Vox Humana

UNTIL comparatively recently, probably the only public speaking ever heard by the majority of people, at least outside the cities, would be from the pulpit on Sundays. Churchgoing was a solemn, formal occasion and it would be appropriate that the minister should preach in a solemn, formal manner. The strong seventeenth century language would be all the more authoritative and exclusive, since it would be heard otherwise probably only at family prayers or at funerals, but combined with a classical scholar's rhetoric it must have sounded very impressive indeed. One wonders if the definition of a minister as "invisible six days of the week and inaudible on the seventh" could possibly have been valid in those days !

As secular institutions developed and people participated more directly in public affairs, other voices than those of the minister would be heard. Improved communications would induce less passive acceptance of traditional attitudes. Eventually it became possible to listen directly to the voices of Kings and philosophers, Prime Ministers, scientists and news readers. The human ear was quick to adapt to these new and exciting aural experiences. It appreciated the directness, naturalness and vitality of what it heard. The ear also became more discriminating and was quick to detect the spurious, the affected and the insincere in public figures.

In spite of the new challenge, in the Church the Pulpit Voice lingered on. Dare one suggest that it may be heard even today in some churches ? A monotonous repetition of descending cadences, delivered in a minor key with excessive nasal tone, may give the impression of satisfying the speaker's personal feelings of reverence (especially in prayer), but it can be meaningless to the listener, if not actually embarrassing. When the speech is unrelated to the vocal patterns accepted by the community, then what is said seems unrelated to experience and may be suspect, even if it is the Gospel, and the preacher a saint. It would seem that if the Church is to communicate fully, it must find a voice as well as a language which it can have in common with its members.

The Gothic Revival in church building has much to answer for. Architects planned without taking into account the practical requirements of the Reformed Church. It was not appreciated that a vast, high building with all its acoustic

peculiarities, though eminently suitable for the Mass and for the sonorous vowels of Latin, created impossible conditions for any speaker attempting to address a congregation in the vernacular. The limitations of the human voice were given secondary consideration. Unfortunately such buildings have lasted a long time and must to some extent be held responsible for the tradition of the "special" voice. The breakaway from the medieval tradition in church building was slow to come. In any case, no-one in their senses would want to lose the magnificent heritage of the Cathedrals however much of an anachronism they might be. Today, wherever one travels in this country and in Europe, one is immensely impressed by the imaginative and practical design of new churches, both Catholic and Protestant. The speaker is less remote, the gulf between pulpit and pew less formidable. A kind of "sound barrier" is being removed.

Acoustics, until comparatively recently, were a hit or miss affair, but quantitative measurements are now applied as a matter of course. Properties of materials are measured so that the reverberation time of a building can be controlled. For clarity of speech, ideally this should not exceed two seconds. A longer reverberation time causes overlapping of sounds at the normal rate of speech and so the speaker has to slow down unnaturally if he is to be intelligible. A shorter time produces an effect of strain and deadness and drains the voice of colour. The organ and the singing voice, on the other hand, need a response of about five seconds, so the architect has to compromise between the requirements of speech and music. It is possible to calculate the average coefficient of absorption of the clothes worn by a congregation in a full church, and to design the pew area itself to give the same coefficient. The acoustics are then unchanged for morning and for evening services, even if the faithful twenty still cluster round the back of the church. In a well designed church, strongly reflecting surfaces placed near to speaker and to listener enable the reflected sound to be almost synchronised with the direct sound, thus creating a reinforcement of great value. One feature still lacking in even the most modern churches is adequate illumination of the speaker. Lighting tends to be so discreet (a reaction, possibly, against "staginess") and so badly placed, that if the speaker sways, his face is distorted and the reaction to his preaching may well be psychedelic rather than spiritual. The public address system has also greatly helped the speaker's environment and removed much of the strain—though not the responsibility

of the speaker to project. An amplifier, however "hi-fi", is no substitute for the human voice and, it must be remembered, does not discriminate between vocal vices and virtues. The actual voice of the speaker should always be dominant and the amplifier's presence undetectable.

Given a favourable environment, the potentialities of the human voice can be exploited to maximum effect. This might conjure up an image of a Church ringing with histrionics and tones reminiscent of the flavour of sweet sherry. Such an image is so abhorrent to many that they tend to shy away from the idea of any connection between what is being said and how it is delivered. This is a pity, because such an attitude is likely to impose limitations just as serious as those imposed by the builders of unsuitable churches. A voice which obeys the laws of physics and physiology is likely to be a much more useful and versatile instrument than one which is treated either with apathy or brute force. Public speaking is not a fundamentally natural activity and nature has to learn to adapt to a vocal situation more demanding than ordinary conversation. Some of the more common faults such as stilted monotonous delivery are the result of failure to adapt.

