to Chopin's writing of the 'Revolutionary Study' directed to a serious music audience.

Where no overall duration is specified, simply an intent to cover a given subject, the discipline is to contain the material within a stated aim without letting it become diffuse, spreading into other areas. For this reason it is an excellent practice for the producer to write a programme brief in answer to the questions — 'What am I trying to achieve?' 'What do I want to leave with the listener?' Later on, when deciding whether or not a particular item should be included, a decision is easier in the light of the producer's own statement of intent. This is not to say that programmes cannot change their

shape as the production proceeds, but a positive aim helps to prevent this happening without the producer's knowledge and consent.

At this stage the producer is probably working on his own, gradually coming to terms with the subject, exploring it at first hand. During this initial research he makes notes, in particular listing those topics within the main subject which must be included. This is followed by decisions on technique — how each topic is to be dealt with. From this emerges the running order in embryo. Very often the title comes much later — perhaps from a significant remark made within the programme. There is no formally recognised way of organising this programme planning; each producer has his own method. By committing thoughts to paper and seeing their relationship one to another — where the emphasis should be and what is redundant — the producer is more likely to finish up with a tightly constructed, balanced programme. Here is an example of the first planning notes for a local radio programme. This radio station serves a coastal region where the trawler fleet has been seriously affected by the loss of fishing rights in international waters:

Working title:	'The Return of the Trawlermen'.
Aim:	To provide the listener with an understanding of the impact which changes in the deep sea fishing industry over the last ten years have had on the people who work in it.
Duration:	30 minutes.
Information:	Annual figures for shipping tonnage, men employed, fish landed, turnover and profit, investment, etc.
Content:	Historical account of development in the 10 years:
	— technological change, searching, catching, freezing methods.
	— economic change, larger but fewer ships — implication for owners in the increase in capital cost.
	— social change resulting from fewer jobs, higher paid work, longer voyages, and better conditions on board.
	— political change, new regulations relating to international waters, size of nets, off-shore limits.
Key questions:	What has happened to the men and the ships that used to work here in large numbers?
	What has happened to those areas of the city where previously whole streets were dependent on fishing as a livelihood? Family life, local shopkeepers etc., loss of comradeship?
	How significant were the political factors affecting fishing rights in distant waters or was the industry in any case undergoing more fundamental change?
	Will the trends continue into the future?
Interview sources:	Trawler Federation.
	Docks and Harbour Board? Shipbuilder?
	Trawlermen's Union.
	Fleet owner.

	Skippers — past and present.
	White Fish Authority.
	Representative of fish processing industry — oils — frozen food.
	Government — ministry official; members of parliament.
	Wives of seamen, etc.
Reference sources:	Newspaper cuttings.
	Library — shipping section.
	Government White Paper.
	Trawler company reports.
	Magazine — Fishing News International.
	Fred Jones (another producer who did a programme on the docks some time ago).
Actuality:	Bringing in the catch, nets gear running, ships bridge at sea, engine noise, radio communications, shoal radar, etc.
	Unloading — dockside noises.
	Auction.

By setting out the various factors which have to be included in the programme, it is possible to assess more easily the weight and duration which should be given to each, and whether there are enough ideas to sustain the listener's interest. It probably becomes apparent that there is a lot to get in. It would be possible to do a programme which concentrated solely on the matter of international fishing rights, but in this case the brief was broader and the temptation to dwell on the latest or most contentious issue, such as safety at sea, must be resisted — that's another programme.

There is one final point on planning. A producer's statement of intent should remain fixed, but how he fulfils that aim may change. He plans initially to reach his goals in a certain way; however if in the course of the production he unearths an unforeseen but vital fact, he must alter his plans to include it. The programme material itself will influence decisions on content.

Research

Having written the basic planning notes, the producer must then make the programme within his allocated resources. He must decide whether he will call on a specialist writer or will write his own script. Depending on this will rest the matter of further research — perhaps it is possible to obtain the services of a research assistant or reference library. The producer who is working to a well defined brief knows what he wants and in asking the right questions will save both time and money. The principle with documentary work is always as far as possible to go back to sources, the people involved, eye witnesses, the original documents and so on.

Structure

The main structural decision is whether or not to use a narrator. A linking, explanatory narrative is obviously useful in driving the programme forward in a logical, informative way. This can provide most of the statistical fact and the context of the views expressed, and also the names of various speakers. A narrator can help a programme to cover a lot of ground in a short space of time but this is part of the danger; and may give the overall impression of being too efficient, too 'clipped' or 'cold'. The narrator should *link* and *not interrupt*, and there will almost certainly not be any need to use a narrative voice between every contribution. There are styles of documentary programme which make no use at all of links but each item flows naturally from one to the next, pointing forward in an intelligible juxtaposition. This is not easy to do but can often be more atmospheric.

Collecting the material

Much of the material will be gathered in the form of location interviews. If it has been decided that there will be no narrator, it is important to ensure that the interviewees introduce themselves — 'speaking as a trawler owner . . .' or 'I've been in this business now for thirty years . . .' They may also have to be asked to bring out certain statistical information. This may be deleted in the editing but it is wise to have it in the source material if there is no obvious way of adding it in a linking script.

It must be decided whether the interviewer's voice is to remain as part of the interviews. It may be feasible for all the interviewing to be done by one person, who is also possibly the producer, and for the programme to be presented in the form of a personal investigative report. Pursuing this line further, it is possible for the producer to hire a well known personality to make a programme as a personal statement — still a documentary, but seen from a particular viewpoint that is known and understood. Where the same interviewer is used throughout, he becomes the narrator and no other linking voice is needed. Where a straightforward narrator is used, the interviewer's questions are removed and the replies made to serve as statements, the linking script being careful to preserve them in their original context. What can sound untidy and confusing is where in addition to a narrator, the occasional interviewer's voice appears to put a particular question. A programme should be consistent to its own structure. But form and style are infinitely variable and it is important to explore new ways of making programmes — clarity is the key.

Impression and truth

The purpose of using actuality sounds is to help create the appropriate atmosphere. More than this, for those listeners who are familiar with the subject, recognition of authentic backgrounds and specific noises increases the programme's authority. It may be possible to add atmosphere by using material from sound effects discs. These should be used with great care since a

sound only has to be identified as 'not the genuine article' for the programme's whole credibility to suffer. The professional broadcaster knows that many simulated sounds or specially recorded effects create a more accurate impression than the real thing. The producer concerned not simply with truth but with credibility may use non-authentic sounds only if they give an authentic impression.

The same principle applies to the rather more difficult question of fabrication. To what extent may the producer create a 'happening' for the purpose of the programme? Of course he has to 'stage manage' some of the action. If he wants the sound of ship's sirens, the buzzing of a swarm of angry bees, or children in a classroom reciting poetry, these things may have to be made to happen while his recorder is running. Insofar as these sounds are typical of the actual sounds, they are real. But to fabricate the noise of an actual event, for example a violent demonstration with stones thrown, glass breaking, perhaps even shots being fired; this could too easily mislead the listener unless it is clearly referred to as a simulation. Following the work of broadcasters in war time it is probably true that unless there are clear indications to the contrary, the listener has a right to expect that what he hears in a documentary programme is genuine material to be taken at face value. It is not the documentary producer's job to deceive, or to confuse, for the sake of effect.

Even the reconstruction of a conversation that actually happened, using the same individuals, can give a false impression of the original event. Like the 'rehearsed interview', it simply does not feel right. Similarly it is possible to alter a completely real conversation by the switching on of a tape machine — a house builder giving a quotation for a prospective purchaser is unlikely to be totally natural with a 'live' microphone present!

Faced with the possibility that reality will elude him, both in an original recording or by a later reconstruction, the documentary producer may be tempted to employ secretive methods to obtain his material.

An example would be to use a concealed tape machine to record a conversation with an 'underground' bookdealer for a programme on pornography. This is a difficult area which brings the broadcaster into conflict with the quite reasonable right of every individual to know when he is making a statement for broadcasting. Certainly the BBC is opposed to the use of surreptitious production techniques as being an undue invasion of personal liberty. If such a method is used, it is as a result of a decision taken at a senior level.

The implications for an organisation which broadcasts material which depended on the subliminal or secret, are such that this is a question which the producer, staff or freelance, should not take upon himself. He must obtain clearance from his programme boss.

Of course if the subject is historical, it is an understood convention that scenes are reconstructed and actors used. Practice in other countries differs but in Britain a documentary on even a recent criminal trial must of necessity reconstruct the court proceedings from the transcripts since the event itself cannot be recorded. No explanation is necessary other than a qualification of the authenticity of the dialogue and action. What is crucial is that the listener's understanding of what he hears is not influenced by an undisclosed motive on the part of the broadcaster.

Music

The current practice is to make little use of music in documentary programmes, perhaps through a concern that it can too easily generate an atmosphere, which should more properly be created by real life voices and situations. However, producers will quickly recognise those subjects which lend themselves to special treatment. Not simply programmes which deal with orchestras or pop groups, but where specific music can enhance the accuracy of the impression — as background to youth club material, or to accompany reminiscence of the depressed '30s. A line from a popular song will sometimes provide a suitably perceptive comment, and appropriate music can certainly assist the creation of the correct historical perspective.

Compilation

Having planned, researched, and structured the programme, written the basic script and collected his material the producer must assemble it so as to meet his original brief within the time allotted. First, a good opening. Two suggestions which could apply to the earlier example of the programme on the fishing industry are illustrated by the following script of page one:

Example one

1. Sound effects:	Rattle of anchor chain.
	Splash as anchor enters water.
2. Narrator:	The motor vessel 'Polar Star' drops anchor for the last time. A deep sea trawler for the last twenty-four years she now faces an uncertain future.
	Outclassed by a new generation of freezer ships and unable to adapt to the vastly different conditions, she and scores of vessels like her are now tied up — awaiting either conversion, or the scrap yard.
	In this programme we look at the causes of change in the industry and talk to some of the men who make their living from the sea. Or, who like their ships, feel that they too have come to the end of their working life, etc.

Example two

1. Skipper Matthews:	I've been a trawler skipper for eighteen years — been at sea in one way or another since I was a lad. Never thought I'd see this. Rows of vessels tied up like this, just rusting away — nothing to do. We used to be so busy here. I never thought I'd see it.
2. Narrator:	The skipper of the Grimsby 'Polar Star'. Why is it that in the last few years the fishing fleet has been so drastically reduced? How have men like skipper Matthews adapted to the new lives forced on them? And what does the future look like for those who are left? In this programme we try to find some of the answers ... etc.

The start of the programme can gain attention by a strong piece of sound actuality, or by a controversial or personal statement carefully selected from material that is to be heard within the programme. It opens 'cold' without music or formal introduction preceded only by a time check and station identification. An opening narration can outline a situation in broad factual terms, or it can ask questions to which the listener will want the answers. The object is to create interest, even suspense, and involve the listener in the programme at the earliest possible time.

The remainder of the material may consist of interviews, narrators' links, actuality, vox pop, discussion and music. Additional voices may be used to read official documents, newspaper cuttings or personal letters. It is better if possible to arrive at a fairly homogeneous use of a particular technique, not to have all the interviews together, and to break up a long voice piece or statement for use in separate parts. The most easily understood progression is often the chronological one, but it may be desirable to stop at a particular point in order to counter-balance one view with its opposite. And during all this time the final script is being written around the material as it comes in — cutting a wordy interview to make the point more economically in the narration, leaving just enough unsaid to give the actuality material the maximum impact, dropping an idea altogether in favour of a better one. Always keeping one eye on the original brief.

