OUR DISCORDANT SCIENTISTS

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ONCE more the world has been stirred by the outspoken frankness of a British scientist. Before an audience of three thousand men the new president of the British Association for the Advancement of Science, Sir William Bragg, declared his faith in the existence of the human soul. This pronouncement seemed the more unexpected as the contrary opinion had been expressed by his immediate predecessor in the presidential chair, Sir Arthur Keith, in 1927.

The religious press is breathing more freely. For, while we may pretend to ignore the conclusions of science as regards the soul and immortality, yet when Sir Arthur in substance declared his conviction that science cannot support the historic faith in the soul's existence, and must teach that death ends all, a distinctly depressing influence was felt. Our oft-repeated assurance that the final truth regarding the soul is far beyond the range of vision of the physical sciences, was slightly shaken. From the great heights to which British science has climbed, Sir Arthur's verdict came with fearful intimations, like a Banquo's ghost, and the Feast of Faith was not entirely undisturbed. The question was anxiously asked, "Is that really and truly the direction in which science is moving?" We did not much mind the agnostic attitude of the crowds of scientific toilers to whom religious questions are matters of complete indifference. Besides, scientific agnosticism is such an old story! In the case of Sir Arthur Keith, however, it was not agnosticism that spoke. His was apparently the deliberate and mature conclusion of a scientist of positive convictions—the final statement of a highly gifted man who had travelled the highway of modern knowledge, and whose powers of induction were acknowledged by the entire civilized world. At the very least, he was entitled to a respectful hearing.

One can not help being puzzled by the question as to what would have happened if the new president of the British Association, instead of reversing the verdict of his predecessor, had placed himself squarely in line with his conclusions. Does it seem likely that such a re-enforcement of Sir Arthur's position would have been without effect upon the minds of a generation whose faith in

the soul and its survival is already deeply shaken? Is it not rather highly probable that a second blow, coming from such a source, and aimed at our weakened faith in the soul's existence, would have caused many among us to topple over, doubtless in some cases with a sigh of relief that now at last Science, the great deity of the age, has demolished an ancient superstition?

The question has been raised—and widely discussed in Church circles—Did either of the two scientists deliver his dictum in the name of science, strictly speaking, or was it simply the deliberate utterance of an individual? The point may not be worth quarrelling about, and in the public mind it is only "a distinction without a difference." Both, I have been assured, have scientific minds of the largest calibre; both addressed themselves to a vast audience of scientists; and, as presidents of the British Association for the Advancement of Science, they utter words weighty and authoritative. Whichever alternative we choose, it can hardly mean anything less than that scientific minds are radically divided on the question of the soul's existence.

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What we here mean by the term "soul" is simply "the immortal part of man", in everyday parlance. No other definition will serve so well the purpose of this article. The term, as we know, has been used extensively to indicate nothing more than a vital force which will perish with the body, and as such is clearly within the scope of scientific investigation, like all things mortal. But when this vital force is invested with the attribute of immortality, the "soul" becomes a vastly different conception—deeply puzzling to the thinker, unmanageable to science, a monstrous falsehood to the materialist, a source of assurance to the moralist. Sir Arthur had evidently expended some strength and time in an effort to discover the truth or untruth about the soul in its capacity of immortality; and, with all the scientific resources at his command, he could return only a negative verdict. The existence of such a creature cannot be demonstrated. In this he was, of course, quite right, and he might have gone much further. "To prove immortality" is a contradiction in terms. Such a proof would require nothing less than the testimony of someone who had himself lived through all the eternities, and so could speak from experience. Modern theosophy has contributed some keen observations upon the futility of all effort to prove the soul's immortality; but, unfortunately, one absurdity has been succeeded by another. Human souls survive the dissolution of the body, we are told,—but only for a limited time, perhaps for years or possibly centuries. We may see them in

our church-yards, hovering like blue lights over the graves of the dead, or they may haunt our houses and barns and frighten superstitious people, i. e., all those who do not happen to be theosophists, and therefore are ignorant of the harmlessness and transitory nature of the apparitions. But, sooner or later, all alike will sink in the abyss of annihilation. This is a stunning blow in the face of modern spiritism, whose heavy task it is to demonstrate that the soul cannot die. Naturally, the ardent and consistent spiritist will look with contempt upon the unholy ghost of theosophy. But, though the theosophist can no more prove his thesis than the spiritist can prove his, he has introduced into the controversy the novel idea that the survival of the soul does not necessarily imply immortality.