In the process of phonation the vocal cords in the larynx are brough together closely enough for a current of air under pressure to cause them to vibrate and produce a note. This note in isolation is fairly insignificant, and not, in fact, what we recognise as voice at all, not, that is, until it is coupled with the series of notes produced in the cavities of the throat and mouth. These cavities, although remarkably small, are capable, when stimulated, of combining to give a very strong reinforcement of resonance to the original vocal note. The pitch of the latter, however, determines the pitch we consciously hear. We also hear, though not so consciously in terms of pitch, the fundamentals of the throat and mouth resonators, as they and their openings alter in size and shape. These notes we recognise as vowels. Further modification takes place when the sound is interrupted, partially or completely, in the oral resonator through movements of the tongue, lips and jaw. These interruptions themselves cause new frequencies to develop which are recognised as consonants. For example the sibilant "S" (the downfall of a well known Old Testament character) has a very high frequency and the hard-of-hearing, due to decreased frequency range, tend to lose that sound first—a point worth remembering in an elderly congregation. As the duration of consonants is

very much less than that of vowels, it follows that if speech is to be intelligible over a large area, articulation must be extremely clear and firm. In addition, to achieve audibility it is obvious that an adequate supply of breath must always be available to maintain the necessary pressure and the muscles of the resonators themselves must be allowed to function freely in response to the vocal note over as wide a range as possible, contributing vitality, colour and interest to the voice. Accessory resonance from the cavities of the skull, though not responsible for differentiating vowel sounds, nevertheless adds further richness and carrying power.

In our language, whatever the regional variations, we do recognise and employ certain speech melodies conveying significant meaning and mood ; and so subtle are these inflections that any distortion of their accepted values fails to ring true. In the adult voice a very close co-ordination is established between the ear and the movements of the larynx and resonators. As long as this co-ordination is under control all is well and speech will sound natural. Whether the voice settles down as bass or soprano, it will operate naturally within its own characteristic pitch range which varies from speaker to speaker. A close interaction also exists between air pressure and vocal tension of which, through his ear, the public speaker must be aware. Increased pressure from the lungs caused by the desire to increase volume is met reflexly by increased tension in the vocal cords. As a result, unless this is controlled, the pitch rises and the speaker is compelled to operate on a range of pitch totally foreign to his normal habit. His voice tires because of the unaccustomed tension, the resonators fail to tune in to the new range of vocal sounds and the subtle patterns that give significance to speech become distorted. It is true that a shriek will carry farther than a musically produced note, but it is a seriously mistaken theory that to raise the vocal pitch in a sustained run of speech causes anything but strain and fatigue to both speaker and listener. Speech will always be most co-ordinated, clear and natural if the range is that normally used by the speaker in his everyday speech.

Another point worth noting is that the listener tends to comprehend groups of words more quickly than unconnected syllables. It is always easier aurally to accept the phrase as the unit of speech. Many public speakers, in a mistaken effort at clarity, speak syllabically and the loss of relative stress and duration values results in less intelligibility rather than more. The basic rhythm and phrasing characteristic of

the speaker must be followed. Only in this way can he express lucidly what he has to say.

Assuming that the acoustics of the church are favourable, that the voice production is musical and the speech of an acceptable clarity, the public speaker is then free to devote some thought to a more elusive form of communication, that intangible quality which creates a rapport with the listener. How often in church when the voluntary is ended, do we hear the words " Let us worship God " uttered so perfunctorily as to suggest that the whole affair is a bore from the start ; how often do we feel that the minister is praying on his own account and not helping us to pray ; how often do we wonder why the Scriptures are read aloud at all since we would do better reading them on our own ? Are the children really gripped by that story of Johnnie and the lost boat and does the forthcoming coffee morning fill us with as much foreboding as it appears to fill the minister ? And finally do we treacherously join the ranks of those who consider twenty minutes a very long time to sit still when, at the end of it, we are sent away with a somewhat cursory benediction ? It is easy to be critical at the receiving end, but is there very, very occasionally a grain of truth here ?

The secret of effective and inspiring communication must surely include, at the time of speaking, whether in prayer, reading or preaching, complete understanding of the needs of the congregation and a sensitivity to their response, achieved through very thorough preparation and then—complete selflessness during the act of worship. Perhaps, in the final analysis, Vocation and Personality are the key to it all.

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