

Scientific Reactions to '*Humanae Vitae*'

Some preliminary comments and questions

by P. E. Hodgson

The evident concern of Pope Paul VI for the sufferings of mankind, his tireless labours for peace, and his willingness to adopt new initiatives have won him admiration and a respectful hearing far beyond the bounds of the Christian communion. The recent encyclical *Humanae Vitae* has attracted the attention of many scientists, partly because it is relevant to the population problem and partly because it contains a section specifically addressed to them. Many scientific periodicals concerned with science and human affairs have therefore devoted leading editorials to the encyclical, and many other scientists have commented on it in articles and letters.

Scientists are well aware that the population problem has arisen largely as a result of their work. Advances in medical science have decreased infant mortality, eliminated many killer diseases and increased the average life span, so that populations hitherto static or increasing slowly have begun to increase rapidly, thus out-running available food supplies and leading to widespread poverty and malnutrition. This is an agonizing situation that cannot be ignored and indeed all those who struggle to solve it are following the command of Christ to feed the hungry, give drink to the thirsty and clothe the naked. Familiar with the properties of the exponential function, scientists know that the only way to solve the problem, and to avert catastrophic famines in the next decades, is to find some way of regulating births. To be effective, the method chosen must be usable by poor, simple and illiterate people. Several possible methods are under investigation, and some limited success is being achieved.

The religious beliefs of the people concerned are not of interest to the scientist as such, except in so far as they help or hinder his efforts to raise living standards. He is particularly exasperated if these seem to lack all rational basis, like prohibitions on eating readily-available food. Some of the methods of birth control have also attracted religious opposition and, while he can appreciate prudent reserve on medical grounds, he finds it difficult to understand a purely religious prohibition of actions that appear to offer the only hope of solving the population problem.

For these reasons, many scientific and humanitarian bodies have petitioned the Pope in the last few years for a reconsideration of the Church's prohibition of artificial birth control. The development of theological discussion, especially after the Second Vatican Council, encouraged many to hope for some relaxation.

In this situation the encyclical *Humanae Vitae* came as a severe shock, and the reactions of scientists ranged from the reasoned disapproval of *Nature* and the medical journals to the bitter outburst in the *New Scientist*.

Few journals commented on the reasons for the decision that artificial methods of birth control are illicit, an exception being *World Medicine*, which gave an imaginary dialogue between a theologian and a scientist.¹ Noting that the 'natural law' is 'always an ephemeral concept to scientists continually unearthing evidence that "nature" is a dynamic, constantly evolving entity', the scientist asks 'why the "rhythm" method of contraception, which his own studies show him is capable of causing illness, is regarded as "natural" while pharmaceutical and surgical advances which are products of man's imagination and creative energy—products, in short, of man's "natural" brain—are regarded as unnatural interference'. The theologian can only reply that the pill is against the natural law, which brings the argument back to its starting place. It is one of the ironies of this dialogue that the theologian appears to think of man in a static, purely biological way, while the scientist considers him as an evolving spiritual-biological entity.

It is, however, now common ground that the natural law arguments are insufficient to demonstrate the intrinsic evil of artificial birth control and, as Dr Marshall remarked in *The Times*, this was even admitted by the minority group of theologians in the Papal Commission, of which Dr Marshall was a member.² The decision thus rests on authority alone.

The probable consequences of the encyclical attracted most comment. *Nature* observed that there is 'no question that this pronouncement could easily turn out to be a powerful brake on the steady process of improvement which has now begun in less fortunate parts of the world'.³ The burden is likely to be felt most heavily in Latin America, where the traditional opposition of the Church to family planning programmes is likely to be powerfully reinforced. Since people there evidently want to restrict the size of their families, and as the State, under pressure from the Church, does not provide the means, the result has been a rise in the number of abortions to epidemic proportions. In Chile, for example, there is one illegal abortion for every two live births. The abortion rate for the whole of Latin America is estimated to amount to 25-30 per cent of all live births. In 1965, 20 per cent of the beds in Chilean maternity hospitals were occupied by patients suffering from the effects of illegal abortions, and 39 per cent of maternal deaths were due to the same cause. Faced with this situation, the Chilean Government last year announced a family planning campaign, and this lead has been followed by many other governments. The change was reflected in

¹Editorial, 27th August, 1968.

²Letter on 31st July, 1968; article by Dr Marshall on 3rd August, 1968.

³Editorial, 3rd August, 1968.

the words of President Camargo of Columbia in 1965: 'For us, the human solution, the Christian solution, the economically and politically sound solution is birth control' (*The Lancet*, leading article, 10th August, 1968). Now Governments will be under strong pressure from the Church to abandon these family planning campaigns. If they do so, a further increase in abortions seems inevitable. The encyclical may also restrict the interest of the World Health Organization in birth control, as Catholic delegates, who only recently withdrew their opposition, may be instructed to maintain it (*Nature*). If family planning legislation is hindered as a result of the encyclical, then poor people will be affected by it, even if they are not Catholics. In these circumstances, 'governments must surely take steps to safeguard the rights of non-Catholics, even when these are a minority' (*Nature*).

It was the probable social consequences of the encyclical that led the *New Scientist*, in an editorial entitled 'A Holy Tyrant', to exclaim: 'Bigotry, pedantry and fanaticism can kill, maim and agonize those on whom they are visited just as surely as bombs, pogroms and the gas chamber. Pope Paul VI has now gently joined the company of tyrants, but the damage he has done may well outclass that of all earlier oppressors' (1st August, 1968).