Among Church people in many communities the impression has prevailed that Sir Arthur and Sir William have been at odds regarding the fundamentals of science and her relation to the human soul. Otherwise, it has been asked, how could they disagree? But this is clearly an erroneous impression. As related to their respective pronouncements upon the soul, the difference between the two is not occasioned by a divided attitude toward science and her possibilities, but by the fact that one speaks as a scientist pure and simple, while the other speaks as a philosopher in the best sense of that word. Both are perfectly well aware of the fact that by no known scientific method can the soul's existence be demonstrated. The significance of Sir William's attitude is his admission that there are other oracles which may be consulted, and that the failure of science in her search for the soul is in no wise a conclusive demonstration of the soul's non-existence. Here he reveals the catholicity of his mind. His tribe may be increasing, but not very fast. Rarely do we see an expert student of the atom and the electron inclining his mind to the deeper intimations of human history. For the time being at least, the distinguished scientist turns away from his study of electrons and atoms, and proclaims what I should call the "Grundtvigian" view of history *—a slow but ceaseless revelation of the deathless Spirit's mysterious wisdom. The real foundation of his faith in man and the soul is his profound appreciation of those spiritual treasures which have been accumulated through the ages.

Yet, Sir William does not forget that he is a scientist. He reminds his distinguished audience that a scientist should be the last person to doubt the legitimacy of human faith in an order of

^{*}Bishop N. F. S. Grundtvig, Danish poet and ecclesiastic, whose studies in history aroused a great deal of interest among his countrymen a century ago.

existence which science has shown herself unable to reveal. Does not the scientist at every turn face the Infinite? He who has seen so much should be the first man to acknowledge that there must be a great deal he has not seen. This is unquestionably the most acceptable attitude that science can assume. Instead of closing the door, as Sir Arthur seems inclined to do, it keeps it open for any investigator who has the inclination and the courage to enter the Great Unseen.

But even the Unseen, it seems, must give us some inkling of its existence, if it is ever to tempt the explorer. Without even the faintest suspicion that anything exists beyond what is already charted, it is difficult to imagine how any new movement in science could ever begin. In regard to the world immortal, there has been no lack of intimations as to its existence. Nay, the human mind has been lashed and prodded to the conquest of the immortal kingdom; but the strength and richness of the suggestions regarding its existence have been equalled only by the stubbornness with which it has refused to reveal itself to mortal eyes. In our generation the possibility of such a disclosure has at last appealed to the scientific imagination. There is, so far as I know, no evidence that Roger Bacon or Albertus Magnus ever suspected that the soul, as an immortal being, could be discovered and investigated like other objects of scientific research.

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One notable exception to the above statement should be made. The reading public knows but little about Emanuel Swedenborg; and if we ever think of him, it is generally in connection with his spiritual visions rather than with his scientific achievements. Swedenborg, however, was a scientist, and one of the foremost of his age. While he does not pretend to have rent the veil which hides from us the world immortal by any application of his scientific knowledge, yet his scientific attitude remains to the end of his life a leading characteristic, and even his Visions of Heaven and Hell are shot through and through with scientific thinking. He sees a fundamental law at work even among the immortals. In this respect he differs widely from St. Paul, whose experiences in the celestial regions are among the forbidden fruits on the tree of know-The Apostle is doubtless sincere in reporting his visit to the realm of the departed, and so is Swedenborg, but of the two accounts the Swedenborgian is by far the more interesting. Not only does it give us a clear and consistent idea of the life in the land of the immortals, but we are also made to feel that we are ever in close

correspondence with those who have departed this world, and that practically the whole life of man is under the control of the world invisible. This phase of Swedenborg's teaching has survived in

modern spiritism.

Students of spiritism, it has been urged, have one great advantage. They do not, and can not, begin the study of man's immortal part until it is thoroughly "isolated"—freed from all entanglements with the mortal body. This is true. Isolation of the object to be investigated is, of course, a prime necessity. If it is mixed with alien substances, the investigator is balked. But in the case of departed spirits the advantage is more apparent than real. The departed one has no way of communicating with the investigator save through the services of a "medium"—with the result that the old relations with the physical body are at least in part restored, and the old entanglements are re-established. To communicate with "pure spirit" is apparently a privilege not granted to flesh and blood. The story of spiritism conveys the lesson that it is impossible to tell, in any given case, whether it is the medium or the "spirit" that delivers the oracle—a difficulty which has led to endless controversy and infinite fraud.