Programme sequence

There are few rules when it comes to deciding the programme sequence. What matters is that the end result makes sense — not simply to the producer, who is thoroughly immersed in the subject and knows every nuance of what he left out as well as what he put in, but to the listener who is hearing it all for the first time. The most consistent fault with documentaries is not with their content but in their structure. Examples of such problems are insufficient 'signposting', the re-use of a voice heard sometime earlier without repeating the identification, or a change in the convention regarding the narrator or interviewer. For the producer who is close to his material it is easy to overlook a simple matter which may present a severe obstacle to the listener. The programme-maker must always be able to stand back and take an objectively detached view of his work as its shape emerges.

The ending

To end, there are limitless alternatives. Here are some suggestions:

(1) To allow the narrator to sum up — useful in some types of schools programme or where the material is so complex or the argument so interwoven that some form of clarifying resumé is desirable.
(2) To repeat some of the key statements using the voices of the people who made them.
(3) To repeat a single phrase which appears to encapsulate the situation.
(4) To speculate on the future with further questions.

(5) To end with the same voice and actuality sounds as those used at the opening.

(6) To do nothing, leaving it to the listener to form his own assessment of the subject. This is often a wise course to adopt if moral judgements are involved.

Contributors

The producer has a responsibility to those whom he has asked to take part. It is first to tell them as much as possible of what the programme is about. He provides them with the overall context in which their contribution is to be used. Secondly he tells them, prior to transmission, if their contribution has had to be severely edited, or omitted altogether. Thirdly, whenever possible he lets his contributors know in advance the day and time of transmission. These are simple courtesies and the reason for them is obvious enough. Whether they receive a fee or not, contributors to documentary programmes generally take the process extremely seriously often researching additional material to make sure their facts are right. They frequently put their professional or personal reputation at risk in expressing a view or making a prediction. The producer must keep faith with them in keeping them up-to-date as to how they will appear in the final result.

What the producer cannot do is to make the programme conditional upon their satisfaction with the end product. He cannot allow them access to the edited tapes in order to have them approved for transmission. Not only would he seldom have a programme because contributors would not agree, but he would be denying his editorial responsibility. The programme goes out under his name and that of the broadcasting organisation. That, the listener understands, is where praise and blame attaches and editorial responsibility is not to be passed off or avoided through undisclosed pressures or agreements with anybody else.

The feature

Whereas the documentary must distinguish carefully between fact and fiction and have a structure which separates fact from opinion, the feature programme does not have the same formal constraints. Here all possible radio forms meet, poetry, music, voices, sounds — the weird and the wonderful. They combine in an attempt to inform, to move, to entertain or to inspire the listener. The ingredients may be interview or vox pop, drama or discussion and the sum total can be fact or fantasy. A former Head of BBC Features Department, Laurence Gilliam, described the feature programme as 'a combination of the authenticity of the talk with the dramatic force of a play, but unlike the play, whose business is to create dramatic illusion for its own sake, the business of the feature is to convince the listener of the truth of what it is saying, even though it is saying it in dramatic form.'

It is in this very free and highly creative form that some of the most memorable radio has been made. The possible subject material ranges more widely than the documentary since it embraces even the abstract. A

programme on the development of language, a celebration of St. Valentine's day, the characters of Dickens. Even when all the source material is authentic and factually correct, the strength of the feature lies more in its impact on the imagination than in its intellectual truth. Intercut interviews with people who served in the Colonial Service in India mixed with the appropriate sounds can paint a vivid picture of life as it was under the British Raj — not the whole truth, not a carefully rounded and balanced documentary report, it is too wide and complicated a matter to do that in so short a time, but a version of the truth, an impression. The same is true of a programme dealing with a modern hospital, the countryside in summer, the life of Byron, or the wartime exploits of a bomber squadron. The feature deals not so much with issues but with events, and at its centre is the ancient art of telling a story.

The production techniques and sequence are the same as for a documentary — statement of intent, planning, research, script, collection of material, assembly, final editing. In a documentary the emphasis is on the collection of the factual material. Here, the work centres on the writing of the script — a strong story line, clear visual images, the unfolding of a sequence of events with the skill of the dramatist, the handling of known facts but still with a feeling of suspense. Some of the best programmes have come from the producer/writer who can hear the end result begin to come together even as he does his research. It is only through his immersion in the subject that he is qualified to present it to the rest of us. Once again, because of the multiplicity of treatment possible and the indistinct definitions we use to describe them, an explanatory subtitle is often desirable.

'A personal account of . . .'
'An examination of . . .'
'The story of . . .'
'Some aspects of . . .'
'A composition for radio on . . .'

Thus the purpose of the finished work is less likely to be misconstrued. For the final word on the documentary and feature area of programming, Laurence Gilliam again:

'It can take the enquiring mind, the alert ear, the selective eye, and the broadcasting microphone into every corner of the contemporary world, or into the deepest recess of experience. Its task, and its destiny is to mirror the true inwardness of its subject, to explore the boundaries of radio and television, and to perfect techniques for the use of the creative artist in broadcasting.'

The work of the producer

So what does the producer actually do?

Ideas

First and foremost he or she has ideas — ideas for programmes, or items, people to interview, pieces of music or subjects for discussion — new ways of treating old ideas, or creating a fresh approach to the use of radio. New ideas are not simply for the sake of being different, they stimulate interest and fresh thought, so long as they are relevant. But ideas are not the product of routine, they need fresh inputs to the mind. The producer therefore must not stay simply within the confines of his world of broadcasting, but must involve himself physically and mentally in the community he is attempting to serve. It is all too easy for 'media men' to stay in their ivory tower and to form an elite not quite in touch with the world of the listener. Such an attitude is one of a broadcasting service in decline. Ideas for programmes must be rooted firmly in the needs and language of the audience they serve; the producer's job is to assess, reflect and to anticipate those needs through a close contact with his potential listeners. If he is far from them he must read their newspapers, talk to the returning traveller, study his mail most carefully, and visit their country as and when he can. The producer will carry a small notebook to jot down the fleeting thought or snatch of conversation overheard. And if he cannot think of new ideas himself, he must act as a catalyst for others, stimulating, and being receptive to their thoughts and at least recognise an idea when he sees one. Only then may he retreat to the quiet of his office so that he can think.

There is however a great deal of difference between a new idea and a good idea and any programme suggestion has to be thought through on a number of criteria. An idea needs distilling in order to arrive at a workable form. It has to have a clarity of aim so that all those involved know what they are trying to achieve. It has to be seen as relevant to its target audience, and it must be practicable in terms of resources. Is there the talent available to support the idea? Is it going to be too expensive in

people's time? Does it need additional equipment? What will it cost? Is there sufficient time to plan it properly? Any new programme idea has to be thought through in relation to the four basic resources — people, money, technical equipment and time. It may be depressing to have to modify a really good idea in order to make it work with the resources available, but one of the producer's most important tasks is to reconcile the desirable with the possible.

Persuasion

Given the initial programme idea in a practical format, the producer may have to persuade his boss, the head of department, programme controller or station manager, that the proposal is the best thing that could happen to the broadcast output. Further, not only will the programme not fail, but it will enhance the manager's reputation, as well as provide a memorable programme. While the producer will see a project as intrinsically worthwhile or personally creative, the manager of the service may be much more concerned with competitive ratings. His or her first question is likely to be: 'What will it do for the audience?' There are two possible answers: 'satisfy it' or 'increase it'. A good programme may do both. In allocating a transmission slot, the time of day selected and the material preceding it can be crucial to the success of the programme. It is no good putting out a programme for children at a time when children are not available, nor is it helpful to broadcast an in-depth programme at a time when the home environment is busy and the necessary level of concentration is unlikely to be sustained. This is where a knowledge of the target audience is essential. Farmers, industrial workers, housewives, teenagers, doctors will all have preferred listening times which will vary according to local circumstances.

The fairly superficial news/information and 'current affairs plus music' type of continuous programme, where all the items are kept short, may be suitable for the general audience at times when other things are happening — such as meal times or at work. But the timing of the more demanding documentary, drama or discussion programme can be critical and will depend on individual circumstances. Factors to be considered when assessing audience availability may include weekday/weekend work and leisure patterns, the potential car listenership which can represent a significant 'captive' audience, television viewing habits, FM/MW usage, and so on. The producer is involved in marketing his product and normal consumer principles apply whether or not his radio service is commercially financed.

Resource planning

Having agreed on a time slot for the broadcast, the producer must ensure there is reasonable time available for its preparation. Is it to be next week or in six months' time? No producer will say that he has sufficient time for production work but there is much to commend his working within definite deadlines for such pressure can lend creative impetus to the programme.

The programme idea is now accepted and the transmission date and time allocated. At this stage the producer draws up a detailed budget and obtains authorisation for any additional resources which he may need — money for research effort, scriptwriting, contributors or a music group. Fees may have to be negotiated. He will check the availability of appropriate studio facilities and make arrangements for any necessary engineering or other staff support. He must also obtain the clearance of any copyright work which he wishes to use. Conditions for the broadcasting of material in which usage rights are owned by someone outside the broadcasting service vary widely. In the case of literary copyright, books, poems, articles, etc., the publisher will normally be the point of reference but if the work is not published, the original author (or if dead his estate) should be consulted. Under British copyright law such rights of ownership exist for a period of 50 years from the date of publication or from the death of the author, whichever is the later. The rules vary according to the law of the country in which the broadcast is to be made and in cases of doubt it is well worth taking specialist legal advice — discussing copyright fees after the broadcast is, to say the least, a weak negotiating position.

Preparation of material

Programme requirements may be very simple and the producer able to fulfil them on his own — some interview material, music selected from the library, and his own crisply written and well presented links may be all that is required. Good ideas are often simple in their translation into radio and can be easily ruined by 'over-production'. On the other hand it may be necessary to involve a lot more people, such as a writer, 'voices', actors, specialist interviewer or commentator. The interpretation of the original idea may call for specially written music or the compilation of sound effects, electronic or actuality. Again, it is easy to get carried away by an enthusiasm for technique, which is why the original brief is such an important part of the process. It should serve as a reference point throughout the production stages.

After selecting his contributors, agreeing fees and persuading them to share his objectives, the producer's task is basically to stay in close touch with them. Remember also, that the producer must always be on the look out for new voices and fresh talent. He then revises draft scripts and clarifies individual aims and concepts so that when everybody comes together in the studio they all know what they are doing and can work together to a common goal. He must apply himself to this with a great sense of timing so that everything integrates at the same moment — the broadcast or recording. Above all the producer must give encouragement. The making of programmes has to be both creative and businesslike. There is a product to be made, restrictions on resources and constraints of time to be observed. But it also calls on people to behave uniquely, to write something they have never written before, to give a new public performance, to play music in a personal way. The producer is asking them to give something of themselves. Contributors, artists and performers of all kinds generally give their best in an atmosphere of encouragement, not

uncritical, not complacent, but with a recognition that they are involved in the process of creative giving. To an extent it is self-revealing, and this leaves the artist with a feeling of vulnerability which needs to be reassured by a sense of succeeding in his attempted communication. The producer's role is to provide this feedback in whatever form it is required. He has therefore to be watchful and perceptive of his contributors, whether they are professional or amateur.

During this time while material is being gathered and ordered there may be a number of permissions to seek. Broadcasters have no rights over and above those of any other citizen and to interview someone or to make recordings in a home, hospital, school, factory or other non-public place requires the approval of appropriate individuals. In the great majority of cases it is not withheld, and indeed it is most often only an informal verbal clearance that is required. It does not do however to record on-site without the knowledge or consent of the legitimate owner or custodian of the property. But neither is it acceptable to be given permission subject to certain conditions, for example to undertake to play back the material recorded and not to broadcast any of it without the further permission of the person concerned. In response to his request to record, the producer must accept only a 'yes' or a 'no' and not be tempted to accept conditional answers. The listening public has the right to believe that the programme they hear is what the producer whose name attaches to it wants them to hear, and is not the result of some secret deal imposed on him by an outside party. Accountability for the programme rests with the producer: it can seldom be shifted elsewhere.

