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## Some Thoughts on Religion and Science

*The years behind us*

Robert Browning, writing in 1864, five years after the publication of Darwin's *Origin of Species*, thus sums up his impression of the popular reaction to the stirring events of the times:

The candid incline to surmise of late  
That the Christian faith proves false, I find:  
For our Essays-and-Reviews' debate  
Begins to tell on the public mind,  
And Colenso's words have weight.<sup>1</sup>

Darwin's epoch-making book is not specifically mentioned in this verse, but there can be no doubt that it, more than the composite volume entitled *Essays and Reviews*, which appeared in 1860, or than Bishop Colenso's critical commentary *On the Pentateuch*, which was published in 1862, accounted for the 'surmise' of the falsity of the Christian faith.

It was more than a surmise. It almost bordered on panic. It is difficult now to conceive the horror with which Darwin's theory of evolution filled the minds of the vast majority of English people who were at all religiously inclined. They were certain that rejection of a belief in the creation of the universe by six divine acts on six days of a single week destroyed the foundations of religion and morality. It is probably true to say that no book ever published, before or since, caused so much consternation in the public mind as Darwin's *Origin of Species*.

It is important to note that, while the religious aspect of the controversy of a hundred years ago is now alone remembered, the main opposition to Darwin's views came from his fellow-

<sup>1</sup> *Gold Hair: a Story of Pornic.*

scientists. The permanence of species was a doctrine held by practically all the leading naturalists and geologists of the time. No blame therefore can reasonably be attached to Christians if they accepted the prevailing judgement of men of science, and joined with them in the condemnation of a novel and doubtful theory.

It is also important to note that a few churchmen, including some of the most distinguished, welcomed Darwin's theory from the start. Clergymen like R. W. Church, afterwards Dean of St Paul's, A. P. Stanley, afterwards Dean of Westminster, Charles Kingsley the novelist-historian, and F. J. A. Hort the eminent theologian, were unequivocal in their support, as letters in their biographies amply prove. But unfortunately they did not speak out, and their views were largely unknown to their contemporaries.

This left the controversial field, as far as the representatives of religion were concerned, to champions who, however earnest and well-meaning, were ill-equipped for the fray, believing as they did that the cosmology which was contradicted by Darwin's theory was an integral part of the Christian religion.

Of these champions the most famous was the redoubtable Samuel Wilberforce, Bishop of Oxford, who made up in eloquence for what he lacked in insight, and in deftness for what he lacked in knowledge. In many respects he was an able man, but he had a closed mind and was impervious to new light. In particular, he allowed his skill in debate to lead him to make statements which, however much they won applause, did not impress the more thoughtful of his hearers, and have not added to his reputation at the bar of posterity.

'If the theory of evolution is true, the Book of Genesis is a lie', he thundered, and no one could object to such a downright declaration of his conviction, however much one might dissent from it. But when he went on to insinuate 'our suspected cousinship with the mushrooms', and to ask 'is it credible that all favourable varieties of turnips are tending to become men',<sup>2</sup> one cannot but feel that such arguments, however laughter-provoking, were unworthy of the man and of his theme.

<sup>2</sup> Gertrude Himmelfarb, *Darwin and the Darwinian Revolution*, p. 225.

Everybody knows how this tendency to score smart debating points led him to disaster in the celebrated encounter with T. H. Huxley at the assembly of the British Association in 1860. There is no need to repeat the oft-told story here; suffice it to say that it showed him at his worst, just as in the following passage from his pen we see him at his best: 'To oppose facts in the natural world because they seem to oppose Revelation is but another form of the ever-ready feeble-minded dishonesty of lying for God, and trying by fraud or falsehood to do the work of the God of truth'.<sup>3</sup> How he could square the sentiments of this admirable statement with many other of his utterances – such as those already quoted – it is difficult to see.

