

SCIENCE AND THE END

(Continued)

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XVII

IT MAY be that no time is lost, though much life is lost. While events have taught science to see her way and to know her responsibility, that way has been described, however dimly, by the plain sense of ardent minds in every fellowship and field of social activity; so that among those who may read this, there will hardly be one surprised by the plea for investigation now, or unaware that the belief in an evil bias disabling every child born into the world has lost its power upon us. It is no longer the first principle of education. There is the extreme belief on the other hand, held by some educationists, that a normal child may be left to itself without fear; and most minds know the very real sense in which it may be said that a new generation begins the quest of happiness unembarrassed. This is the ground of Mr. Maeterlinck's perception, "Humanity is made to be happy as a man is made to be healthy."

Sixty years ago, in England, there was no such readiness to think fearlessly of instinct or to admit an exact determination. Those who nursed the old doctrine could point to the experience of France, where Rousseau's rash attack upon it had brought more disillusionment than welfare. There was no education not inspired by it. It was the foundation of all religious persuasions, all conventional thought about morals and all criminal legislation. Had science directly questioned it, she must have lost judicial temper in a fiercer conflict than is good for any court of truth, and might have imperilled her prerogative. Who can say? But she was preoccupied by the single instinct of curiosity, and found other use for that than

to forge weapons for such a conflict. Would that she had forged none of any kind!

And now, uncertain as distinctions are between evil and good, so that clerics cry out that a sense of sin must be re-established, there is nothing lawless or extravagant in the hope that science will distil out some soul of goodness from the instincts. The suspicion of extravagance can attach only to the hope that this may yield sufficient guidance.

XVIII

Neither in the instincts nor in our environment, it will be thought can science look for a code of laws like Solon's, or a table of commandments. Nor will she do away with error and correction. Yet if, looking back, she can show us to have been uplifted truly from the beginning, and not enabled merely, men will take heart and be aware of some false leaders. More than that. They will have for the first time a sure consciousness of direction, sensed until now but vaguely by philosopher and poet. Nor is this all, much as it may seem to be in our circumstances. If it were, the case would be only that which a rationalist poet has already seen:

What can we do, o'er whom the un beholden
Hangs like a veil with which we cannot cope?
What but look forward, and with faces golden
Speak to each other softly of a hope!

This is pathetic. There lurks behind it the thought of error and disaster during unmeasured ages, and it is not with such a thought oppressing him that man can march breast forward in Browning's mood. He needs the wisdom to avoid error and to avert disaster. The claim made upon science, and to be met by her, is that, discerning for us the growth of all man's faculties and not of some only, she shall teach us their balance—the sane co-ordinations of normal life. This is the smallest and the greatest measure of her possible service.

XIX

Can it be doubted that the balance in question puts human dignity in the scale against cleverness, good feeling against bare intelligence, at the present moment of history? This service, then, must restore the lost authority of good feeling, and at the same time warn it against those excesses which have hitherto betrayed and weakened it. The risk of disillusionment and disaster must be lessened, and as men grow wiser under the new light they may be happier. To know the increasing purpose of the ages will enable us to speak to each other not softly, but with the courage of liberty in war-time and of all natural ardors.

On the threshold of inquiry, let those who think to explore it be well assured of one consideration. The origin of things noble will not be found in things without promise of nobility. Where it appears, there will already be something admirable as a cause; and where that is not seen reason will reject the induction. Who has been convinced by Mr. Herbert Spencer's account of music, that it comes of contractions and expansions of the chest, abdomen and vocal chords due to strong sexual emotion? This may explain some primordial sounds, such as all animals utter; but what we need to know about a supreme art is what law of life in man, existent when he made such sounds as theirs, decreed the noble sequel. There is, as that philosopher was showing painfully, esthetic feeling. The problem is man's nascent fitness for it. Where was the promise? What foreshadowed "La Cathédrale Engloutie" or a Bach toccata?