So the programme takes shape — promising ideas developed, poor material discarded, items and thoughts explained, put into the listener's context, juxtaposed to give variety, impact, chronology or other meaningful structure. In its design the producer must remember to engage the listener's attention at the start of the programme and continue to do so throughout. Now comes the time for it to be broadcast or recorded.

The studio session

Here again the producer must combine his talents for shrewd business with his yearning for artistic creativity. He has limited resources, particularly of time, and he has people wanting to give of their best, some of whom may be in unfamiliar surroundings, possibly tense, almost certainly nervous. So, arriving in good time he must set them at their ease and create the appropriate atmosphere. There is no single 'right' way of doing this since people and programmes are all different — the atmosphere in a news studio needs to be different from that of a drama production. A music recording session will be different again from a talk or group discussion. It may be a case of providing coffee all round or even a *small* quantity of something stronger. Any lavish hospitality of this kind is generally much better left until after the programme. But there are two points which a producer must observe. Firstly to make any necessary introductions so that people know who everyone else is and what they are doing, including any technical staff. The second task is to run over the proposed sequence of

events so that individual contributors know their own place in the timescale. These two practices help to reassure and provide some security for the anxious. There is nothing worse for a contributor than his standing around wondering what is going on or even whether he has come to the right place.

The producer has brought everything needed for the programme: pre-recorded inserts correctly labelled and timed with optional out cues; disc inserts timed; plenty of copies of the script; coloured pens for making changes; stopwatch, and so on. Everyone in the studio should have a script or running order, and know what is required of them. They should know of any breaks in the session and be sufficiently acquainted with the building as to be able to find their own way to the source of coffee or to the lavatory. There should be enough chairs.

Rehearsal, recording or transmission can begin.

Whatever the attitude and approach of the producer, it will find its way into the end product. To get the job done, there has to be a certain studio discipline. 'That's not quite right yet, let's take it again from the beginning' — this is the signal for a new and better concerted effort. 'Everyone check the running order' — means *everyone*. 'Start again in twenty minutes' cannot mean people wandering back in half an hour. The producer needs to control, to drive the process forward, to maintain the highest possible quality with the time and talent at his disposal. It is generally a compromise. Too strict a control can be stifling to individual creativity, anxiety increases, the studio atmosphere becomes formal and inflexible. On the other hand, lack of control can mean a drifting timescale, an uncertainty as to what is going on, and a lowering of morale. The appropriate balance is developed with experience, but the following points apply generally when managing a studio full of people:

(1) Use general talkback for announcements to studio participants sparingly. Such use should be brief and should be overall praise or straightforward administration. Never use talkback from control cubicle into the studio for individual criticism.
(2) Listen to suggestions from contributors for alterations but be positive in making up your mind as to what will be done.
(3) Provide plenty of individual feedback to contributors.
(4) Keep in the mind the needs of the technical, operational or other broadcasting staff — they also want to feel that they are contributing their skills to the programme.
(5) Watch the clock, plan ahead for breaks, recording or transmission deadlines. Avoid a last minute rush.
(6) Mark the script as a recording proceeds for any retakes needed or editing required.
(7) If rehearsing for a live programme, work out and write down any critical timings for particular items. The 'must be finished by' times are most critical.
(8) If the programme is live and is underrunning or overrunning — and you can do little about it, for example a concert — tell the person who needs to know as far in advance as possible and agree what is to happen.
(9) Be encouraging. Be communicative. Keep calm. Keep control.

In rehearsing a straight talk, it may be necessary for the producer to sit in the studio opposite the speaker in order to persuade him that he is actually talking to someone. The effect of knowing that he has an intent listener is likely to make his delivery much more natural. Moreover, any verbal pedantry or obscure construction in the script is the signal for the producer to ask for clarification. Since it is given in conversational form, this can then become the basis of the suggested re-write. Almost always, construct-ive suggestions for simplification, professionally given, are gratefully accepted, often with relief. Producers should remember, however, that their role is not to create in their contributors imitations of themselves. In making suggestions for script changes, or how an actor might tackle a certain line, the producer must be visualising not how he himself would do it but how that particular performer can be most effective.

In the presence of a live mic, or through a glass window, the producer's non-verbal language is characterised by the following most universal hand signals:

(1) The cue for someone to start. The hand is brought from the raised position to point directly at the person to speak. This is also used for handovers from one broadcaster to another.
(2) To keep an item going, e.g. to lengthen an interview. The hands are slowly moved apart as if stretching something between them.
(3) To start winding up. The index finger describes slow vertical circles in the air, getting faster as the need to stop becomes more urgent.
(4) To come to an immediate end, to cut. The hand is passed swiftly across the throat — often with an anguished facial expression.

So much for the producer's responsibility to the other people involved in making the programme but of course his prime responsibility is towards the listener. Is the programme providing a clear picture of what it is intending to portray. Are the facts correct and in the right order? Is it legally all right? Is it of good technical quality? Is it interesting? Most of these questions are self-evident and so long as they are borne in mind will answer themselves as the programme proceeds. Some questions however may require a good deal of searching, for example — is it in good taste?

Taste

Taste: The disposition or execution of a work of art, choice of language or conduct seen in the light of the faculty of discerning and enjoying beauty or other excellence.

(Concise Oxford Dictionary)

Beauty and excellence are in the eye of the beholder but where there are common standards of acceptability, the producer must be fully aware of them so that his programmes may be directed within them. He must know the generally accepted social tenor of his time and the cultural flavour of his place if he is to succeed with the general audience and avoid giving unwitting offence. He may decide that his programme is only directed to the bawdy revellers in the marketplace with little thought for those who

would be shocked at such goings on. He may design his programme simply for a cultural or intellectual elite whose acceptable standards are 'more advanced' than those of more simple folk. So be it, but either way the radio casting of his programme is by definition broad rather than narrow; others will hear and their reaction too must be calculated as part of the overall response. In questions of content, material will be designed for a specific target audience but the matter of acceptable taste is a much broader issue which the radio producer must sense accurately. In stepping outside it, he takes a considerable social risk. In deciding on a style of language, or the inclusion of a particular joke which raises the question of good or bad taste, there is one simple rule: would I say this to someone I did not know very well in a face to face situation? If so, it is fine for broadcasting. If not, the producer must ask himself whether he is using the microphone as a mask to hide behind. Simply because the studio appears to be isolated from contact with the audience it is sometimes tempting to be daring in one's assumed relationship with the individual listener. The seeming separation is not a cause for bravado but a reason for sensitivity. The matter of taste in broadcasting so often resolves itself in a recognition of the true nature of the medium.

Ending the session

After the recording and while the contributors are still present, it is often possible to put together some additional material for on-air trailing and promotional use. A specially constructed 30 second piece will later pay dividends in the attention which it can attract.

The producer has a responsibility to his professional colleagues who use the same technical facilities. This finds expression in a number of ways:

(1) *Studio cleanliness:* the smaller the radio station the more it operates on a 'leave the place as you would wish to find it' basis. He probably will not be required to do the clearing up in detail but he should leave it in its 'technically normal' and usable state.

(2) *Fault reporting system:* every studio user must contribute to the engineering maintenance by reporting any equipment faults which occur. It is extremely annoying for a producer to be seriously hampered by a studio 'bug' only to find that someone else had the same trouble a few days previously but did nothing about it.

(3) *Return of borrowed equipment:* a radio centre is a communal activity, its facilities are shared. An additional tape recorder or special microphone taken from one place to another for a specific programme should be returned afterwards. It may not be the producer who actually does this but it is likely to be his responsibility to ensure that some other user is not deprived.

If the programme was 'live', the contributors have been thanked and the occasion suitably rounded off. This may mean the dispensing of some 'hospitality' or simply a discussion of 'how it went'. It is generally unhelpful to be too analytical at this stage: most people know anyway whether as a programme it was any good.

Post-production

If the programme was recorded, the producer has a tape, or tapes, which may require editing. He should have a running order or script marked in detail with the edits he knows he wants but there may be additional cuts to be made in the light of the overall timing. A further editing session is booked at which he listens to all the material and makes the final judgement on what is to be included. There may still be time here for second thoughts. Should the music be re-mixed? Does the sound need to be enhanced in any way — by adding echo or special effects treatment? This is probably the last opportunity to hear the programme in its final form to check that what the listener hears is what the producer intends.

Programme administration

The finished tape together with the necessary paperwork is then deposited within 'the approved system' so that the programme finds its way satisfactorily on to the air. Often, a producer while excellent as a creative impresario, artistic director or catalyst in the community may have a total blindspot when it comes to simple programme administration. He may be fortunate enough to have a secretary to look after much of this for him, nevertheless it is his responsibility to see that such things are done. The following is a summary of the likely tasks:

(1) The completion of a recording or editing report and other details such as library numbers which will enable the tape to get on the air in accordance with the system laid down.
(2) The writing of introductory on-air announcements, cues and other presentation material detailing the transmission context of the programme.
(3) The initiation of payment to contributors, and letters of thanks giving the transmission details if these were not known at the time of the recording.
(4) The supply of programme details covering the use of music, commercial records or other copyright material. Depending on local circumstances these items will need to be reported to the various copyright societies so that the original performers and copyright holders can receive their proper payment.
(5) The issue of a publicity handout, press release, or programme billing for use by newspapers, or programme journal published by the broadcasting organisation. The placing of on-air trails or promos drawing attention to his programme.
(6) The answering of correspondence generated by the broadcast. While not necessarily representative of listener reaction as a whole, letters form an important part of a producer's public accountability. Apart from the PR value to the particular radio service such enquiries and expressions of praise or criticism constitute a consumer view which should not be treated lightly.

Technician, editor, administrator and manager

In summary, the producer's task is in four parts: the technical and operational, the editorial, the administrative, and the managerial. The technical part is to do with the proper use of the tools of his trade, knowing when and how to use programme-making equipment. The editorial function is about ideas and decisions. It is to do with making judgements about what is and is not appropriate for a particular programme. It is about backing hunches and taking risks, about choosing and commissioning material. The administrative part is procedural (following agreed systems of paperwork): contracts, running orders and scripts, expenses and payments, overtime, leave applications, studio bookings, copyright returns, logging transmissions, verifying traffic, reporting faults, requisitioning records and tape. But the producer is also a manager, managing projects called programmes. He sets the objectives for other people, monitors their progress, controlling, organising and motivating them in their work. He will be the person who disciplines the habitual latecomer, who resolves conflict between contributors.

The journalist and the DJ, the presenter and the performer, frequently regard themselves as the pre-eminent component in a mixed sequence. The producer as manager must create the team where each is sufficiently confident to support the other. As manager, the producer recognises the financial responsibility of the job — agreeing the budget, monitoring expenditure, and taking action to remain within the allocation. If need be he argues the case for more, but the editorial and managerial aspects cannot be separated. Editorial decisions *are* resource decisions. Like any other manager he is primarily in charge of the quality of what happens, his bottom line is the standard of the programme — he says what is good enough and what isn't. At the end of the day the producer decides and communicates what he wants done, to what standard, by when, by whom, at what cost. That's editorial management.

Having completed the programme, the producer is already working on the next. For some it is a constant daily round to report new facts and discover fresh interests. For others it may be a painstaking progress from one epic to another. Unlike the purely creative artist, the producer cannot remain isolated, generating material simply from within himself. His role is that of the communicator, the interpreter who attempts to bring about a form of contact which explains the world a little more. For the most part it is an ephemeral contact leaving an unsubstantial trace. Radio works very much in the present tense, reputations are difficult to build and even harder to sustain. The producer is rarely regarded as any better than his last programme.