This was the situation encountered by the Society for Psychical Research when it was first organized in 1882, for the purpose of examining into "the amount of truth contained in world-wide superstitions." It was a gigantic task that confronted the Society, but the names of men enlisted in its membership were reassuring. Henry Sidgwick, A. J. Balfour, and William James were already attracting attention on both sides of the ocean, and Andrew Lang and Lord Tennyson were household words. These and others, of equal accomplishments, enlisted in the great crusade. Inevitably, they were called upon to deal with the various phases of spiritism.

Like so many other strange things, spiritism is an offspring of the American mind. During the middle of the nineteenth century, after its birth in a small village near Rochester, N. Y., this new cult went like wildfire through the States, crossed over to England and the continent, and everywhere set people wild with wonder and apprehension. Since the days of Cotton Mather, nothing like it had been witnessed. A new revelation of the immortal kingdom, it seemed, was about to be vouchsafed to the poor children of men. Mediums multiplied, travelled widely, and became famous and rich. Some were exposed as highly accomplished frauds, and disappeared. Even in America there was no lack of men who looked askance at the spiritist movement; but the general sentiment seemed to be, "where there is so much smoke, there must be some fire."

This was also the sentiment that dominated the Society for Psychical Research. Through many years of patient toil its devoted labourers have been at work, accumulating material, sifting the grain from the chaff, and recording their findings. After these many years, it seems, we are entitled to ask, What is the net gain, if any?

To the layman it does not seem that the game has been worth the candle. A mass of fraud has been exposed. On the other hand, some of the labourers became convinced that the central thesis of spiritism is true, and surrendered to the evidence they found. may indeed be accepted as a positive gain; but, may we ask, What is its influence upon the world's life and thinking, upon science, upon education, upon religion? So far as we can judge, there is hardly a trace of any such influence. Besides, there is a growing tendency to explain in terms of telepathy all those psychic phenomena with which the Society has been grappling. In telepathy there is but one major problem to be solved—How can the "brainwaves" of one man affect the brain of another? Is telepathy, then, the end of this long and thorny path? The spiritist movement is evidently dying out, but individual champions of "scientific spiritism" still hold their ground. Among these, Sir Oliver Lodge is unquestionably the most prominent. Sir Oliver is one of the biggest puzzles of the age. His scientific labours do not lessen his interest in spiritism, and his spiritism he can easily reconcile with the work he does as a scientist. No opposition can daunt him. Sir Oliver is another "Rock of Chicamauga."

It is impossible to dismiss Sir Oliver with a mere shrug of the shoulders. As Emerson said of Swedenborg, "He lay broad and big on the waters of his day", so we can say of this interesting spiritist-scientist that he stands firm and unmovable in the ebbing tide of a spiritistic age. Nor is he entirely without a message. People no longer hesitate to surrender their souls, if thereby they can gain the world. Nay, increasing numbers are learning to look upon the soul as a hampering nuisance in the heavy competition for life's advantages. Like all representative spiritists, Sir Oliver is steadily pointing to the soul as something we can not get rid of—the human self that must sometime face its own past life, whether we like it or not. If there is something that we must term the ethical import of spiritism, it is evidently here.

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Not very long ago, a southern bishop got himself into trouble. He had been dabbling in astronomy; and, as a most mournful result, lost his childhood's faith. In the astronomical universe he could find no place for heaven; and, of course, if there is no heaven, there are no souls. So his whole scheme of faith was wrecked. Thereupon he was taken to task for his ignorance by an American savant, who reminded him that for aught he or anybody could tell, heaven may be located around the next corner in a fifth dimension! Here is something which reminds us of the popular mediæval question as to how many thousands (or millions) of immortals might dance together on the point of a cambric needle.

Probably the *savant* referred to would repudiate as childish and illogical the grotesque metaphysical efforts of the mediæval mind. Doubtless he does repudiate them. It is not easy to see, however, in what respect his own suggestion is much better. A heaven, crowded with immortals, and "located around the next corner", presents a metaphysical problem quite as desperate as anything the mediæval theologian ever devised. Whether we picture to ourselves the point of a cambric needle as a ball-room or the celestial regions as crowded in between the sky-scrapers of an American city, we are facing the same fundamental difficulty. In either case our thoughts are moving in an imaginary dimension, to which we can attach no sort of reality.