At once it seems that what has been said of preconceptions is relevant. Former attempts to explore the realm of feeling have not allowed its dignity, and so have failed to find that nascent. They assumed, perhaps, the greater lordship of intellect. Their curiosity was cold, at least; and (for other instances) nothing noble in morals was explained by tracing them to prudence, or in religion by imputing it to mere fear.

XX

Yet, on a little thought, it must appear that the case of early man was not contemptible. Let it be looked at well, for this is the

kernel of our problem. That earliest ape-like shape with the rudimentary hand, how was he placed, and what instincts more than curiosity certainly inspired him?

He had appeared in a world where all the factors that could affect living creatures were forms of either peril, interest or beauty. Since he reacted to these, in whatever degree, he was endowed with courage, curiosity and admiration. Without courage, he must in all likelihood have perished; without curiosity and admiration, he would have remained brutish. Here, it is plain, were three great instincts destined to uplift him; and there is nothing stranger in science than the fact that their respective values for this purpose have not been weighed. Between the pride of scientists in curiosity and the contempt for Pithecanthropus felt by all men, one instinct of the three has indeed been almost overlooked, namely admiration, the response to beauty.

Is there any good reason to suppose that in the earliest men and women, this was less active than curiosity? Mark its use in the general scheme of Nature. Some sense of beauty, however indefinable, plainly lives in creatures of smaller brain than theirs was. Not only is it seen in the bower bird and other birds, but it serves the alchemy of sex universally. In man, it now refines that alchemy and does much else. There is no need to ask for a definition of beauty: it is enough that this instinct of admiration, measured *ex pede Herculem*, was stronger in Pithecanthropus than in the bower bird. As much may be said for curiosity, but no more.

With respect to courage, even Spencer did not see its value as a principle of dignity. Was it imperfectly considered as part of what, with a poor discrimination, is termed "the instinct of self-preservation"; or was it ignored in that concept? Courage is an essential of every moral quality that can be called admirable. Thus, at the outset of any wise inquiry, it is evident that, until the ends fostered by courage and admiration have all been seen, we cannot define progress, and it is a mere conceit to think that man's destiny will be worked out, in achievements won and judged alike, under the sole spur of curiosity.

XXI

The argument does not need even love, of all instincts the most imperious. It might be worked out clearly if this were left aside.

The assumed predominance of intellect over feeling would be thus examined with less prejudice, and the case much simplified. What a question, this, to discuss by itself, whether love adds to human dignity or compromises it! But, however a plebiscite might decide the outlook for intellect would not be Mr. Shaw's.

That leaves love aside with a vengeance. An instinct such as this may, it seems, be dispensed with! It is rebellious to eugenic treatment and must be superceded by the chemists. Why it should be more easily bowed out than, say, courage or admiration, one is left with curiosity to ask. Even chemists, who hope to break up an atom some day, have not proposed to deprive Nature of an element.

Love meant less to early man than it means to man as he is, and this is all that need be said for the moment; but even so it was already, for all living creatures, the corollary of death. Since they were to die, and leave a fitter progeny to follow them, all in their fashion loved. Of the life-force, which Mr. Shaw seems to respect sometimes, love was the keenest pressure. It still is, with whatever differences, and some of these differences belong to any thought of progress.

XXII

But leave aside at least the old dispute whether love alone may promise our salvation, though curiosity should not. This concert of instincts in the earliest beings to be called human, beings with a brain that was to grow for some crescendo, claims to be considered first. It is the more arresting that, for so long, there has not been a soloist.

To appreciate its harmony, one must know the value of each instrument, and it appears that there has been one under-rated. What is the value of that which responded to the touch of beauty? What did the ability to admire mean to men? The obvious answer that it meant the arts is incomplete deplorably, and yet has been the only answer current. The reaction allowed to beauty is our esthetic sense and genius, no more. Let us see if it was for this alone, in addition to the service of sex and even a sublimation of love, that beauty is set against peril.