Programme evaluation

A crucial activity for any producer is the regular evaluation of what he or she is doing. Programmes have to be justified. Other people may want the resources, or the airtime. Station owners, advertisers, sponsors and accountants will want to know what programmes cost and whether they are worth it. Above all, conscientious producers striving for better and more effective communication will want to know how to improve their work and achieve greater results. Broadcasters talk a great deal about quality and excellence, and rightly so, but these are more than abstract concepts, they are founded on the down to earth practicalities of continuous evaluation.

Programmes can be assessed from several viewpoints. We shall concentrate on three:

- Production and quality evaluation.
- Audience evaluation.
- Cost evaluation.

Production evaluation

Programme evaluation carried out among professionals is the first of the evaluative methods and should be applied automatically to all parts of the output. However, it is more than simply a discussion of individual opinion, for a programme should always be evaluated against previously agreed criteria.

First, the basic essential of the proper technical and operational standard. This means there is no audible distortion, that intelligibility is total, that the sound quality, balance and levels are correct, the fades properly done, the pauses just right, and the edits unnoticeable.

Second, is about what the programme is for — what it sets out to do? A statement of purpose should be formulated for every programme so that it has a specific direction and aim. Without such an aim, any programme can be held to be successful. So, what is the 'target audience'? What is the programme intending to do for that audience? How well does it set about doing it? (Whether it actually succeeds in this is an issue for audience evaluation.)

Third, is a professional evaluation of content and format. Were the interviews up to standard? The items in the best order? The script lucid, and the presenter communicative? In the realms of music and drama, matters of excellence become more subjective. The participants themselves can be invited to take part in the evaluation — the focus of which should always be constructive improvement rather than the apportioning of blame. When producers are first involved in playback and discussion sessions, they are bound to show some initial defensiveness and sensitivity over their work. This has to be understood. It is best minimised by focusing the discussion on the programme, not on the programme-maker. The process is essentially about problem-solving and creatively seeking new ideas in pursuit of the programme aim.

Programme quality

Quality is a much over-used word in programme making. Is it only something about which people say 'I know it when I see it or hear it, but I wouldn't like to say what it is'? If so, it must be difficult to justify the judges' decisions at an awards ceremony. Of course there will be a subjective element — a programme will appeal to an individual when it causes a personal resonance because of experience, preference or expectation. But there must also be some agreed professional criteria for the evaluation of programme excellence. In a programme of quality at least some of the following will be prominently in evidence.

First, *appropriateness*. Irrespective of the size of the audience gained, did the programme actually meet the needs of those for whom it was intended? Was it a well-crafted piece of communication which was totally appropriate to its target listeners, having regard to their educational, social or cultural background? Programme quality here is not about being lavish or expensive; it is about being in touch with a particular audience, in order exactly to serve it, providing with precision the requirements of the listener.

Second, *creativity*. Did the programme contain those sparks of newness, difference and originality which are genuinely creative, so that it combined the science and logic of communication with the art of delight and surprise? This leaves a more lasting impression, differentiating the memorable from the dull or bland.

Third, *accuracy*. Was it truthful and honest, not only in the facts it presented and in their balance within the programme, but also in the sense of being fair to people with different views? It is in this way that programmes are seen as being authoritative and reliable — necessary of course for news, but essential also for documentary programmes, magazines and, in its own way, for drama.

Fourth, *eminence*. Quality acknowledges known standards of ability in other walks of life. A quality programme is likely to include first-rate performers — actors or musicians. It will make use of the best writers and involve people eminent in their own sphere. This of course extends to senior politicians, industrial leaders, scientists, sportsmen and women — known achievers of all kinds. Their presence gives authority and stature to

the programme. It is true that the unknown can also produce marvels of performance, but quality output cannot rely on this and will recognise established talent and professional ability.

Fifth, *holistic*. A programme of quality will certainly communicate intellectually in that it is understandable to the sense of reason, but it should appeal to other senses as well — the pictorial, imaginative or nostalgic. It will arouse emotions at a deeper and richer level, touching us as human beings responsive to feelings of awe, love, compassion, excitement — or even the anger of injustice. A quality programme makes contact with more of the whole person.

Sixth, *technical advance*. An aspect of quality lies in its technical innovation, its daring — either in the production methods or the way in which the audience is involved. Technically ambitious programmes, especially when 'live', still have a special impact for the audience.

Seventh, *personal enhancement*. Was the overall effect of the programme to enrich the experience of the listener, to add to it in some way rather than to leave it untouched — or worse to degrade or diminish it? The end result may have been to give pleasure, to increase knowledge, to provoke or to challenge. An idea of 'desirable quality' should have some effect which gives, or at least lends, a desirable quality to its recipient.

Combining accuracy with appropriateness for example means providing truthful and relevant news in a manner which is totally understandable to the intended audience at the desired time and for the right duration. Quality news will also introduce creative ways of fairly describing difficult issues so leaving the listener feeling enriched in his understanding of the world.

Programme quality requires several talents. It takes time to think through and is less likely to blossom if the primary requirement is quantity rather than excellence. It cannot be demanded in every programme, for creativity requires experiment and development. It needs the freedom to take risks and therefore occasionally to make mistakes. Qualitative aspects of production are not easy to measure, and it may be that this is why an experienced programme-maker determines them intuitively rather than by logic alone. Nevertheless they have to be present in any station which has quality on the agenda, or aspires to be a leading broadcaster.

Quality allied to programming as a whole — especially that thought of as public service — takes us back to criteria described on p. 10. Quality in this sense will mean a diversity of output, meeting a whole range of needs within the population served. It will reflect widely differing views and activities, with the intention of creating a greater understanding between different sections of the community. Its aim is to promote tolerance in society by bringing people together — surely always the hallmark of quality communication.

The cynic will say that this is too idealistic and that broadcasting is for self-serving commercial or even propagandist ends — to earn a living, and provide music to ease the strain of life for listeners. If this is the case, then simply evaluate the activity by these criteria. The many motivations for making programmes and the values implicit in the work are outlined on p. 11–12. What is not in doubt is the need to evaluate the results of what we do against our reason for doing it.

Audience evaluation

Formal audience research is designed to tell the broadcaster specific facts about the audience size and reaction to a particular station, or to individual programmes. It is often conducted by interviews in the street or visits to homes using a range of interviewees which properly represents the total potential listenership. The more detailed the information required — the number of people who heard part or all of a given programme on a particular day, and what they thought of it — the more costly the research will be. This is because the sample will need to be larger, requiring more interviews. If the information required is fairly general — how many people tuned in to Radio One for any programme last month and their overall opinion of the station — this kind of approach is a great deal cheaper, for it can be included in a general market survey of a range of products and services.

It should be said that constructing a 'properly representative' sample of interviewees is itself a difficult process requiring some precision. It should represent the total potential listenership in terms of age, gender, social or occupational status, and lifestyle, e.g. urban or rural. It should reflect any marked regional variations within the area surveyed, which in many cases will include linguistic or cultural differences. This pre-survey work ensures for example that the views of Hindi-speaking students, male and female, are sought in the same ratio to the over-65s living in rural areas as these two categories exist in the population as a whole. Only when the questioning is put to a correctly constructed sample of the potential audience will the answers make real sense.

A further important definition relates to the meaning of the word 'listener'. Many sequence programmes are two or three hours long — do we mean a listener is someone who listened to it all? If not, to how much? In Britain, RAJAR — Radio Joint Audience Research — conducts surveys of all radio listening using a self-completion diary. Here a listener is defined as someone who listens for a minimum of five minutes within a fifteen minute time segment. The figure for weekly reach is the total number of these people over a typical week, expressed as a percentage of the population surveyed. The resulting figures have even more value over a period of time as they indicate trends in programme listening, seasonal patterns, and changes in a specific audience, such as car drivers. This allows comparisons to be made between different kinds of format and schedule. Research therefore helps us to make programme decisions, as well as providing the figures for managers to justify the cost of airtime.

Letter response

Informal audience research — anecdotal evidence, press comment and immediate feedback — often has an impact on the producer which is out of proportion to its true value. Probably the most misleading of these — in relation to the listenership as a whole — is the letter response. Several studies have shown that there is no direct correlation between the number of letters received and the size or nature of the audience. News is often the

most listened-to part of the output, yet the newsroom receives compara-
tively few letters.

Letters will indicate something about the individuals who are motivated
to write — where they live, their interests perhaps, what triggered them to
pick up a pen, or what they want in return. But it is wrong to think that
each writer represents a thousand others — they may do, but you don't
know that and cannot assume it. There may be more letters from women
than from men — does that indicate that there are more women listeners
than men? Not necessarily — it may be that women have more time, are
more literate, are more motivated, or have the stamps!

Broadcasting to 'closed' countries, or where mail is subject to inter-
ference, frequently results in a lack of response which by no means
necessarily indicates a small audience. Low literacy or a genuine inability
to pay the postage are other factors which complicate any real accuracy in
attempting audience evaluation through the correspondence received. It
may give some useful indicators, and raise questions worthy of feeding
back into programmes — for each individual letter has to be taken most
seriously — but letter writers are self-selecting along patterns which are
likely to have more to do with education, income, available time and
personal motivation than with any sense of the audience as a whole.

A method which partly overcomes the unknown and random nature of
letter response is to send with every reply to a correspondent a question-
naire (together with a stamped addressed return envelope) designed to ask
about the writer's listening habits, to your own and to other services. It also
asks for information about the person. Over a period of several months it is
possible to build up some useful demographic data. It still only relates to
those who write, but it can be compared with official statistical data —
available from many public libraries — to discover how representative are
the people who write.

Research panels

Another method of informal research is through listening panels scattered
throughout the coverage area. Such groups can, by means of a question-
naire, be asked to provide qualitative feedback on programmes. Panel
members will be in touch with their own community and therefore may be
chosen to be broadly representative of local opinion. Once a panel has
been established, its members can be asked to respond to a range of
programme enquiries which over time may usefully indicate changes in
listening patterns.

Such panels are also appropriate where the programme is designed for a
specific minority such as farmers, the under-fives, the unemployed,
hospital patients, adult learners, or a particular ethnic or language group.
Here, the panel may meet together to discuss a programme and provide a
group response. Visited by programme makers from time to time, a panel
can sustain its interest by undertaking responsible research for the station.
But beware any such sounding-board which is too much on the producer's
side. Too close an affiliation creates a desire to please, whereas pro-
gramme makers must hear bad news as well as good. Indeed, one of the

key survey questions is always to find out why someone *did not* listen to my programme.

Questionnaires

In designing a research questionnaire ensure that the concepts, words and format are appropriate to the person who will be asked to complete it. A trained researcher filling in the form while undertaking an interview can cover greater complications and variables than a form to be completed by an individual listener on their own. Before large-scale use, any draft questionnaire should be tested with a pilot group to reveal ambiguities or misunderstandings:

- Decide what information you need, and how you will use it.
- Can this be gained by closed (yes/no) questions?
- Avoid imprecise terms, e.g. 'often', 'generally'.
- Do the questions appear to imply a 'right' or preferred answer?
- With multiple choice questions it is often useful to add: Other (please specify). This allows for an answer you have not thought of.
- Keep the questionnaire short, and as simple as possible.

Cost evaluation

What does a programme cost? Like many simple questions in broadcasting this one has a myriad possible answers, depending on what you mean.

The simplest answer is to say that a programme has a financial budget of 'X' — an amount to cover the 'above the line' expenses of travel, contributors' fees, copyright, technical facilities, and so on. But then what is its cost in 'people time'? Are staff salaries involved — producer, technical staff, secretarial time? Or office overheads — telephone, postage, etc? Is the programme cost to include studio time, and is that costed by the hour to include its maintenance and depreciation? And what about transmission costs — power bills, engineering effort, capital depreciation?

Total costing will include all the management costs and all the overheads over which the individual programme-maker can have little or no control. One way of looking at this is to take a station's annual expenditure and divide it by the number of hours it produces so arriving at a cost per hour. But since this results in the same figure for all programmes no comparisons can be made. More helpful is to allocate to programmes all cash resource costs which are directly attributable to it, and then add a share of the general overheads — including both management and transmission costs — in order to arrive at a true, or at least a truer, cost per hour figure which will bear comparison with other programmes.