Leslie Stephen, writing of the famous encounter between Wilberforce and Huxley, says that 'it was one incident in a remarkable outburst of intellectual activity. The old controversy between scientific and ecclesiastical champions was passing into a new phase . . . and the intellectual issues to be decided were certainly no less important than those which had presented themselves to Erasmus and Luther'.<sup>4</sup> What were these issues?

In answering this question we may follow the guidance of the former Dean of St Paul's, Dr W. R. Matthews. In a sermon in St Paul's Cathedral on the occasion of the tercentenary of the Royal Society in 1960, Dr Matthews made reference to the controversies on evolution of a century ago, and said: 'Very few educated Christians today could sympathize with the stand taken then by the representatives of orthodox Christianity . . . Yet these men were intelligent and honest . . . What then was the cause of their violent reaction against the new hypotheses? They believed that they were defending a truth so precious and so fundamental that any apparent attack upon it, or weakening of its authority over men's minds, must be repelled. In my opinion, fundamentally they were right. The belief in God the Creator and His revelation held a truth that mankind cannot abandon . . . But they were wrong, disastrously wrong, in thinking that this truth depended upon the literal accuracy of the Creation

<sup>3</sup> Review of *Origin of Species* in *Quarterly Review* of July, 1860, Quoted by Lack, *Evolutionary Theory and Christian Belief*, p. 15.

<sup>4</sup> *Studies of a Biographer*, p. 188.

myths in Genesis. They were wrong too in thinking that the Bible was a source of scientific knowledge'.<sup>5</sup>

This is a well balanced appraisal of the strong and weak points in the position taken up by the protagonists of religion in the controversies of a hundred years ago. In passionately contending for a belief in a divine Creator and His revelation 'fundamentally they were right', as Dr Matthews says. This is a truth which religion cannot surrender. But they did not discern that this truth was not linked up with the interpretation of the early chapters of Genesis then taught by the Church and universally accepted by Christians.

Thus the conflict between science and religion a hundred years ago was based on misunderstandings – misunderstandings on both sides. But that does not alter the fact that the conflict was very real and deep. And it was to survive for many years – indeed, it has not entirely ceased even yet. As late as 1877 a late Pope described Darwinism as 'a system which is repugnant at once to history, to the tradition of all peoples, to exact science, to observed facts, and even to Reason herself'.<sup>6</sup> This sweeping and categorical condemnation of course settled the matter for Roman Catholics, and not many Protestants would have demurred to its wholesale strictures.

Here and there cautionary and steadying voices were heard, as for instance when George Eliot wrote, in a letter of 5 Dec., 1859: 'To me the Development theory, and all other explanations of processes by which things came to be, produce a feeble impression compared with the mystery that lies under the processes'.<sup>7</sup> But these voices had little or no effect on the popular conception of the issues involved in the conflict. The man in the street, or at any rate the average thoughtful citizen, in trying to make up his mind in the confusion of the conflict, was bewildered as to the decision he should make.

On the one hand there were the scientists who seemed ruthlessly determined on the destruction of all that was regarded as sacred, and whose position, or at any rate the consequences of

<sup>5</sup> Quoted in *A Threefold Cord*, by Lord Samuel and H. Dingle, p. 226.

<sup>6</sup> Barnes, *Should Such a Faith Offend*, 132.

<sup>7</sup> Quoted in *Life*, 2. p. 110.

whose position, is voiced in the grim eighteenth century lines of James Thomson :

I find no hint throughout the Universe  
Of good or ill, of blessing or of curse;  
I find alone Necessity supreme.<sup>8</sup>

At the other extreme were the ecclesiastical writers who vociferously asserted that Darwinism was entirely opposed to 'everything which the Creator Himself has told us in the Scriptures of the methods and results of His work'.<sup>9</sup>

In between these two extremes there were the well-meaning but futile 'reconcilers', who endeavoured to make 'the best of both worlds by urging what amounted to 'a tacit agreement to use words with double meanings'.<sup>10</sup> It is no wonder that uncertainty and confusion were the characteristic mental notes of the day.