What must psychology say, looking at early man in his environment? Nothing disputable; yet, long before esthetic sense could

dispose men to limn with skilful hands the shapes and drawings found in the caves of France—amazing proofs of its antiquity—instinct must have taught men wonder. This is but a mingled curiosity and admiration. It must have dawned, however feebly, before such skill as that which the drawings and shapes attest was mastered. Wonder came soon, we may be sure. Yet observe that the degree in which it is felt alone distinguishes wonder from reverence. The dawn was that of a religious impulse, for good or ill.

There was fear in this, it is not doubtful. Their peril, with this respect for inscrutable powers outside themselves, made men fearful. It is known that they were superstitious, and practised magic. But, with a deepening wonder, they ceased to do so. It is bad psychology to miss the sense of beauty in religion, and worse now than formerly, since the element of fear tends notably to dissolve out of it. With a curious fear only, men could not have imagined even devils.

XXIII

Psychology must say much more. It is evident that, after admiring what the eye saw, men admired what the mind perceived, seeing another beauty in feeling and thought. However foolishly, they began with self-consciousness to have moral notions, quickened by this aptitude.

The consideration is not hackneyed; but it is not upon self-interest only that moral codes, as they came into being, can have been founded, even the rudest. They are not, in fact, seen to be so founded among the more savage of races now living. All instincts whatever, in measures varying with every tribe's mentality, have helped to give them character, and we, the races more civilized, judge between them inevitably by standards in which neither self-interest nor cold intelligence is unalloyed. It was in the beginning as it is now, and we have come far because there was that beginning.

The classic thought that goodness and beauty may be one and the same quality is not too poetic. In deeds, "the beautiful seems right by force of beauty." It appears that the instinct overlooked or under-prized, this gift of admiration, was capital.

XXIV

In the august opposition of beauty and peril there is, in fact, that of life and death included, and it should cause no surprise if a future theology, grateful to the Nature-loving Germanic races, catch a little of beauty's smile. Men whose courage was lately tried will understand how this might be; for, as in Shakespeare's magic it needs the brothers' stoic grief for Imogen to make us love their song, and needs the song to make that lovely, so beauty is valued most when peril threatens. Such men remember it. The beauty of the world fosters admiration, to foster courage in turn.

Consider courage now, that other noble instinct. There is nothing better to set down here than the story of a young Scots officer, told to me with that piercing modesty with which men spoke of their great behavior in the hell of what was called scientific war. After four days' misery in the trenches and three nights without sleep, the ugly havoc of slaughter had disgusted him. It was before Thiepval. He was one of the first million and a half British heroes who went to France, giving themselves freely. The moment came to lead his men into action, and although he did not grudge to die for liberty—which is a fair thought—there was no joy of the sacrifice. Fatigue and the foul horror of all he had seen made it look meaningless. What he did, moving out to the vain and wretched attack, was mechanical; his heart dead within him. But, chancing to look up, he saw in morning sunlight on an old tower wallflowers growing. Just that touch of the world's beauty was enough; he had his faith again and went on gladly, because there is no courage without its inspiration.

This, however, is the one instinct without which neither love nor hope, neither any virtue nor life itself, could have been. The war, which is the true author of this protest, revealed its greatness; for truly few men had known that it was even instinctive, and perhaps not one that there is no peril conceivable by which it can be overcome. This is familiar knowledge now, and it is clear that, if the need could be imagined, men might be found to advance against a volcano in eruption. Of such stuff has Nature made us; life is stronger than death.

XXV

The triumphs of curiosity are not great enough to set beside this fact, in the light of which our permanent situation of peril and beauty has meaning. They teach us less. It is to life that we are destined, not to self-extermination, and yet to a life sufficiently conditioned; a life for which no philosophy founded in fear or simple prudence can be of service, and no purpose merely intellectual is ample.

But it is proper to keep a cool argument. The point to be made is that the uses of courage have grown since early man faced odds, and the instinct with them. Its quality is higher not only in war, which may be of no use for an expert and governed evolution, but in the prowess of exploration, of first attempts to fly, and of a thousand daily acts named or passed over by the newspapers, than it was for *Pithecanthropus*. More than that. It is our test of virtue. Any grace or fealty of conduct put on with another motive is called hypocrisy if unmasked; for, however meek they may be, we know as false those fealties or graces which do not involve it. There is even some condemnation of those checks which do not conserve it. All true virtues are magnanimous; the Roman word for them was not coined foolishly. We admire them with a standard that courage sets.