Does news cost more than sport? How expensive is a well-researched documentary, or a piece of drama? How does a general magazine compare with a phone-in or a music programme? How much does a 'live' concert really cost? Of course it is not simply the actual cost of a programme which matters — coverage of a live event may result in several hours of output,

Radio XYZ

1. Programme title ....

2. Date/time of broadcast ....

3. Do you listen to this station? (circle)
      every day/most days/once a week/once a month/never

4. Did you hear this particular programme? (circle)   yes/no

5. If no, go to Question 11. If yes, did you listen to (circle)
      all of it/most of it/parts of it/a little of it?

6. What did you think of the programme? (circle)
      excellent/good/fair/poor.

7. What did you like most about it?

8. What did you dislike about it?

9. Is the programme broadcast at a suitable time for you? (circle)   yes/no

10. If no, what would be a better time for you? (circle)
      on the same day/on a different day

11. If you did not hear the programme, why was this?

12. If you did hear the programme did you do anything as a direct result?

Some information about yourself is very useful since it enables us to contact you for follow-up if necessary, and it helps us to know more about our audience. However, this section is optional and you may leave it blank if you prefer. Any information you give is for the purpose of programme evaluation only and is regarded as strictly confidential.

Name .... Sex M/F

Address .... Married/Single

....

Age (circle) under 15/16–24/25–39/40–59/60+

Occupation ....

Hobbies and interests ....

....

Other Radio Stations listened to ....

Newspapers/magazines read: ....

Fig. 22.1. A simple audience research questionnaire for individual members of a listening panel. The station completes 1. and 2. before distribution.

which with recorded repeat capability could provide a low cost per hour. Furthermore, given information about the size of the audience it is possible, by dividing the cost per hour by the number of listeners, to arrive at a cost per listener hour. So is this the all-important figure? No, it is an indicator among several by which a programme is evaluated.

Relatively cheap programmes which attract a substantial audience may or may not be what a station wants to produce. It may also want to provide programmes which are more costly to make and designed for a minority audience — programmes for the disabled, for a particular linguistic, religious or cultural group, or for a specific educational purpose. These will have a higher cost per listener hour but will also give a channel its public service credibility. It is important for each programme to be true to its purpose — to achieve results in those areas for which it is designed. It is also important for each programme to contribute to the station's purpose — its Mission Statement.

After a full evaluation, happy is the producer who is able to say 'My programme is professionally made to a high technical standard, it meets precisely the needs of the whole audience for which it is intended, its cost per listener hour is within acceptable limits for this format, and it contributes substantially to the declared purpose of this station.' Happy too the station manager.

Training

We learn in four main ways: by watching others, by studying theory, by trying things out, and by full-scale practical experience. In fact, the activities are linked together. The process of observation leads us to draw conclusions about what appears to work and what doesn't, we can then test theories before launching out in practice. We monitor ourselves as we do that and the cycle starts again.

Practical
action

Pragmatic
testing

Observation
and reflection

Theory and
understanding
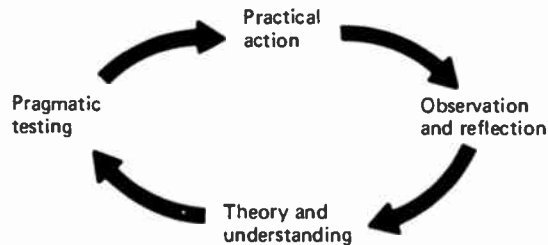
(after Kolb)

Unfortunately, most people are not equally disposed to these four ways of learning. Someone strong on observation, reflection and theory will learn a great deal from visiting studios, watching professionals at work, asking questions and reading the literature — and they may be reluctant to try a practical exercise until they think they have mastered the theory. Someone else — the practical activist — will be anxious to get on with 'doing it', impatient of the principles.

It follows that a good training scheme for producers should contain all four elements in proportions suited to the participants and, in practice, to the facilities and expertise available. There's no point in throwing someone in at the deep end ('that's the only way to learn, that's how I did it') without the essential guidelines. Nor is it sensible to insist that new producers watch someone else without any opportunity to ask questions and try things out for themselves. Giving 'on air' experience too soon can induce in some a real sense of fear, from which recovery may be slow and painful. On the other hand preventing people from doing anything 'for

real' is likely to lead to acute frustration. It is this aspect of motivation that those responsible for a producer's training must monitor most closely. Is the new person enjoying learning? How do they think the training process is going? Are there signs of their being 'over-challenged' or bored? If they are slow to finish work, is it because they are aiming at too high a standard for their present level of skill? If the work quality is low, is it because of a lack of understanding of what is required or an inability with a particular technique? Learning *how* to interview, for example, will certainly take place during practice and real interviews — but the key to *understanding* interviewing will occur during a session of expert feedback on the end result. The critical analysis of programme material by someone experienced in the craft is an essential part of the learning process. Neither is this confined to the new producer. Established producers also need to grow; their development should not be overlooked simply because they can do a day's work without supervision. New challenges, techniques, programme formats and roles will help to keep regular output producers from going stale. They may even be good enough to enthuse and train the next generation.

Course organisation

The trainer is the enabler, developer and promoter of others. To be successful it is necessary to know the needs of the trainees — their present levels of skills and knowledge — and where you want a particular training event to take them. Whether that event is a half-day module or a three-month course, it will require five areas of attention:

(1) *Aim*. The purpose of the training should be clear. What insights and abilities are people to take away with them? The trainer needs a vision of what is to be achieved, and from what starting point.

(2) *Logistics*. Technical, financial and other practical arrangements have to be made for the desired number of people attending the event. Teaching space, accommodation, working space together with equipment for practical sessions, administrative effort and office support e.g. word-processing and copying, transport, catering, visual aids — OHP, whiteboards, flipcharts, books and folders, etc. — have to be predicted and provided.

(3) *Design*. What topics need to be covered in what order? The flow should accommodate the different learning styles, the balance between theory and practical, and between individual and group work. The sessions after a mid-day meal should either succumb to the convention of siesta or be vigorously participative, and anything in the evening should be different again. Courses are frequently so full of input that there is little time for reflection, to process what is learned. Lectures should be modified with discussion 'buzz groups' and questions, and practical work given time for debriefing and individual feedback, encouragement and critique.

(4) *Lesson plans*. Each session needs its own written outline starting with its aim. What is it to achieve? How will it do it? A plan, preferably

drawn up by the trainer who is to lead the session, will detail the content of the session giving approximate timings for each section and how it will be organised. It will list the training handouts to be distributed, equipment needed, visual aids required, videos or films to be shown, etc.

(5) *Evaluation.* The initial aim will give you the success criteria for the training, but has it worked for each individual? Described in detail later, evaluation of and by trainees and tutors is part of the quality control process — and if there are standards to be met and examinations passed, these should also be with regard to the four learning styles.

The following training ideas can be adapted to suit specific conditions and represent the principles of learning by seeing — understanding — trying — doing. Observation, theoretical principle, group discussion, and working in the 'safety' of a training environment are combined with 'on-job' learning. In each case the trainer should clearly indicate what is required, by when, to what standard, with what resources.

Stretching imagination

Write a one-minute piece on a colour (see p. 118). Members of a group take colours out of a hat — black, purple, red, grey, etc. Provide access to music, poetry, Fx and compile a tape for discussion and evaluation by the group. Invite a blind person to sit in and comment.

Editorial selection

Provide each trainee with the same tape copy of a five-minute interview, to be edited down to $1\frac{1}{2}$ minutes. Use a transcript to mark what has been used and what cut. With a group, each person says why he or she chose certain parts and omitted others, and which parts should be re-written as cue material. Analyse the reasons for selectivity. Does everyone stand by their own decision, or recognise that other choices may be better?

News priorities

List twelve basic stories. Choose three as the lead stories for a five-minute bulletin. With only room for nine, decide which three to drop. Analyse and discuss the reasons given:

(1) Police Chief presses for stricter measures against all forms of civil terrorism including up to 28 days detention without charges being made.
(2) Farmers fear price rises of staple foods in the coming six months due to poor harvesting conditions.

(3) Popular national youth movement announces plans for international rally to be held in the capital.

(4) The country as a whole has attracted more tourists than ever before. Income from tourism reaches multi-million record.

(5) Important political figure — in the opposition party — claims wasteful government spending on road-building programme.

(6) Plane crash in desolate region involving internal flight of domestic airline with 75 people on board. Circumstances and casualties not yet known.

(7) Famous local sportsman wins premier prize in an international competition.

(8) Country's political leader announces new government policy for welfare facilities for the old, disabled and poor.

(9) Small bomb explosion in a store in centre of the capital. Part of a continuing campaign of protest by a dissident minority who claims responsibility by 'phone call to the radio station.

(10) Rural region suffers a suspected outbreak of cattle disease which threatens the destruction of livestock under a government order.

(11) Industrial dispute over a pay claim threatens the shut-down of major car plant.

(12) University department of medical research announces a breakthrough in its search for a drug to alleviate arthritis in the hand and knee joints.

News exercise

An excellent 'real' news exercise is to provide a training group with the same sources as those available to the working newsroom. Alongside the professional team the trainees independently compile a five minute bulletin for comparison with the actual output. Invite the Editor to listen and comment — discuss the differences of selection and treatment.

A further exercise is to listen on the same day to bulletins from different stations or networks, analysing the reasons for the variations between them.

Voicework

When giving feedback — especially critical feedback — it is always wise to remember that the trainer is commenting on the work, *not* the person. However, with voice training the work and the person come very close together and it can be almost impossible to separate them. Listening to a trainee newsreader you may feel that he or she is acting, not being themselves. So who are they being? Do they have a mental image of a newsreader that they must live up to? Are they in effect impersonating a newsreader? If so, what is wrong with being him or herself? These can be difficult questions which in the end only the individual concerned can

answer. Before going on to specific technical skills any newsreader or presenter must be comfortable with themselves. If they do not like their voice or accent they will try to change it and the whole effect may sound false; for if they are too concerned with their own performance they will not have sufficient care for the listener, and communication will suffer.

The first step therefore is to record and playback some newsreading and ask the reader to comment on it. If it is very different from their normal voice, record this conversation and play this back and compare it with the newsreading. Why the difference? Many readers have to be assured that their normal voice — or at least something very close to it, that works for them throughout the greater part of the day — is perfectly OK for radio.

Having liberated a voice to be natural, rather than either assumed or nervous, the trainer continues with professional feedback according to the following '7 Ps':

(1) *Posture*. Is the sitting position comfortable, to allow good breathing and movement? Cramped or slouching posture does not generally make for an easy alertness.
(2) *Projection*. Is the amount of vocal energy being used appropriate to the programme?
(3) *Pace*. Is the delivery correct? Too high a word rate can impair intelligibility or cause errors.
(4) *Pitch*. Is there sufficient rise and fall to make the overall sound interesting? Too monotonous a note can quickly become very tiring to listen to. However, animation in the voice should be used to convey natural meaning rather than achieve variety for its own sake.
(5) *Pause*. Are suitable silences used intelligently to separate ideas and allow understanding to take place?
(6) *Pronunciation*. Can the reader cope adequately with worldwide names and places? If a presenter is unfamiliar with people in the news, or musical terms in other languages, he must be taught to read phonetic guidelines.
(7) *Personality*. The sum total of all that communicates from microphone to loudspeaker, how does the broadcaster come over? Is it appropriate to the programme? Can the trainer or trainee suggest any improvement?

All voicework has something of performance about it and it is natural for broadcasters of all disciplines to want some form of professional feedback. It follows that the opportunity for formal voice training, and for a discussion of one's personal approach to it, should be offered to both new and experienced practitioners.