For the forty years following the appearance of the *Origin of Species* in 1859 – that is, for the remainder of the nineteenth century – the Christian found himself and his faith assailed by vigorous and relentless criticism in the name of science. Darwin himself, who survived for the first half of the period, took no part in such controversies; but some of his followers would have been satisfied with nothing less than the total destruction of religious faith.

Not only were the religious bases of morality criticized in the name of scientific humanism, but religion itself was discounted as merely subjective. Indeed, some scientists went so far as to describe all spiritual phenomena as pathological.

Confident assertions were made by those who maintained that the physical sciences had the answer to everything, and that in a mechanically organized universe of cause and effect there could be no place for God.

When those who held that there was 'no place for God' were pressed to say what then was the driving impulse behind evolution, they replied by such question-begging epithets as 'Universal Mind', 'Life Force', 'Creative Evolution', 'Emergent

<sup>8</sup> *The City of Dreadful Night*.

<sup>9</sup> *The Bible Today*, p. 64.

<sup>10</sup> Cyril Bibby, *T. H. Huxley*, p. 253.

Evolution', 'Holistic Urge', and so on. But question-begging though these epithets were, they sounded impressive, and many who ought to have perceived their hollowness were deceived by them.

The prevailing belief among those scientists who flouted the divine-intervention idea of Creation – and these were the majority – was that living matter arose from non-living matter under peculiar physical and chemical conditions prevailing far back in the earth's past, and not since repeated. This was a theory easy to formulate, but obviously difficult to substantiate.

When it came to man and his origins, the general view of the time, shared by not a few scientists, including such eminent ones as A. R. Wallace and St George Mivart, was that while the human body was evolved by natural means from other animals, the soul came by a special divine creation.

Other scientists, and by far the greater number, followed the lead of Darwin in arguing that man's mental and spiritual qualities were derived from rudiments present in the lower animals.

The interests of true religion were not helped by the attempts of certain well-meaning Christians – akin to the 'reconcilers' of whom mention has been made – to 'harmonize' a quasi-science with an attenuated (and sometimes with an extravagant and distorted) religion.

Of these attempts one of the most deplorable was that of those (Philip Gosse, for instance) who countered the argument that the evidence of the rocks refuted the Bible story of Creation by the extraordinary theory that God Himself had interleaved the strata and put in the fossils.

Still less, if possible, were the interests of religion helped by the lamentable sophistry of other 'defenders of the faith,' among whom Cardinal Newman may be mentioned. Newman, with reference to the assertion of the Bible that the sun moves round the earth, while science holds that the earth moves round the sun, said that 'we shall never know which is right until we know what motion is'.<sup>11</sup> Which is surely one of the most flagrant instances of obscurantism on record.

<sup>11</sup> A. L. Rowse, *Studies in Social History*, 27.

'In the 1890s', writes Bishop Stephen Neill, 'it was by no means easy for an intelligent man to be a Christian', and that is by no means an overstatement. 'Yet it was precisely in this decade', the bishop goes on to say, 'that the tide began to turn.'<sup>12</sup> As the nineteenth century merged into the twentieth, Darwinism showed signs of losing much of its hold on many scientific minds. Some biologists – Driesch, for instance – wrote of 'the decline of Darwinism', and even said that 'Darwinism is dead'.<sup>13</sup> This decline was largely due to the new discoveries in genetics and the mutation theory which dated from about 1900. Later, as biological knowledge increased, Darwinism revived in prestige, and as the twentieth century advanced won back more than its previous position in the acclaim of the learned, and in popular esteem.