The thought, then, that Nature is hostile to virtue was illusory. A thing admired and brave, virtue is in the plain line of man's advances; but, as it could not be an easy thing and still virtue, Nature makes occasions for it.

XXVI

Now that so much is evident, love need not be left aside. And it is the main urge felt by us. Of all the modes of courage that are uplifting though "animal," it is the most beautiful as well as the commonest: counterpoise of death, it could be nothing less. But, for this reason, it comes easily and is not a virtue. It is only the unparalleled nurse of virtue. Courage with all its implications is quickened most where love is worthy, as courage is most injured by love's abuse.

Again the process of evolution seems to have made for dignity, and this in ways beyond enumeration. The hue and cry against abuses, conventional and real abuses both, requires the fact to be stated for pessimists; who are not encouraged that love knows ten thousand amplifications, diffusions and devotions more than it once did. If they deem it evil, as Rome does, these appear only good as they have been freed of sex intention or specially blessed. But the hue and cry lacks proportion. The world knew most of them before it was raised. There were noble mothers, there was much kindness, there were infinite loyalties. And though men sublimate love from sex, and find it still come easily, and build fair hopes upon it for this world or another, these must be judged as we judge the dispassionate virtues and fall into Nature's pattern. Is it ease or magnanimity they dream of?

It will some day be a curious task of historians to trace, in the concept of an unsexed and diffusive love, the error by which rewards and ease were thought of more than braveries; and philosophers will ask if it was an error to which such a form of love is naturally liable. Than love in any form, there is no more fertile cause of disillusionments, for nothing else has so enriched our ideals. But the commoner disillusionments correct themselves without grave mischief, and in regard to none is it true that

Beauty stands
In the admiration only of weak minds
Led captive.

Pace Satan (to whom a Puritan gave these lines), it is true rather that beauty takes all minds and tests them. Seeing love to be no virtue, Meredith called it a crucible.

But, desiring to help us, a pietist of intellect has conceived synthetic eggs in place of this principle of life and nurse of all courage and much dignity. *Reductio ad absurdum*. By intellect we should not be well guided. By feeling, then? No; but by Nature's pattern.

XXVII

It appears that there has been a subtler evolution than Darwin discerned, the evolution of man's distinguishing spirit, and that this is not expressed in the notion that might is right, or well defined as intellectual. It is more than a survival of the fittest. If it were

only that, we should not see fine spirits and coarse perishing equally in wars, or find that cultured men and women have small families. It is a special law of fitness for the race, retrieving constantly such losses. The general law of life is compensated by it.

The co-existence of this special law in man with that which Darwin determined is evident. Since every thought not utilitarian must ignore that, and any heroism may be a handicap, there could have been no spiritual distinction evolved in man without the compensation in question. Our distinction does not exempt us from Darwin's law, but has not come of it and could not have done so. A special law alone makes possible some higher form of life than that of the other races, and it is seen in consciousness itself, endowed with the three principal instincts which have been considered and with a brain that may be nourished by their play.

XXVIII

But what is the part of intellect in our consciousness? What is, in fact, the pattern woven in consciousness by factors that do not change and cannot be evaded? If this were seen our reason might at least be wise, and we should know better, if not precisely or completely, how much it can accomplish. Science, no doubt, can patiently show it; it is not hidden, but only subtle. We need to see it clearly. For is there not in adequate wisdom some power to avoid error; and must we not hope to foster that happiness which, in tune with his environment, man may count upon, and the desire of which never abates within us?

In the woven pattern, it may appear either that the proportions of all its colors have been constant from the first, or that one or other of the colors tends to predominate. The Jacquard loom of our environment does not, or does, change those proportions while enriching the design. In the design of mingled thought and feeling, thought may not, or may, become the more important strand, as men who think have assumed that it must. So far, it has only been shown that the assumption was gratuitous, and that it implies a change not in all lights admirable, or plainly good for the strength of the web; that there is a pattern and there is a quality which had been ignored by it. To see this may be sufficiently useful at the moment, but more must be known. What, exactly, may thought do for us?