Personal motivation

Using the lists in Chapter 1, write a short essay on the ideal use of the radio medium and how you see yourself being most fulfilled as a programme-maker. Why and how do you want to use radio?

Vox pop

Trainees produce edited street interviews on a similar topic:

- a film or television programme;
- an aspect of industrial or agricultural policy;
- solutions to traffic problems;
- views on new buildings being erected;
- teenage dress.

Discuss — to what extent does luck play a part in the end result? How does one's personal approach affect the outcome? What is the most appropriate slot for these items?

Commentary

An initial exercise is for a trainee to be given a picture taken from a newspaper or magazine and without showing it to the others is asked to describe it for 30 seconds. He or she then shows it to the group — they then comment on the differences between their mind's-eye picture and the real one. What was it about perspective, size or content that was distorted? The next step is to do a piece of outside scene-set or event commentary on tape for subsequent playback (without editing) and analysis. Did it provide a coherent picture?

Drama

Write ten minutes of dialogue for two to four voices, with or without effects. Using actors, produce the playlet for discussion by the group. Invite the actors to give their view of how they were produced. Could they have done better? Were the producer's instructions clear? Did the end result re-create the writer's intentions?

New challenges for old producers

Set out deliberately to do something personally never attempted before:

- A vox pop in an old people's home, or at a school.
- Produce a commercial, and offer it to the appropriate agency for comment.
- Draft outline ideas for a documentary, giving research sources.
- Using the clock format, construct a one-hour music sequence for a given target audience.
- List ten new ideas for an afternoon magazine.
- Write a public service message — road safety, community health.
- Reconstruct the station's morning schedule.

Without attempting to justify the result, it should be discussed with an experienced broadcaster. It should then be done a second time, with a further appraisal.

Maintaining output

Many radio training courses with access to studio facilities will culminate with a sequence of programmes as simulated continuous output. Run in real time to a predetermined schedule, a full morning's music, news and weather, traffic reports, features, etc. are watched by professional observers who report back on programme quality, presentation style, sound levels, operational faults, the management of the studio, the producer's ability to motivate and communicate with others, and so on. Some such exercises include deliberate emergencies like equipment failure, the breaking of a major news story, the unexpected arrival of a VIP, or the loss of some pre-recorded material. Such 'disasters' should not be allowed to bring everything to a halt since the effect may be counter-productive to good morale. However 'live' broadcasters must be encouraged to think quickly 'on their feet'.

Assessing quality

Listen to a piece of radio for subsequent discussion. What was its purpose? What effect did it have on you? Comment on content, order, and presentation — the message and its style of delivery, on technique, story treatment, music selection, news values, etc. If possible invite the actual producer to comment on the discussion. When giving feedback — and this is a general rule — comment on the work, don't criticise the person. Critique the programme not the programme-maker.

The process of discussion, analysis and evaluation is carried on continuously by professional broacasters. It is especially important after any programme that has attracted public or government criticism. Communicators need the comments of others — and a 'gut' reaction may be just as valid as a careful intellectual assessment. All broadcasters, in training and the trained, need to maintain their own analytical reasoning in good order. Keep 'quality' on the agenda.

Training evaluation

If programmes are to be evaluated, then so must be the training process itself. Trainees can be encouraged to set their own goals at the start of any course or training period, and asked half-way through how they are doing in achieving those goals. At the end, to what extent have they succeeded in meeting their own criteria? Other 'end of course' feedback useful to trainers is obtained by questions such as:

- Which sessions did you find most useful?
- Which sessions did you find least useful?

- How did you find the balance of theory and practical?
  too much theory/about right/too much practical.
- Did the training come too soon/about the right time/
  too late, for you?
- How far was the training relevant to the work you are doing/
  you expect to be doing?
- What would you like to see added to the course?

It is also useful in an end of course questionnaire to ask for 'any other comments'. This will cover training administration and group relationships, as well as course content. The trainer needs to know as much as possible about what the trainee feels about the training experience as well as what he thinks.

Of course radio training in all its forms is only a means to an end — better broadcasting. Real evaluation can only take place three or six months later, involving both the trainee and his or her manager. Is what has been learned being put to practical use? Are genuine results apparent from the training effort? If not, is there a mismatch between the training approach and the workplace? Training has to meet the felt needs of the programme output and the trainer, like the programme-maker, will constantly evaluate what he does in order to improve the product for the customers.

Back-announcement

Harry Vardon, one of the great exponents of golf, was asked why he never wrote a book setting out all that he knew about it. His reason was that when he came to put it down on paper it looked so simple that 'anyone who didn't know that much about it should not be playing the game anyway!'

It looks as though it is the same with broadcasting. Is there really any more to it than — 'Have something to say, and say it as interestingly as you can?' Yet there are whole areas of output which have hardly been mentioned — educational programmes, light entertainment and comedy, programmes for young people, specialist minorities or ethnic groups. What about the special problems of short-wave broadcasting, or programmes for the listener who is a long way from the broadcaster? A book, like a programme, cannot tell the whole truth. What the reader, or listener, has a right to expect is that the product is 'sold' to him in an intelligible way and then remains true to his expectations. Broadcasters talk a great deal about objectivity and balance, but even more important, and more fundamental, is the need to be fair in the relationship with the listener. A broadcasting philosophy which describes itself in programme attitudes yet ignores the listener is essentially incomplete.

What then is the purpose of being in broadcasting — the aim of it all? It is not enough to say, 'I want to communicate' — communicate what? And why? As we have seen there are several possible answers to this — to earn money, to meet the needs of the organisation, to meet your own needs, to become famous, or to persuade others to think as you do. But the purpose of communication is surely to provide options and a consequent freedom of action for other people, not to close them by offering a half-truth or by weighting them with a personal, political or commercial bias. The reason for providing information, education and the relaxation of entertainment is to suggest alternative courses of action, to explain the implications of one against another, and having done so to allow for a freedom of thought and action. This assumes that people are capable of responding in a way which itself requires a regard for our fellow men and women.

Having announced his intentions and made his programme, the producer must put his name to it. Programme credits are not there simply to feed the ego or as a reward for your labours. They are a vital element in the power which broadcasting confers on the communicator — personal responsibility

for what is said. Many members of a team may contribute to a programme, but only one person can finally decide on the content. Good programmes cannot be made by committee. Group decisions inevitably contain compromise and a weakening of purpose and structure, but worse, they conceal responsibility. Communication that is not labelled or attributed is of little use to the person who receives it.

Programme makers face a hundred difficulties not mentioned here but by engaging a 'professional overdrive', rather than regarding them as a personal undermining, most problems can be made to take on more the aspect of a challenge than a threat. The practicalities of production are encapsulated by the well known Greenwich time signal whose six pips must serve as their final reminder:

(1) *Preparation:* state the aims, plan to meet them.
(2) *Punctuality:* be better than punctual, be early.
(3) *Presentation:* keep the listener in mind.
(4) *Politeness:* to contributors, listeners and staff.
(5) *Punctilious:* observance of all agreed systems and procedures. If there is something you don't like, do not ignore it, change it.
(6) *Professional:* the putting of the interests of the listener and the broadcasting organisation before your own. And the constant maintenance of an editorial judgement based on a full awareness and a competent technique.

Glossary

Above-the-line cost Expenditure under the producer's control in addition to fixed overheads (below the line).

Access broadcasting Programme in which editorial decisions are made by the contributor, not by professional staff.

Acoustic Characteristic sound of any enclosed space due to the amount of sound reflected from its wall surfaces and the way in which this amount alters at different frequencies. See also *Reverberation time, Coloration.*

Acoustic screen Free standing movable screen designed to create special acoustic effects or prevent unwanted sound reaching a particular microphone. One side is soft and absorbent, the other is hard and reflective.

Actuality 'Live' recording of a real event, sounds recorded on location.

Ad Advertisement or commercial.

Ad-lib Unscripted announcement, 'off-the-cuff' remark.

Aerial Device for transmitting or receiving radio waves at the point of transition from their electrical/electromagnetic form.

AGC Automatic Gain Control. Amplifier circuit which compensates for variations in signal level, dynamic compression.

AM Amplitude modulation. System of applying the sound signal to the transmitter frequency, associated with medium-wave broadcasting.

Anchor Person acting as the main presenter in a programme involving several components.

AP Associated Press. Syndicated news service.

Apple and biscuit Microphone resembling a black ball with a circular plate fixed on one side. Omni-directional polar diagram.

ASCAP American Society of Composers, Authors and Publishers — copyright control organisation protecting musical performance rights.

Atmosphere Impression of environment created by use of actuality, sound effects or acoustic.

Attenuation Expressed in decibels (dB), the extent to which a piece of equipment decreases the signal strength. Opposite of amplification.

Attenuator Device of known attenuation deliberately inserted in a circuit to reduce the signal level.

Audience figures Expressed as a percentage of the potential audience, or in absolute terms, the number of listeners to a single programme or sequence, daily or weekly patronage, or total usage of the station. See *Patronage, Ratings, Reach.*

Audience measurement Research into numbers and attitudes of listeners. Methods used include: 'Aided-Recall' — person to person interview; 'Diary' — the keeping of a log of programmes heard; 'Panel' — permanent representative group reporting on programmes heard.

Audio frequency Audible sound wave. Accepted range 20 Hz–20 kHz.

Automatic Gain Control See *AGC.*

Azimuth The extent to which the gap in the recording or playback heads of a tape machine is truly vertical, i.e. at right angles to the direction of tape travel.

Back-announcement   Where the names and details of an interview or record are given immediately after the item.

Backing track   Recording of musical accompaniment heard by a soloist while adding his own performance.

Balance   Relative proportion of 'direct' to 'reflected' sound apparent in a microphone output. Also the relative volume of separate components in a total mix, e.g. voices in a discussion, musical instruments in an orchestra.

Bass cut   Device in microphone or other sound source which electrically removes the lower frequencies.

Bay   Standard 2145 mm × 526 mm frame housing power supplies and other technical equipment used in studios or control areas.

Bed   Instrumental backing to which words or singing are added to make a commercial or station ident.

Bias   High frequency signal applied to the recording head of a tape machine to ensure distortion free recording.

Bi-directional   Microphone sensitive in two directions, front and back, but completely insensitive on either side, e.g. ribbon microphone.

Black   A carbon copy, generally of typed news story.

Board   American term for studio control desk or panel.

Boom   Wheeled microphone support having a long arm to facilitate microphone placing over performers, e.g. orchestra.

Boomy   Room acoustic unduly reverberant in the lower frequencies.

Boundary effect mic   Small microphone mounted on a plate with a gap between it and the plate to give a directional polar diagram. Used on-stage for opera and theatre work. Also called Pressure Zone (PZ) effect.

Breakthrough   Unwanted electrical interference or acoustic sound from one source or channel affecting another.

Bulk eraser   Equipment capable of demagnetising, 'wiping' or 'cleaning' a spool of tape, or several at a time.

Cans   Colloquial term for headphones.

Capacitor microphone   Microphone type based on the principle of conducting surfaces in proximity holding an electrical charge. Requires a power supply.

Capstan   The drive spindle of a tape recorder.

Cardioid   Heart-shaped area of pick-up around a microphone.

Cartridge or cart   Enclosed endless loop of tape on a single spindle which having finished is ready to start again. Also refers to Digital cart or floppy disk. Used especially for signature tunes, jingles, idents, and commercials.

Cassette   Enclosed reel to reel device of 3 mm wide tape particularly used in domestic or miniature recording machines.

CD   Compact Disc. Digital recording and playback medium.

Channel   The complete circuit from a sound source to the point in the control panel where it is mixed with others.

Chinagraph   Soft pencil used to mark tape cutting points during editing. Generally yellow.

Clean feed   A supply of cue programme in which a remote contributor hears all the programme elements other than his own. Essential to prevent howl-round in certain 2-way working conditions.