An interesting instance of how Darwinism was regarded by a devout and able mind at about this time is afforded by the case of Edward Wilson, the scientist of Scott's ill-fated expedition to the South Pole in 1914. 'The works of Darwin', we are told by Wilson's biographer, 'were for him almost a second Bible. He saw life at every phase as one, and in the law of evolution a principle which gave to all life a meaning and value, and therewith a key to unlock the door to the meaning and value of life in the realm of the spirit. From the dawn of creation when the life-giving Spirit brooded over the formless abyss, to the incarnation of the Son of God when the Life was made manifest in terms of human personality at its topmost reach, he perceived the mysterious operation of the same eternal law . . . an imminent purpose ceaselessly at work.'<sup>14</sup> It is just another illustration of a growingly common outlook among intelligent Christians in the early years of the twentieth century.

### *The situation today*

'Nothing would more astonish the materialist philosophers of the last four decades of the nineteenth century,' says George

<sup>12</sup> *Twentieth Century Christianity*, p. 15.

<sup>13</sup> *Science and Philosophy of the Organism* (Gifford Lectures, 1907) p. 340.

<sup>14</sup> George Seaver, *The Faith of Edward Wilson*, p. 7.



Sampson, writing in 1941, 'than the changed attitude of scientific speculation towards the intangible element in human aspiration. With the advance of research into regions undreamt of there has come a lessening of the confident agnosticism and materialism that marked the period of Huxley and Tyndall.'<sup>15</sup>

'Confident agnosticism and materialism' was indeed a marked feature of the period referred to, while in the same period 'the intangible element in human aspiration' was by the protagonists of science largely ignored, or even denied. Slowly but surely the situation changed as the twentieth century advanced. Science became less aggressive, and in the 1930s we find an eminent astronomer (Sir James Jeans) asserting that 'the universe shows evidence of a designing and controlling power that has something in common with our own individual minds'.<sup>16</sup>

Even more striking, as an indication of the change in the climate of scientific opinion, is the confession, dating from the same time, of J. B. S. Haldane, 'I am not myself a Materialist because, if Materialism is true, it seems to me that we cannot know that it is true. If my opinions are the result of the chemical processes going on in my brain, they are determined by the laws of chemistry, not those of logic'.<sup>17</sup>

This discerning statement – which incidentally shrewdly diagnoses the inherent weakness of the materialist position – illustrates one aspect of the better relations which had come about between science and theology, viz. the admission on the part of scientists that the limits of scientific 'explanation' of nature are soon reached, and that the ultimate causes, forces, conditions of nature are as unexplained, as full of mystery as ever.

In equal part the better relations of theology and science were the outcome of the abandonment of false claims on the part of theologians, and the recognition that there is no 'Bible revelation' in matters of science. Many of the questions which troubled the pious in the middle of the nineteenth century were seen to be harmless enough in the light of fuller knowledge and a different perspective. In particular, difficulties which had for

<sup>15</sup> *Concise History of English History*, 886

<sup>16</sup> *The Stars in their Courses*, p. 134.

<sup>17</sup> *The inequality of Man*, p. 157 (Pelican).

long afflicted and distressed devout minds over the creation stories in Genesis ceased to be troublesome, were seen to be unnecessary, because based on a complete misunderstanding of the scope and aim of the sacred writings.

Viscount Samuel may here be adduced as describing, in a striking passage, the position arrived at by an increasing number of scientists in the period immediately prior to the second world war: 'In so far as it [science] accepts, and emphasizes, the principle of causality, and in so far as it perceives that the universe, as we see it, cannot be self-caused, science leads inevitably to the conclusion that there must be a casual factor not comprised within our view of the universe. If this be Deity, then science has made atheism impossible'.<sup>18</sup>

In a later book the same author, referring to the volume just quoted, says that he wrote it 'less with a view to writing a book than for the sake of clarifying my own ideas. At the end I found I had come a long way from the negations of my earlier days; was less of an agnostic; definitely anti-materialistic; convinced that the universe is charged with mind and purpose'.<sup>19</sup>

That Lord Samuel here speaks for a large number of his contemporaries in science and philosophy is confirmed by the words of another recent writer: 'It is a popular delusion to suppose that the vast majority of scientific men today are atheists'.<sup>20</sup>

It may be said then with confidence that the conflict between religion and science is much less strident at present than it was. But it would be going too far to say that the gulf between the two is completely bridged. There are still obstacles on both sides.