It is, however, profoundly true that our new and expanding science of astronomy is largely responsible for people's loss of faith in heaven and immortality. The telescope has swept the sky for immeasurable distances, I have been told, but not the faintest trace of anything beyond space and matter has ever been discovered. Which shows, perhaps more clearly than anything else, how completely we have lost our idea of metaphysical realities. In many of our colleges metaphysical studies have been entirely neglected for years past. They are out of date, and have no relation to aviation and automobiles. There is furthermore the growing conviction that if heaven and immortality are ever to come back as dependable facts, they must come through the channels of science. It is not easy to imagine a more awkward situation.

And if, indeed, "the faith of our fathers" is dying, if the soul and immortality are no longer among the cherished convictions of mankind, it is interesting to think that perhaps, after all, science will restore to us what she has taken away. To tell an automobile crazed world that we must still "walk by faith, and not by sight", is wasted effort. We ask for the vision; faith proves nothing. Science cannot, with her present equipments, give us a vision of heaven or of immortality; but she can do something. The universal recognition of the existence of the Luminiferous Ether is a case in point. Here is a universe, utterly unknown and unknowable

to any of our five senses, yet a universe infinitely more extended than all the galaxies we have ever discovered, a "cosmic jelly", as John Fiske called it, in which our solar systems are swimming like infinitesimal islands. The point here is that science, because of what she can demonstrate, is compelled to acknowledge the existence of what she can not reveal. In the ether cosmos is room enough for all the heavens and celestial abodes that the imagination of men may delight to dwell upon, but effectively protected from the profane gaze of the telescope. And then, there is a prophetic note in the growing suspicion that the interstellar spaces, as we call them, are not quite as vacant as they may seem to our natural vision, but are everywhere throbbing with life. Perhaps one of the greatest words of science was uttered in the assertion, "In my Father's House are many Mansions."

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Meanwhile, it is instructive to watch the effect of Sir William's pronouncement upon that large and growing camp of men and women to whom the soul and immortality are just so much deadwood carried into our scientific age from a superstitious past. In that camp, Sir William is naturally not a great favourite. He has "yielded to the pressure of public opinion", he has "betrayed the cause of pure science", he has shown himself a "reactionary". Sir Arthur, on the other hand, is a "true son of science", a "progressive thinker", a man whose misfortune it was to be followed in the presidency of the British Association by a pseudo-scientist who is playing to the galleries and is a foe to progress!

It is easy enough to remark that this is the voice of the rabble to which no attention should be paid, and which receives no attention from the ears of cultured men. But it should not be forgotten that this voice represents precisely that grade of intelligence which is fast assuming control in most of our communities, and its impact upon the public mind is increasingly felt. It is the voice of practically the whole physical-labour world,—socialists and labour organizations wherever found,—and of that large and growing class of minds which are convinced that the millennium will never dawn unless we can cut loose from the past, and pronounce history, as Henry Ford did, a mass of "bunk". The doctrine of the soul and immortality, we have been informed, is so completely tangled up with the past history of the race—a history full of superstition and cruelty—that the two can not be separated. Therefore, the only thing to do is to relegate them both to the obsolete.

Nor is it difficult to see that the Church itself is largely in the grip of this same element. The soul and immortality have no

longer an advocate in any "progressive" pulpit. So "socialized", indeed, has the Church become that "the soul of society" is regarded as of infinitely greater importance than the souls of its individuals. Unhappily, however, the soul of society is everywhere discovered to be divided against itself, and gives no promise of unification in any conceivable future. From this class of churches, Sir William will not receive much hearty applause.

A crowning paradox remains to be touched upon. It would seem natural to expect that in an organization where the social soul is everything, and the individual soul nothing, a strong and clear social view should prevail. It is, however, precisely in such organizations that individualism holds its carnival. The rights and privileges of the individual, the importance of the individual, the tastes of the individual, are nowhere more fiercely defended than where the soul of society is the great rallying point. No purely "social churches" have ever survived their infantile Torn to pieces by internal dissensions, we see their ruins scattered over the land. On the other hand, the strongest social cement is found in the conviction that the individual soul is immortal, and that the ties which are formed in this mundane sphere will hold for ever. This might naturally lead to a consideraation of the soul from a social point of view; and if this brief review should ever see the daylight in cold print, such a consideration may be attempted some future day.