Clip   A short piece of audio extracted from a longer item and illustrative of it. See also *Sound-bite*.

Coloration   Effect obtained in a room when one range of frequencies tends to predominate in its acoustic.

Compressor   Device for narrowing the dynamic range of a signal passing through it.

Condenser microphone   See *Capacitor mic*.

Control line   A circuit used to communicate engineering or production information between a studio and an outside source. Often also used as cue line. Not necessarily high quality — see *Music line*.

Copy   Written material offered for broadcast, e.g. news copy, advertising copy.

Copyright   The legal right of ownership in a creative work invested in its author, composer, publisher or designer.

Copytaster   The first reader of copy sent to a newsroom who decides whether it should be rejected or retained for possible use.

Cough key   Switch, under the speaker's control, which cuts his microphone circuit.

Crossfade   The fading in of a new source while fading out the old.

Crossplug   The temporary transposition of two circuits, normally on a Jackfield. See also *Overplugging*

Crosstalk   Audible interference of one circuit upon another.

Cue   The pre-arranged signal to begin — visual light or gesture. verbal, musical, or scripted words.

Cue, in and out   The first and last words (effects or music) of a programme or item.

Cue light   A small electric light, often green, used as a cueing signal.

Cue line   A circuit used to send cue programme to a distant contributor.

Cue programme   The programme which contains a contributor's cue to start.

Cue sheet   Documentation giving technical information and introductory script for programme or insert, i.e. cue material.

Cume   Cumulating audience measurement. See *Reach*.

DAT   Digital Audio Tape. Sound recording and playback system in *digital mode* using small tape cassette and rotating heads — as in a videorecorder.

dB   Decibel. Logarithmic measurement of sound intensity or electrical signal. The smallest change in level perceptible by the human ear.

Dead side of microphone   Least sensitive area.

Deferred relay   The broadcasting of a recorded programme previously heard 'live' by an audience.

Digital effects unit   Electronic equipment capable of affecting sound quality in a variety of ways e.g. by changing frequency response, adding coloration or reverberation. Capable of creating synthetic or 'unreal' sounds.

Digital mode   The encoding of a signal as on/off pulses which represent its amplitude and frequency.

Din   Plug or socket manufactured to standard of Deutsche Industrie Norm.

Directional   Property of microphone causing it to be more sensitive in one direction than in others. Also applied to transmitters, receiving aerials, loudspeakers, etc. See also *Polar diagram*.

Disc jockey   Personality presenter of record programme, generally pop music show.

Dolby system   Trade name for electronic circuitry designed to improve the signal to noise ratio of a programme chain.

Double-ender   Short length of audio cable with a Jack plug on each end used to connect pieces of equipment or Jacks on a Jackfield.

Double headed   Style of presentation using two presenters.

Drive time   Periods of morning and later afternoon which coincide with commuter travel and the greatest in-car listening.

Dry run   Programme rehearsal, especially drama, not necessarily in the studio, and without music, effects or movements to mic. See *Run through*.

Drop out   Momentary drop in level or loss of quality in tape reproduction due to lack of contact between tape and repro. head.

Dub   To copy material already recorded. To make a dubbing.

Ducking unit   Automatic device providing 'voice-over' facility. See *Voice-over*.

Dynamic range   Measured in dB, the difference between the loudest and the quietest sounds.

Echo   Strictly a single or multiple repeat of an original sound. Generally refers to reverberation.

Echo plate or spring   Device for artificially adding reverberation.

Edit   The rearrangement of material to form a preferred order. Particularly in the cutting or dubbing of recorded tape.

Editing block   Specially shaped metal guide which holds the tape in position during the cutting and splicing process.

Editorial judgement   The professional philosophy which leads to decisions on programme content and treatment.

e-mail   Electronic mail. National or international means of conveying computer generated correspondence or other text between similarly equipped terminals — a 'store and forward' system.

EQ   Equalisation or frequency control especially as applied to individual channels on a music mixing desk.

Equity   The British Actors Equity Association. Actors' union.

Erase head   The first head of a tape recorder which cleans the tape of any existing recording by exciting it with a high frequency signal.

Fade   A decrease in sound volume. (Fade down or out.)

Fader   Volume control of a sound source used for setting its level, fading it up or down, or mixing it with other sources. Also '*Pot*'.

Fade in   An increase in sound volume. (Fade up.)

Fax   Facsimile machine, capable of sending/receiving documents, scripts and news copy via a telephone line.

Feed   A supply of programme, generally by circuit.

Feedback   See *Howl-round*.

Feedspool   Tape recorder spool which supplies the tape to the recording head. (As opposed to 'take-up' spool.)

Figure of eight   See *Bi-directional*.

Filter   Electrical circuitry for removing unwanted frequencies from a sound source, e.g. mains hum, or surface noise from an old or worn recording. Also in drama for simulating telephone or two-way radio quality, etc.

First generation copy   A copy taken from the original recording. A copy of this copy would be a second generation copy.

Fletcher-Munson effect   The apparent decrease in the proportion of higher and lower frequencies, with respect to the middle range, as the loudspeaker listening level is decreased. Significant in correct setting of monitoring level, particularly in music balance.

Fluff   (1) Accumulation of dust on the stylus of gramophone pick-up. (2) Mistake in reading or other broadcast speech.

Flutter   Rapid variations of speed discernible in tape or disc reproduction.

FM   Frequency modulation. System of applying the sound signal to the transmitter frequency, associated with VHF broadcasting.

Foldback   Means of allowing artists in the studio to hear programme elements originating elsewhere even while studio microphones are live.

Freelance   Self-employed broadcaster of any category — producer, contributor, operator, reporter, etc. Not on permanent full-time contract. Paid by the single contribution or over a period for a series of programmes. Non-exclusive, available to work for any employer. See also *Stringer*.

Frequency   Expressed in cycles per second or hertz, the rate at which a sound or radio wave is repeated. The note 'middle C' has a frequency of 256 Hz. A long-wave transmitter with a wavelength of 1500 metres has a frequency of 200 kHz (200,000 cycles per second). Frequency and wavelength are always associated in the formula $F \times W$ = speed. Speed is the speed of the wave, i.e. sound or radio, and in each case remains constant.

Frequency distortion   Distortion caused by inadequate frequency response.

Frequency response   The ability of a piece of equipment to treat all frequencies within a given range in the same way, e.g. an amplifier with a poor frequency response treats frequencies passing through it unequally and so its output does not faithfully reproduce its input.

Full track   Tape recording using the whole width of the tape.

Fx   Sound effects created in the studio or available from grams or tape.

Gain   Expressed in decibels (dB), the amount of amplification at which an amplifier is set. Can also refer to a receiving aerial — the extent to which it can discriminate in a particular direction thereby increasing its sensitivity.

Gain control   The control which affects the gain of an amplifier, also loosely applied to any fader or volume control affecting the output level.

Gramophone, gramdeck or grams   Turntable and associated equipment for the reproduction of records.

GTS   Greenwich Time Signal — six pips ending at a precise time.

Gun-mic   Microphone resembling a long-barrelled shotgun. Highly directional, used for nature recordings or where intelligibility is required at some distance from the sound source, e.g. OBs.

Half track   Tape recording erase and recording applied only to the 'top' half of the tape, as opposed to 'full track' which uses the whole width.

Hammocking   Scheduling term referring to the need to support a low audience or specialist programme by placing more popular material before and after it in order to maintain a strong average listening figure.

Handout   Press information or publicity sheet issued to draw attention to an event.

Hand signals   System of visual communication used through the glass window between a studio and its control area, or in a studio with a 'live' mic. See *Wind-up*.

Harmonic distortion   The generation of spurious upper frequencies.

Head amplifier   Small amplifier within a microphone especially capacitor type.

Head gap   Narrow vertical slot at the front of tape recorder erase, record and replay heads.

Headline   Initial one-sentence summary of news event.

Hertz   Hz. Unit of frequency, one complete cycle per second.

Hiss   Unwanted background noise in the frequency range 5–10 Hz, e.g. tape hiss.

Howl-round   Acoustic or electrical positive feedback generally apparent as a continuous sound of a single frequency. Often associated with public address systems. Avoided by decreasing the gain in the amplifying circuit, cutting the loudspeaker or in contribution working through the use of a clean feed circuit.

Hum   Low frequency electrical interference derived from mains power supply.

Hyper-cardioid   A cardioid microphone having a particularly narrow angle of acceptance at its front which decreases rapidly towards the sides.

ID   Station identification or ident.

IFPI   International Federation of Phonographic Industries. International organisation of record manufacturers to control performance and usage rights.

Igranic jack   Jack plug providing two connections.

In cue   The first words of a programme insert, known in advance. Can also be music.

Insert   A short item used in a programme, e.g. a 'live' insert, a tape insert.

Intercom   Local voice communication system.

IPS   Inches per second. Tape-recording term, refers to speed of tape travel past the recording and replay heads.

ISDN   Integrated Services Digital Network. A system of conveying high quality digital audio signals over the public telephone system.

Jack   Socket connected to an audio circuit. Can incorporate a switch activated by insertion of Jack plugs — a 'break' Jack.

Jackfield or patch panel   Rows of Jacks connected to audio sources or destinations. Provides availability of all circuits for interconnection or testing.

Jack plug or post office Jack   Plug type used for insertion in Jack socket comprising three connections, a circuit pair plus earth, known as 'ring tip and sleeve'. See also *Double ender*.

Jingle   Short musical item used as station ID, or in advertisement.

Jingle package   The set of jingles used by a station to establish its audio logo.

Jock   See *Disc jockey*.

Joining tape   Adhesive tape used in tape editing.

Key   Switch.

Kilo   Thousand. Kilohertz — frequency in thousands of cycles per second. Kilowatt — electrical power, a thousand watts.

Landline   See *Line*.

Lavalier microphone   Small microphone hung round the neck (**lanyard mic**) or fastened to clothing.

Lazy arm   Small boom type microphone stand suitable for suspending a microphone over a 'talks' table.

Lead sheet   Basic musical score indicating instrumentation of melody. Used for microphone control during music balance.

Lead story   The first, most important story in a news bulletin.

Leader   Inert coloured tape having the same dimensions as recording tape spliced into a recorded programme or insert to give visual indication of beginnings and endings. Before the beginning — white or yellow; intermediate spacers — yellow; after the end — red.

Level   (1) A test prior to recording or broadcasting to check the volume of the speaker's voice — 'take some level'. (2) Expressed in dBs, plus or minus, the measurement of electrical intensity against an absolute standard, zero level (1 MW in 600 ohms).

Limiter   Device to prevent the signal level exceeding a pre-set value.

Line   Physical circuit between two points for programme or communication purposes.

Line equalisation   The process which compensates for frequency distortion at the receiving end of a landline.

Line-up   Technical setting up of circuits to conform to engineering standards. Line-up tone of standard frequency and level used to check the gain of all component parts.

Lip mic   Noise-excluding ribbon microphone designed for close working, e.g. OB commentary.

Log   Written record of station output. Can also be recorded audio.

Marching box   Sound effects device comprising small box partially filled with gravel used to simulate marching feet.

MCPS   Mechanical Copyright Protection Society. Organisation which controls the copying or dubbing of copyright material.

Mega   Million.   Megahertz — frequency   in   millions   of   cycles   per   second.   Megawatt — electrical power, a million watts.

Microphonic   Faulty   piece   of   electronic   equipment   sensitive   to   mechanical   vibration — acting like a microphone.

Middle of the road   Popular, mainstream music with general appeal. Non-extreme.

Modulation   Variations in a transmission or recording medium caused by the presence of programme. Often abbreviated to Mod.

Module   Interchangeable equipment component.

Montage   Superimposition of sounds and/or voices to create a composite impression.

MOR   Middle of the road music.

MU   Musicians Union.