Of these obstacles one of the most real and serious is that so many scientists are almost completely out of touch with modern theological thinking. Prof. John Baillie truly says that 'many men criticize and even oppose Christianity without ever having taken much trouble to discover what it is all about . . . It is remarkable what nonsense is spoken about it even by men of the highest distinction in departmental fields of knowledge'.<sup>21</sup>

<sup>18</sup> *Belief and Action*, p. 33 (Pelican).

<sup>19</sup> *Memoirs*, p. 251.

<sup>20</sup> A. F. Smethurst, *Modern Science and Christian Beliefs*, p. 37.

<sup>21</sup> *Invitation to Pilgrimage*, p. 13.

'Nonsense' is not too strong a word. Take this testimony from a keen and experienced observer of modern life: 'How often one has met otherwise intelligent people who have dismissed the whole Christian Faith because, for instance, they cannot believe that the first chapter of Genesis is true to science, that Jonah was swallowed by a whale, that unbaptized babies go to hell, or that heaven is above the bright blue sky'.<sup>22</sup>

There can be no doubt that these strictures can be substantiated up to the hilt. The intelligent agnostic, with his prejudices against the churches and all their ways, very rarely takes the trouble to look behind the tradition and the surface appearance in order to find out the meaning of essential Christianity. Consequently his attacks against Christianity are nearly always ill-informed or out-of-date. Someone has said that the information on which many a criticism of Christianity nowadays is based has apparently been obtained from the critic's washerwoman. It would be still nearer the mark to say that the source was the washerwoman's grandmother. Bishop Gore speaks with complete justification of 'really distinguished men' who 'exhibit an ignorance of Christian thought at its best, whether ancient or modern, the like of which in the treatment of science would expose a theologian to well-merited ignominy'.<sup>23</sup>

But while it is undoubtedly true that scientists are largely out of touch with modern theological thinking, further out of touch than theologians are with science, this is not to say that the representatives of religion are to be exonerated from blame for the continuing conflict between the two. There are a number of sinister trends in recent theological writings which are putting back the clock of progress. Religious obscurantism, which has caused so much mischief through the centuries, is again rearing its unattractive head. The ideas associated with the school of Karl Barth, coupled with the effects of the deliberately anti-scientific and anti-rational teaching of Kierkegaard, whose influence, after long eclipse, seems to be on the increase, are tending to widen the gulf between scientists and theologians.

In particular, there is in our day a revival of views of Scripture,

<sup>22</sup> J. B. Phillips, *God our Contemporary*, p. 76.

<sup>23</sup> *Philosophy of the Good Life*, p. 270 (Everyman).

which substitute a belief in Biblical inerrancy and verbal inspiration for a belief in (to quote a phrase from C. S. Lewis) 'God's gradual and graded self-revelation',<sup>24</sup> and which are an ominous threat to a better understanding between science and religion, being flatly contrary to the great principle laid down long ago by Bishop Butler, that Reason is 'the only faculty we have wherewith to judge concerning anything, even Revelation itself'.<sup>25</sup>

What then are the prospects of the future as far as the relations between science and religion are concerned? Our answer to this question must take into consideration certain characteristics of our day and age, in addition to those already mentioned.

J. B. Priestley has said that we live in the 'most blankly secular and material society the world has known since Hadrian's Rome'.<sup>26</sup> There may be an element of exaggeration in this statement, but there is at least this amount of truth in it: that the scientific discoveries of the twentieth century have resulted in a large scale ignoring of Christianity as redundant and irrelevant. This is the real threat to religion at present: not so much an active and overt opposition, but a widespread indifference, the indifference alike of the 'intelligentsia' and of the masses.