The sharpest criticism was however directed at the argument used in the encyclical that artificial birth control 'opens up a wide and easy road towards conjugal infidelity and the general lowering of morality'. This, as Dr Marshall pointed out in *The Times*, is a sociological assertion for which there is no scientific evidence. On the further statement in the encyclical that it leads men to consider their wives as 'mere instruments of selfish enjoyment', *World Medicine* remarked that the assertion 'casts a completely unjustified slur on thousands of happily married people who practise contraception'.

The encyclical directly addresses scientists when it asks them 'to provide a sufficiently secure basis for a regulation of birth, founded on the observance of natural rhythms'. This invitation was analysed in *The Tablet* by Sir Francis Walshe, who pointed out that 'the only means by which a known and determined regulation of births can be secured is in *replacing* the often variable and unpredictable natural rhythms (the accurate ascertainment of which is, in any case, not within the competence of uneducated women in underdeveloped countries) by *imposing*, by some as yet unknown medical substance —another "pill"—an *artificial* rhythm of known duration and periodicity'. But we 'cannot impose a medically-planned rhythm and still retain the "natural rhythms"', so it seems that the encyclical asks the impossible. Furthermore, it is not clear why the rhythm method must be improved if the sexual act must always remain 'open to the transmission of life'.¹ *World Medicine* asks whether 'the rhythm method is acceptable only because it carries a chance of

¹Letter on 7th September, 1968.

failure and are "men of science" being asked merely to shorten the odds? Why bother when we already have the Pill?"

It is evident that the experts on the papal commission must have provided all the relevant information on the medical and social aspects of sexual behaviour. By ignoring the majority recommendation, 'the Pope has rejected the results of scientific investigation into the nature of human sexuality and, against the background of this contemptuous dismissal of scientific research, his exhortations to doctors and "men of science" are not only arrogantly presumptuous, but also gratuitously insulting' (*World Medicine*).

The reactions to the encyclical as a whole were hardly complimentary: 'a pronouncement that seems unnecessary, which is certainly needlessly harsh in tone, and which will otherwise be remembered as an exceedingly illiberal development' (*Nature*); 'a chill shock', 'a mistake that will cause guilt and suffering' (*The Lancet*); 'a headlong flight from reality' (*Pulse*); 'one of the most reactionary anti-scientific documents produced this century' (*World Medicine*). The only hopeful and constructive note was struck by *The Lancet* with the remark that 'the outcry that has greeted it must hasten the day when the Magisterium delivers a more modern and helpful message'.

It is thus difficult to avoid the conclusion that the encyclical has not been too well received in scientific circles, and that it has not enhanced the reputation either of the Pope or of the Church.

There are three possible explanations of this situation, namely inadequacies in the encyclical itself, in the communication of its contents to scientists, and in the scientists themselves. Concerning the latter, it is possible that many scientists do not share many of the religious beliefs underlying the encyclical, but nevertheless they do share its fundamental concern for the well-being of mankind. The opposition to the encyclical does not come from areligious hedonists but from responsible men who are devoting their lives to the care of those troubled in mind and body, and to the raising of their living standards.

The way the encyclical was communicated to the Church and the world can hardly be described as satisfactory. Many bishops first heard of it from the press, and their comments were sought before they had seen, let alone studied, the full text. The English version first published in this country contained significant omissions, and is manifestly an imperfect translation of an Italian original. On a more fundamental level, it has been argued that the latin mind does not expect its enactments to be taken rigorously, and it is always understood that the rules may be elastically applied to particular cases. If this is the case, it is the responsibility of the local episcopate to point it out. Such a serious misunderstanding would have been corrected by now. Serious though the inadequacies in communication may be, it does not seem possible to maintain that the encyclical

has been radically misunderstood by the scientists who have commented on it.

The remaining possible explanation of the adverse comments is the content of the encyclical itself. The relevance and accuracy of the criticisms deserve detailed study, but some provisional conclusions may be drawn from the initial reactions. Thus it would appear desirable in future that when a moral decision is based on authority alone, this should be made clear from the start, and no attempt made to support it by invalid philosophical or scientific arguments. If it is likely to be controversial, an encyclical should be so phrased as to meet the more obvious objections, and to convince readers of its sincerity, even if they do not accept its conclusions. If scientific data are used, scrupulous care should be taken to ensure their accuracy by consulting responsible authorities and, as a matter of prudence as well as courtesy, these should assist in the preparation of the text. Finally, scientists should not be called upon to undertake activities they consider ridiculous, and in a way they find insulting.

The studies of the Papal Commission were certainly conducted in a very thorough way, and experts in the relevant fields of medicine, demography, sociology and economics participated throughout. This ensured that the final report of the Commission was scientifically accurate, and took into account all the relevant data in a balanced way. It was a unique experiment in the life of the Church, and the result was magnificently successful.

The encyclical, however, shows little trace of this work, and one could almost say that it could have been written in substantially the same form if the Commission had never existed. The scientists and others who laboured so long and fruitfully might be forgiven if they were to feel that their time had been wasted. It will not be easy in future to find scientists willing to spend months, if not years, working in this way if it seems likely that the results of their work will be simply ignored. This is one of the most serious aspects of the whole question, for it is only by a continuous dialogue between scientists, theologians and the teaching authority of the Church that science will become fully assimilated into the life of the Church. Until this is done, the Church will inevitably appear to many to be preoccupied with an abstract world of its own, remote from the trials of men.