Its service must be at least more modest and contributive than the group of living "intellectuals" conceive; it is not there for nothing. But the modesty of thought's service appears more saliently as it is examined; for there is yet another reason, as strangely overlooked as any, why nothing is possible but to follow the pattern whether wisely or fallaciously. It is that we are motivated by what we feel, not by what we think.

XXIX

The demand made of science is partly met by the recent verification of this fact, known to psychologists and accepted by all men capable of self-examination. It is not a new fact; Aristotle and Descartes, among others, had long ago discovered it. But it has lately been cleared and illuminated. Man's large brain, far from being a seat of pure intellect, is a complex in which some feeling, recognized or not, prompts every thought that is shaped; and no act is ever done by him, or word spoken, in which the play of this impulse is not traceable. It is there either immediate or remote. Even wisdom cannot be purely intellectual.

Assume that nothing were known of evolution: this fact would still show clearly that the first concern of a real civilization must be with feeling. There should be no dreaming of a wisdom that would either dispense with feeling or slight it. How was the cart put before the horse? What perversity of feeling prompted that maneuver, and then, treating the horse as after all of little value or none, aspired to move the cart by some mechanical means? Some mistrust, bolder than that of old-time clerics, must be conjectured in an evolutionist. They, at least, knew the horse and cart to be inseparably harnessed, and did not mistrust one more than the other.

This fact of psychology bears upon the question of what wisdom may do for us, and instructs us to ask first what wisdom may be. If it is not purely intellectual, and owes to feeling something at all times, it is not the less wisdom; but what value has it, and how has it any? The answer lies in the fact that thought may modify our impulses though it cannot supercede them. A wise thought apprehended makes a change in the complex. What it is important to realize is that such a thought about humanity must be one that has regard to the whole human makeup, the pattern. It must trust the life-force even if ignorant of the working of that force, and perhaps

it may not only trust but bear a hand when the working is known.

Except the life-force and our environment, there is nothing trustable; nothing, even, that may be known with certainty. Seeing that these have brought us so far on the road of advance, and still encourage and move us, what atomy among men can think them faulty and not be ridiculous? Let us chiefly admire the greatest things. Doing so, we shall not be disillusioned dangerously.

XXX

Is it necessary to say that the appeal made to science avows her own faith in truth, in the strength of which she works with unique humility? Men can only admire and trust well what they know well. True, there have been great thinkers exceptions to this rule. Plato and Spinoza were such men of genius. But there have been more thinkers who proved it. The Sophists and Kant taught us to mistrust our senses; empiricists and mystics, materialists and sceptics failed alike from ignorance. To plain men, happily, most of these have meant as little as pure thought will always mean unless it be concerned to inform, or to corroborate, men's admirations.

This is why the world's religions, with all their crudities and figments, have meant more; and, if they have done more harm, it proves the case equally. This, too, is the reason that, hitherto, religion has had little sympathy with science, even in the free churches. Religion knows no concern else. Science, which has also done harm as well as good, or has at least made harm possible, is not urged to copy that particularity, or even to turn from her proper business, the pure quest of knowledge; but, knowledge not being all of equal value, she is persuaded to that great department in which the mind and spirit of man may be seen developing. Besides seeing her vindication there, she may hope to teach religion her own humility.

The diversion involves no change of either spirit or method. The wisdom established by her circumspection will not be currently imparted to plain men by those who procure it; for their work will still be research, and the very nature of this wisdom must require for its dissemination all the existing agencies of culture. By a better care for her own authority science is to save theirs. Otherwise it is certain that these agencies, which are permanent on the showing, will move against her with an augmenting force of reaction.

XXXI

The prospect is worth a cool review. When the unimagined war was over, many hopes and faiths which had kept us light-hearted burned low; but men of science will hardly think that, among them, there was any dimmed so unhappily as the unquestioning faith of civilized peoples in knowledge. The possibility of reaction presents itself as a consequence of this impairment. It will seem real, if not certainly grave, to any man who takes account of the impairment with a little sense of history, or of public movements in his own lifetime.