There is also on the part of a small but by no means negligible coterie of philosophers a denial of the possibility of all objective knowledge. This phase of thought is exemplified in the scepticism of Kierkegaard, who refused to grant either to religion or to science the claim to belong to the category of truth.

These are disquieting features of the life of our day, but they make even more important the fact that, as the late Canon Raven said, 'the attempt to interpret man's religion and man's science in terms not only mutually intelligible but also mutually interdependent, remains the great cultural task of our time'.<sup>27</sup>

This task must be undertaken. We must resolutely aim at 'that synthesis of religion, philosophy and science in which alone the

<sup>24</sup> *Reflections on the Psalms*, p. 114.

<sup>25</sup> *Analogy of Religion*, Part I, chap. 3.

<sup>26</sup> *Thoughts in the Wilderness*, p. 123.

<sup>27</sup> Quoted in *Modern Churchman*, Sept. 1950, p. 214.

enquiring mind can find a resting place'.<sup>28</sup> And in spite of all the difficulties that beset us, there is reason to believe that this synthesis is no mere dream, but a practical possibility; that there are good prospects of an increasing *rapprochement* between the two ancient combatants whose conflict is the theme of this essay.

If this is to come about, there must be adjustments on both sides. The bridge over the gulf between science and religion must be built from both ends. 'The only possible solution of the conflict between science and religion,' says Sir Julian Huxley, 'is for religion to admit the intellectual methods of science to be as valid in theology as everywhere else, while science admits the psychological basis of religion as an ultimate fact.'<sup>29</sup> It is along these lines of mutual respect, and mutual recognition, and mutual accommodation, that the road to a better understanding is to be constructed.

But when we speak of 'the intellectual methods of science' there is an important caveat. We are not bound to accept the latest scientific theories as necessarily true. If we did, we should soon be in difficulties, for science itself is in the melting pot. 'Hardly any man of science, nowadays,' says Bertrand Russell, 'sits down to write a great work, because he knows that, while he is writing it, others will discover new things that will make it obsolete before it appears.'<sup>30</sup>

As against this feature of science, its swift changefulness, it must be borne in mind that religion, on the other hand, deals with realities which in their very nature are eternal and unchangeable.

Haldane, after alleging that 'all religions are full of obsolete science of various kinds, especially obsolete cosmology and obsolete psychology', goes on to say – and his words are the more noteworthy as coming from an avowed agnostic – that 'it may be that there is a core in religion which is independent of scientific criticism. I am rather inclined to take that view'.<sup>31</sup>

It is this 'independent core' in religion that is the vital thing

<sup>28</sup> F. Younghusband, B.B.C. Address, Feb. 8, 1952.

<sup>29</sup> *Religion Without Revelation*, p. 116.

<sup>30</sup> *Unpopular Essays*, p. 90.

<sup>31</sup> *The Inequality of Man*, p. 132 (Pelican Edn.).

about it. It is independent not only of scientific criticism but of all the acids of modernity. These acids may dissolve the superstitious accretions which have gathered about theological speculation through the ages, but nothing can destroy the basic need which led to the emergence of religion, and is a guarantee of its continuance.

With reference to the destructive agency of science, some words of an eminent Gifford Lecturer of a former day are apposite: 'Science has been a destroying spirit, and has filled the temple of truth with ruins. But the things she has destroyed were only idols. Religion . . . she has placed on a firmer throne than ever'.<sup>32</sup>

This may not always have been her conscious purpose, but certainly, when all allowance has been made to the contrary, this has been the ultimate result of her efforts.

One ominous feature of the human situation in this mid-twentieth century is often pointed out, and its importance in relation to our subject calls for a mention of it here. Progress in physical science has given to man powers he is at present morally unfitted to use. His advance in technical attainment has stripped his spiritual capability, and the outcome is the state of the world as we see it today – torn with apprehension and dread lest the future may involve mankind in wholesale destruction.