Music line   High quality landline or satellite circuit suitable for all types of programme, not only music. Compare with *Control line*.

NAB   National Association of Broadcasters. American trade organisation which secures agreement on standards of procedure and equipment, e.g. NAB spool, a professional tape reel type.

Nagra (Trade name)   High-quality portable tape recorder.

Needletime   Expressed in hours or minutes per week, a station's permitted usage of commercial gramophone records. Its amount and cost is arrived at by negotiation between the broadcasting organisation and the record companies. See also *PPL*.

Noise   Extraneous sound, electrical interference, or background to a signal.

Noise gate   Device which allows a signal to pass through it only when the input level exceeds a pre-set value.

OB   Outside broadcast.

Off-mic   A speaker or other sound source working outside a microphone's most sensitive area of pick-up. Distant effect due to drop in level and greater proportion of reflected to direct sound.

Omni-directional   A microphone sensitive in all directions. Also applied to transmitters and aerials.

One-legged   'Thin' low level quality resulting from a connection through only one wire of a circuit pair.

Open-ended   A programme without a pre-determined finishing time.

Out cue   Final words of a contribution, known in advance, taken as a signal to initiate the following item in a sequence.

Out of phase   The decrease in level and effect on quality when two similar signals are combined in such a way as to cancel each other.

Outside source   Programme   originating   point   remote   from   the   studio,   or   the   circuit connection from it.

Overload distortion   The distortion suffered by a programme signal when its electrical level is higher than the equipment can handle. When this happens non-continuously it is referred to as 'peak distortion'. Also referred to as 'squaring off'.

Overplugging   The substitution of one circuit for another by the insertion of Jack plug in a break Jack.

PA   (1) Press Association. News Agency. (2) Public address system.

Par   Paragraph. Journalist's term often applied to news copy.

P as B   Programme as broadcast. Documentation giving complete details of a programme in its final form — duration, inserts, copyright details, contributors, etc.

Package   Edited programme or insert offered complete with links ready for transmission.

Panel   Studio mixing desk, control board or console.

Pan-pot   Panoramic potentiometer. Control on studio mixing desk which places a source to the left or right in a stereo image.

Parabolic reflector   Microphone attachment which focuses sound waves thereby increasing directional sensitivity. Used for OBs, nature recordings, etc.

Parallel strip   An inert row of jacks mounted on a Jackfield not connected to any other equipment but connected in parallel to each other. Used for joining programme sources together, connecting equipment, or multiplying outputs from a single feed. Also available on its own in the form of a 'Junction Box'.

Patch panel   See *Jackfield*.

Patronage   See *Reach*

Peak distortion   See *Overload distortion*.

Peak programme meter   Voltmeter with a slugged slow decay time, designed to indicate levels and peaks of electrical intensity for the purposes of programme control.

Phantom power   Method of providing a working voltage to a piece of equipment, e.g. a microphone, using the programme circuit and earth (ground).

Phase distortion   The effect on the sound quality caused by the imprecise combination of two similar signals not exactly in phase with each other.

Pick-up   Gramophone record reproducing components which convert the mechanical variations into electrical energy, pu-arm, pu-head, pu-shell, pu-stylus.

Pilot   Programme to test the feasibility of, or gain acceptance for, a new series or idea.

Pinch roller   Rubber wheel which holds tape against tape recorder drive capstan.

Plug   Free advertisement.

Polar diagram   Graph showing the area of a microphone's greatest sensitivity. Also applies to aerials, transmitters and loudspeakers. Directivity pattern.

Popping   Descriptive term applied to 'mic-blasting', the effect of vocal breathiness close to microphone.

Post-echo   The immediate repeating at low level of sounds replayed from a tape recording. See *Print-through*.

Post office jack   See *Jack plug*.

Pot   Potentiometer. See *Fader*.

Pot cut   The cutting off of a tape during replay before it has finished by closing its fader — generally to save time. 'Instant editing'.

PPL   Phonographic Performance Ltd. Organisation of British record manufacturers to control performance and usage rights.

PPM   See *Peak programme meter*.

Prefade   The facility for hearing and measuring a source before opening its fader, generally on a tape or disc reproducer or studio mixing desk.

Prefade to time   The technique of beginning an item of known duration before it is required so that it finishes at a precise time, e.g. closing signature tune. Also known as back-timing.

Presence   A sense of 'realistic closeness' often on a singer's voice. Can be aided by boosting the frequencies in the range 2.8 kHz to 5.6 kHz.

Prime time   The best, most commercial hours of station output, e.g. 6.30 a.m. to 10.30 a.m.

Print through   The reproduction at low level of recorded programme through the magnetic interaction of layers of tape due to their close proximity while wound on a spool. The cause of post and pre-echo. Often the result of tight winding through spooling at high speed, and storage of recorded tape at too high a temperature.

Producer   The person in charge of a programme and responsible for it.

Promo   On-air promotion of station or programme. Also *Trail*.

PRS   Performing Right Society. Organisation of authors, composers and publishers for copyright protection.

PSA   Public Service Announcement — made by the station in the public interest, or on behalf of a charity or other non-commercial body — or at its own discretion for a private individual — for which no charge is made.

Puff   See *Plug*.

PZ (Pressure Zone) mic   See *Boundary effect mic*.

Q & A   Question and Answer basis of a discussion between a programme presenter and a specialist correspondent. Less formal than an interview.

Quad   Quadraphony or Quadrasonic. Four channel sound reproduction providing front and rear, left and right coverage.

Radio mic   Microphone containing or closely associated with its own portable transmitter. Requires no cable connection, useful for stage work, OBs, etc.

Ratings   Audience measurement relating to the number of listeners to a specific programme.

Reach   Term used in audience measurement describing the total number of different listeners to a station or service within a specified period. Most often expressed as a percentage of the potential audience. Weekly Reach. Also *Market Penetration, Patronage*.

Record head   The part of a tape machine which converts the electrical signal into magnetic variations and transfers them to the tape.

Reduction   Playback of a multi-track music recording to arrive at a final mix. Also mix-down.

Rehearse–record   Procedure most used in music recording or drama for perfecting and recording one section before moving on to the next.

Relay   (1) Simultaneous transmission of a programme originating from another station. (2) Transmission of a programme performed 'live' in front of an audience. See also *Deferred relay*. (3) Electrically operated switch.

Repro head   The part of a tape machine which converts the magnetic pattern on the tape into electrical signal. Reproduction or playback device.

Residual   Artist's repeat fee.

Reverberation   The continuation of a sound after its source has stopped due to reflection of the sound waves.

Reverberation time   Expressed in seconds, the time taken for a sound to die away to one millionth of its original intensity.

Reverse talkback   Communications system from studio to control cubicle.

Ribbon microphone   A high-quality microphone using electromagnetic principle. Bi-directional polar diagram.

Rip' n' read   News bulletin copy sent from a central newsroom generally by teleprinter or fax, designed to be read on the air without rewriting.

ROT   Recording Off Transmission. Recording made at the time of transmission, not necessarily off-air.

RSA   Response Selection Amplifier — Device for control of treble and bass frequencies, and 'presence'. See *EQ*.

Running order   List of programme items and timings in their chronological sequence.

Run through   Programme rehearsal.

Satellite studio   Small outlying studio, perhaps without permanent staff but capable of being used as a contribution point via a link with the main studio/station centre.

SB   Simultaneous Broadcast. Relay of programme originating elsewhere. Conveyed from point to point by system of permanent SB lines, or taken 'off-air'.

Script   Complete text of a programme or insert from which the broadcast is made.

Segue   The following of one item immediately on another without an intervening pause or link. Especially two pieces of music.

Share   Audience measurement term describing the amount of listening to a specified station or service expressed as a percentage of the total listening to all services heard in that area.

Sig tune   Signature tune. Identifying music at the beginning and end of a programme or regular insert.

Slug   Short identifying title given to a short item, particularly a news insert. Also catchline.

Solid state   Transistorised or integrated circuitry as opposed to that containing valves.

Sound-bite   A short piece of audio said to sum up a particular truth or point of view, able to stand alone.

Squelch   Means of suppressing unwanted noise in the reception of a radio signal. See *Noise gate*.

Sting   Single music chord, used for dramatic effect.

Stock music   In-house library of recorded music.

Stringer   Freelance contributor paid by the item. Generally newsman at outlying place not covered by staff.

Stylus   Small diamond tipped arm protruding from gramophone pick-up. In contact with the record surface it conveys the mechanical vibrations to the cartridge for conversion into electrical energy.

Sustaining programme   Programme supplied by a syndicating source or elsewhere to maintain an output for a station making its own programmes for only part of the day.

Sweep   The process of audience survey for a particular station or service within a given timescale.

Sync output   Programme replayed from the record heads of a multi-track tape machine heard by performers while they record further tracks.

Talkback   Voice communication system from control cubicle to studio or other contributing point.

Talks table   Specially designed table for studio use, often circular with an acoustically transparent surface and a hole in the middle to take a microphone.

Tape   Magnetic recording material.

Tapes   Journalist's term for copy received by teleprinter or paper strips on which such material is printed.

TBU   Telephone Balance Unit. Interface device used in conjunction with calls on a phone-in programme. Minimises risk of howl-round while providing pre-set level of caller to studio

presenter and vice-versa. Isolates public telephone equipment from broadcaster's equipment.

Telex   Teleprinter system of written communication.

Tie line   Any circuit pair connecting two programme areas, especially within the same building.

Tone   A test or reference signal of standard frequency and level. For example, 1 kHz at 0 dB.

Tracking weight   The downward pressure of a gramophone pick-up transmitted through its stylus.

Trail   Broadcast item advertising forthcoming programme. On-air promotion or 'promo'.

Transcript   The text of a broadcast as transmitted, often produced from an off-air recording.

Transcription   A high quality tape or disc recording of a programme, often intended for reproduction by another broadcasting service.

Transducer   Any device which converts one form of energy into another, e.g. mechanical to electrical, acoustic to electrical, electrical to magnetic etc.

Transient response   The ability of a microphone or other equipment to respond rapidly to change of input or brief energy states.

Two-way   Discussion or interview between two studios remote from each other. Also an interview of a specialist correspondent by a programme presenter. See also *Q & A*.

Uher   Trade name of portable tape recorder.

UHF   Ultra High Frequency. Radio or television transmission in the range of frequencies from 300 MHz to 3000 MHz.

UPI   United Press International. Syndicated news service.

VHF   Very High Frequency. Radio or television transmission in the range of frequencies from 30 MHz to 300 MHz.

Voice-over   Voiced announcement superimposed on lower level material, generally music.

Voice report   Broadcast newspiece in the reporter's own voice.

Vox pop   'The voice of the people'. Composite recording of 'street' interviews.

VU meter   Volume Unit meter calibrated in decibels measuring signal level especially as a recording level indicator.

Warm-up   Initial introduction and chat, generally by a programme presenter or producer, designed to make an audience feel at home and create the appropriate atmosphere prior to a live broadcast or recording.

Wavelength   Expressed in metres, the distance between two precisely similar points in adjacent cycles in a sound or radio wave. The length of one cycle. Used as the tuning characteristic or 'radio address' of a station. See also *Frequency*.

Wild or wild track   Term borrowed from film to describe the recording of atmosphere, actuality or effects at random without a precise decision on how they are to be used in a programme.

Windshield   Protective cover of foam rubber, plastic, or metal gauze, designed to eliminate wind noise from microphone. Essential on outdoor use or close vocal work.

Wind-up   Signal given to broadcaster to come to the end of his programme contribution. Often by means of index finger describing slow vertical circles, or by flashing cue light.

Wipe   To erase tape.

Wow   Slow speed variations discernible in tape or disc reproduction.

Wrap   A short piece of actuality audio 'wrapped around' by a vocal introduction and a back-announcement. Frequently used in news bulletins.

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