The faith in knowledge had been livelier than any other. One may say, without being accused of rhetorical exaggeration, that it lit the dawn of an era splendidly and made old lamps look pale. Knowledge was a boon esteemed the least doubtful of all boons whatever. Sane men had no misgiving in counting its blessings or in supposing them to be for sane humanity unmixed. If there were drawbacks to such of these as change men's ways of working, and to some others that changed our ways of living, it could be believed, and was, that all drawbacks must yield to adjustment. Either we should accommodate ourselves to any change that knowledge might bring in, or it would resolve itself into something better. And observe that such a confidence had never before prevailed. A faith of great minds only in the past, it was now that of all men; and any man with whom one fell into talk might share the opinion of Socrates, that ignorance is the one only evil.

We plainly lived in a great period, and one of which science could boast. This faith, old and noble as it is, had only evolved a system and its first universal practice in her pious laboratories; prior to that event, the quest of truth for its own sake had hardly been conceived except by the mathematicians. The period of Athens, wonderful on a smaller scale, had indeed glimpsed it, but had not found its method. Science in the nineteenth century imposed the severity of this method more or less on every branch of learning; all branches flourished together, and the modern world came into being. An assurance born of honesty and splendid achievements, but of the method's honesty most, took hold on the future as if it were settled estate; and the title deeds were knowledge.

It is clear that all knowledge is not the pure boon imagined. We cannot be sure that knowledge has not added appallingly to the sum of human peril; for there was more peril packed into the war than there had been in the recorded earthquakes of fifteen centuries. The comparison of death-rolls can be made with the help of "Whitaker's Almanac." How shall we accommodate ourselves to such a drawback? It is not easy to imagine great minds holding the same faith in time to come, and average minds have meanwhile lost it. Is knowledge still "the great sun in the firmament," and do we think, like Daniel Webster, that "life and power are scattered with all its beams"? Who makes the Shakespearian speech to Jack Cade now, about "the wing wherewith we fly to heaven"? On a waft of poison gas!

XXXII

Smaller events have changed the course of history, and no man, therefore, can estimate the shock of this one unless it be averted. While free minds are staggered by it, and minds less courageous take cover, and vulgar minds have leave to revive the dark ages without ridicule, science may do well to reflect that, in her long and calm apostacy, she has never as now had to reckon with human nature and the stress of life. Public happenings will certainly bring this reckoning, one way or another: and, as she is no longer believed to hold title-deeds, it will then be found that science has lost a host of friends.

Unless the shock be averted, and fuller knowledge can be defended as beneficent clearly, her enemies may hope much from that emergency. It is no stretch of probability to foresee an effect upon education and research that may bridle her in one generation. Much as science has done for us, her benefits must by that time have a matter-of-fact course prevalence, and benefits of another kind may be in fashion. Meantime it is not insignificant that a school of thought which is shy of knowledge altogether has taken heart, and rallies opinion upon old beliefs that deny to the quest of truth all validity. That ancient school is too well-founded to be laughed at. It has never allowed the scientific method, nor cared if knowledge be, as Webster said, "the only fountain both of the love and the principles of human liberty." It does not in any case permit liberty. There is no branch of learning which the revival of this priestcraft

would not wither, nor a hope of progress which it would not quench. For it claims to have the only knowledge of God procurable, holds any other to be mischievous, thinks progress an illusion and knows no compromise.

It is not to be laughed at; and, whether it be feared or not, what should be plain is that the conflict between those who seek truth at all hazards and those who oppose the search culminates. It does so in a general alarm, one so great and reasonable that we shall not presently forget it; and on the issue of this conflict all faith in knowledge and freedom is, as it were, staked afresh in conditions that the course of events will determine. Were science content with her former role, that of an iconoclast of old beliefs and wizard of material gains, the case would be as when, in war, a front crumbles. This may conceivably happen. If it should, the strength and glory of that faith would suffer an eclipse.