At the beginning of the century George Gissing spoke of science as 'the remorseless enemy of mankind, restoring barbarism under the mask of civilization, darkening men's minds and hardening their hearts'.<sup>33</sup> At the time this was regarded as the gloomy jeremiad of a disappointed man. Nowadays we can see that it was a remarkable instance of insight and foresight. Equally remarkable was the prescience of Samuel Butler a generation earlier. In his *Erewhon*, machines were rigorously suppressed on the ground that they were bound to evolve and destroy their makers. Butler's first readers thought he was having a joke at the expense of Darwin, with whom he loved to cross swords. But Butler was nearer the mark than his contemporaries dreamed, or than he himself knew, for modern man is being

<sup>32</sup> Gwatkin, *The Knowledge of God*, ii. p. 278.

<sup>33</sup> *Private Papers of Henry Ryecroft*, p. 268.

mastered by the machines of his own devising. He is in the lamentable predicament of seeking ways of escape from the terrors of his own inventions. Even Qoheleth in the Old Testament seems to have had a pre-view of what has come to pass in our day, or at any rate his ironic words may be quoted in this connection: 'God made man upright; but they have sought out many inventions'.<sup>34</sup>

There is no other way of escape from this tragic modern dilemma than a resolute determination to give religion the priority in human endeavour. Gone are the days, as surely everybody must now realize, when men were so obsessed with scientific achievement that they imagined that by bigger and better technical strides all the problems of the world would be solved. The truth is, and all except the wilfully blind can see it, that these problems are only aggravated by technological advance *per se*.

'Seek ye first the kingdom of God,' said Jesus, 'and all these things shall be added unto you.'<sup>35</sup> That is a word of ultimate wisdom. All else will fall into place when religion has the first place. Not immediately, of course – there is no quick road to the millenium – and not for a long time it may be, but inevitably all the same. And the function of science, its *raison d'être*, is to act as religion's lieutenant, its co-worker in bringing in a better day.

In studying the past, says Arnold Toynbee – perhaps our chief living authority on this theme – we should 'relegate economic and political history to a subordinate place, and give religious history the primacy'. And then he gives his reason for this dictum: 'For religion, after all, is the serious business of the human race'.<sup>36</sup>

When religion is so regarded, and science enlists under its banner, and marches forward in step with it, we shall have real reason for optimism concerning the future of mankind.

At the same time religion must manifest a reciprocal respect for the ministry of its fellow-worker. Every new theory advanced by science, even while it is unproved and unlikely, should be

<sup>34</sup> *Ecclesiastes*, vii. 29.

<sup>35</sup> *Matthew*, vi. 33.

<sup>36</sup> *Civilization on Trial*, p. 94.

welcomed with trustfulness and open-minded expectation. Not only as a possible addition to our knowledge of the wonder of the universe, but also as an enhancement of our conception of what St Paul calls 'the manifold (Πολυποικιλως, much varied, many sided, infinitely diverse) wisdom of God',<sup>37</sup> as seen in the marvel and complexity of His works in nature.

By way of illustration, we may mention Prof. Hoyle's recent hypothesis of 'continuous creation', a theory which had a dubious reception on its introduction, especially from religious critics. It is not enough to say, in the words of one who was equally gifted both as scientist and theologian, that this theory 'presents no difficulties for Christian people, and is in no way irreconcilable with Christian doctrine'.<sup>38</sup> That is true, but it is not the whole truth. Surely Hoyle's conception gives a wider and deeper idea of the activity of God. It suggests that the travail of His creative energy did not cease with the sixth day of the Genesis 'week', but has continued through all the aeons of time. It underlies, may we not say, the truth enunciated by the great Teacher when he said 'My Father worketh even until now' (John v. 17, R.V. Cf. Moffatt: 'My Father has continued working to this hour'. R.S.V.: 'Is working still'. N.E.B.: 'Has never yet ceased His work.').