XXXIII

I do not say an extinction, for the reason which has been named, that ideas are now world-wide, and doubtless the eclipse, like every other, would have in Europe a penumbra as well as a region of total shadow. It might, however, be the more complete because of political reaction; which must attend any such check to freedom of thought, and which, on the other hand, might very well have enhanced the power of obscurantism, and helped to bring the mischief on.

Nor would such a mischief be at all stranger, though it would be worse, than the present refusal of many minds to become scientific. Religion is not perishable, though religions are. It is instinctive and even practical. If reason were of much more importance than it is, and men stopped to apply the method of science at every juncture, life would be embarrassed. Not only must feeling prompt thought, but there must be beliefs and predilections. We have to take almost all decisions quickly, and so they are governed by feelings already known, predilections already felt, decisions already taken. Even at leisure, with nothing to do but think, there is not, perhaps, one man in ten thousand who can thoroughly revise his mind, reducing all to reason, and the rare thinker is not always more efficient for doing it.

How is it thought strange that men in their need of ready judgments—judgments often unconscious of the factors involved, judgments as rapid as feeling itself—should be glad of a school of teachers that saves them any such difficult problem? Here is a complete code of beliefs founded in pure feeling, with rules of conduct that profess to serve all occasions. It has a natural welcome. Science offers nothing of the sort, and not even a sufficient basis for something less pretentious. What in fact? Something half-applicable and half-riddled about survival, something about health and heredity, something of the virtue there is in facing facts; but, as to the great realm of feeling, nothing but curious observations that may be taken to warrant the clerical mistrust of it. There is an unequal rivalry.

It would seem, then, that in the present plight an eclipse of the faith in knowledge and a real check to freedom is not impossible, or unlikely.

XXXIV

On the other hand science—which freedom of thought engendered—may save a heritage won by much heroism, and so oblige her enemy to surrender at discretion. There will in that case be no conflict with religion. Science, as the peculiar guardian of freedom and knowledge, will have cleansed religion of superstition, fear, bigotry and savage doctrines, left it with a visible and heroic beauty, and proclaimed for it an authority that all men may perceive.

That great service to the world's future must be incidental to any adequate deliverance and amends. No doubt it makes a plenary demand for humility in scientific men. They are not to consider what, if it is rendered, will in time to come be the relative positions of religion and science. They are still to trust the spirit of truth which requires it. No religion indefeasibly established in that spirit can, however, contain a menace for them, since they and its apostles must be leagued for a crusade against imperfect civilizations. Nor can a natural religion admit or involve the old acerbities. It will engage literature and the arts as part of its apostolic body, working freely with more than their present tolerance and alleviation, as well as with a cleared aim, and, although there must always be the clash of ideals that is proper to human zeal, with eternal controversy, it is the last of probabilities that science will be the loser.

XXXV

Suppose the service rendered, as I think it must be, and imagine a modern world as well aware of a law of human worth as it is of a law of survival. How might human wisdom expect to ripen, enlarging happiness?

It is plain that the arguments by which public questions were advanced would be intelligent with a new clarity. They must have to do, as now, with the give and take, the golden mean to be found, between survival and worth; between necessities of mere existence and the claims of man's characteristic spirit. It will never be possible (and should not seem desirable) to exclude the operation of either principle of progress. But, this being understood, public questions could not mean such a clash of ignorance as now bewilders men at cross purposes, unable to say what may be permanent in the ends they aim at, or to see what must be unstable and deceptive. Nor could the debate be at any time made critical by such a blinding obsession of material aims and false morals as that which has wrecked Europe.

One cannot measure the strength accruing to human dignity. It is only certain that, in a thousand ways, this would have found the fair expression now denied it; for all good agencies would flourish with a new assurance and discretion. It could be neither scouted nor ignored, and its errors would not be great disasters. The true march of progress must be steadied and made more expeditious. Nor can one measure the gain of happiness, since it would come not only of the disappearance of present woes, but of a new spirit, sanely natural and full of hope.

(To be continued)