One of the truest things ever said concerning the conflict between science and religion comes from the pen of Sir William Bragg: 'Some people say that religion and science are opposed; so they are, but only in the same sense as that in which my thumb and forefinger are opposed – and between the two one can grasp everything'.<sup>39</sup>

To 'grasp everything' opens up an alluring prospect. There really seems no limit to the possibilities of the future of mankind if these two ancient enemies could come together as allies. E.g., one of the foremost of present-day scientists, who is also a convinced Christian, has this to say about the international conference on the peaceful uses of atomic energy held at Geneva in 1955: 'When the report of that conference was published, in

<sup>37</sup> *Ephesians*, iii. 10.

<sup>38</sup> A. F. Smethurst, *Op. cit.*, p. 95.

<sup>39</sup> *Ibid.*, p. 248.



sixteen volumes, it became possible to see, as never before, some of the many ways in which atomic energy can be used for human welfare'.<sup>40</sup> Not only atomic energy, but all other forms of energy, and the outcome of all the investigations and discoveries of science in every field of its activity, could likewise be 'used for human welfare', if only human vision and goodwill, not to say human commonsense, made it possible.

It is along these lines that the long conflict between religion and science could be succeeded by an era of co-operation which would be the prelude to a golden age for mankind. Alfred Noyes has some noble lines in which he glimpses the possibilities of science if thus regarded:

'What is all science then  
But pure religion, seeking everywhere  
The true commandments, and through many forms  
The eternal power that binds all worlds in one?  
It is man's age-long struggle to draw near  
His maker, learn His thoughts, discern His law.'<sup>41</sup>

This magnificent conception of the mission of science, its place and function, may seem a long way from being justified by present attainment. But it constitutes a glorious ideal to inspire the endeavour of all who love their fellow-men, and earnestly desire their well-being.

'If we have grown by natural evolution out of the cave-man, and even less human forms of life', writes the genial Oliver Wendell Holmes, 'we have everything to hope from the future.'<sup>42</sup> This heartening deduction from the past is strengthened when we remember that the human race is as yet in its infancy. Compared with the vast age of the earth, man is but a recent arrival, a child of yesterday. Geologists spell out from the evidence of the rocks a duration of several thousand million years for our planet. But man has existed on it for a bare half million years, and anything deserving to be called civilization for only a fraction of that relatively short period. It all points to the fact that we are just at the beginning of things. We ought not then to

<sup>40</sup> Prof. C. A. Coulson, *Some Problems of the Atomic Age*, p. 32.

<sup>41</sup> *The Torch Bearers*, I. p. 230.

<sup>42</sup> *Poet at Breakfast Table*, p. 194.

be unduly concerned at the condition of the world at present. The strife and jealousy of the nations may be likened to the bickerings and quarrelsomeness of the adolescent stage in the growth of the individual, or even to the instability and immaturity of infancy. In the one case as in the other a calmer and more ordered period may be surely looked for, as wisdom increases with the growth of experience.

The human race is still climbing  
 'Upon the ladder of life, that mounts  
 through Time,  
 From plants and beasts, and up, through  
 man, to God.'<sup>43</sup>

In one sense, when we think of man's origins, he has come a long way. But in another and truer sense, when we consider how far he has to go before he achieves his Maker's purpose in creating him, he is only on the early rungs of the ladder. In the words of Sir James Jeans: 'As inhabitants of a civilized earth, we are living at the very beginning of time . . . and a day of almost unthinkable length stretches before us with unimaginable opportunities for accomplishment. Our descendants of far-off ages . . . will see our present age as the misty morning of the world's history'.<sup>44</sup> Or as one great English poet put it:

This fine old world of ours is but a child  
 Yet in the go-cart. Patience! Give it time  
 To learn its limbs: there is a hand that guides.<sup>45</sup>

<sup>43</sup> Noyes, *Op. cit.*

<sup>44</sup> *The Universe Around Us*, p. 289.

<sup>45</sup> Tennyson, *The Princess*, p. 217 (Globe Edn.).