Editor's Casy Chair.

F the reader were frank, we think he would own to having always had a sense of diminished personal importance through the scientific theory of the universe which classed the earth as the comparatively insignificant planet of one of the innumerable stars wheeling through space, and trailing after them each a brood of inhabited or habitable worlds. This conception testified indeed to the boundless energy and inexhaustible powers of the creator, but it diminished man to the relative importance of the least midget that dances in the summer air. One could not, in view of it, feel one's self of much consequence, individually, socially, or nationally. If one accepted it fully, the sort of corrosive shame for one's unimportance which it brought home, really ate one's faith out, so that one could hardly believe in one's The difficulty of imagself spiritually. ining a hereafter for the human race as we know it on the earth was immeasurably enhanced by that of providing for the human race as we conjectured it on Mars, on Mercury, on Venus, on Jupiter, on Saturn, and the rest; when it came to the planets of the other suns, themselves without count, the laboring fancy fainted under the burden. Agnosticism spread from the science which invented its name, and the extinguished soul wandered in the spacious solitude like one of the dead stars which circle through the rayless ether.

In an infinite universe, with its myriad solar systems of peopled planets, the mind of man ached forlorn, and would have rapturously hailed a scientific return to the earlier ideal of the earth revolving in the centre of one comfortable little universe, with a sun of its own to keep it warm by day, and a company of friendly stars and planets to cheer it by night; and this is almost quite what has happened now. We are still a globe, in the scientific belief, but the unscientific few who have clung through thick and thin to the old ideal of our being a disk need not be altogether discouraged; we may yet be so. The sun is now found to be in the heavens for no purpose but to light and warm the earth, and so far as the planets of our system, and the planets and stars of the other systems, and the stuff, the flinty particles, the protoplasmic dust of all the suns and planets that ever were, or shall be, have any use, it is to help keep this earthly ball in poise and place, neither too hot nor too cold, with just the right apportionment of air and moisture on its surface, and to make it the home of man, whose kind or whose like has no other home in the infinitude about it.

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The sciences once supposed gay are often not so entertaining as the sciences once supposed serious; and Dr. Alfred Russel Wallace's treatise, now grown a goodly volume from certain earlier essays in the same direction, on "Man's Place in the Universe," will have, we think, a charm beyond the reach of poetry for the reader who does not mind being set thinking about himself and his destiny. At any rate, we are going to take the chance of commending it to him, and we will own that we have ourselves started from a fresh reading of it in what we have just been saying. is Dr. Wallace, co-inventor with Darwin of the Darwinian theory, who invites us from what seems a supreme place in science, to take with him the ground which we have been loosely outlining. It is he who proclaims from his commanding height that so far as the universe has been ascertained to have a mind, a heart, a soul, it resides here, and here alone, in the human race. It is he who rescues man from a humiliating sense of his infinitesimality in a boundless and myriad-peopled universe, and imparts to him a reasonable hope that he is not, after all, so infinitesimal, but is really the masterpiece of his creator. It is he who inspires him with fresh courage to hold up his head, to believe in himself and so in his Maker, and supplies him with a new incentive to live forever.

We do not say this is the direct or immediate purpose of Dr. Wallace in writing his book, but we believe that it

will be one of its effects, and one of its most important effects. Science owed us some such good turn, for one by one it had taken from us those props on which the fainting soul relies, and it had not altogether consoled us by showing us that they were worm-eaten crutches at the best. It had not intentionally removed from us a spiritual faith, but in allying us with the brute, and imbuing us, subtly and pitilessly, with the conviction that might was right through the survival of the physically fittest, it had, in the belief of some of the wisest and best, measurably bereft us of the humanity which the ages had slowly and painfully evolved as an ideal of conduct. In enlarging the habitable universe to a cosmical boundlessness in which we were each as an atom of a molecule it had disabled our trust in the saying that not one sparrow could fall to the ground without the Father's knowing it. To be sure, the notion of a habitable cosmos, which Dr. Wallace has now challenged, was not without its suggestion of an illimitable human solidarity. It gave a fine thrill to fancy one's self bound, by like laws and like ties with the teeming populations of the other planets, to the same central life, but one could not feel for those far fellow-beings any such family affection as is implied by the notion of universal brotherhood. To some mortals this is difficult even in our small terrestrial circumstances. Some of us do not like to own the negro a brother; others have a prejudice against the Jew; and men are even sundered hopelessly by their callings and traditions, so that persons of humble station are sometimes not asked to dinner in the higher ranks of Christian society; it happens now and then that the destitute are suffered to starve and freeze in the largest cities. and no one feels directly responsible. It may be inferred, then, how weak must be the sympathy binding us to the Martians or the Mercurians, or even the Venutians, as they probably called themselves when they were supposed to exist. Such a sentiment could avail nothing against the desolating consciousness of inferiority immanent in every human creature when he was obliged to regard himself not merely as one of many

earthly millions, but one of cosmical nonillions in multitude immeasurably beyond the expression of Arabic numerals or algebraic signs. Dr. Wallace, however, restores those who accept his gospel to a possible belief in the brotherhood of man, and he tacitly invites them to resume their former relations with the creator and their fellow creatures of the finny, the furry, and the feathery tribes, not to specify the reptiles, the beetles, and even the abhorred mosquitoes.

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It cannot be denied that there was much in this old relation to foster the kindliness inculcated by the prevailing philosophy of the old eighteenth century. If this kindliness culminated in what are called the horrors of the French Revolution (probably to distinguish them from the unnamable horrors that produced it), still it must be owned that the philosophy which inspired it was mainly civilizing. In the midst of a creation existing for his use and pleasure, man could not very well be such an ungrateful monster as to deny the claim of inferior life upon his protection and compassion. Children were taught by the softening influences of literature to be considerate and merciful to the harmless things of the air and grass, and poetry, in the humanest poet of the period, declared-

I would not enter on my list of friends, Though graced with polished manners and fine sense,

Yet wanting sensibility, the man Who needlessly sets foot upon a worm.

Sensibility, a very different thing from sentimentality, became the ideal of culture, and if the eighteenth century could have lasted a few hundred years longer, it might have ended in the golden age. But the nineteenth century had to come in its turn, and it brought with it that tale of wars and woes which almost eclipses the splendor of its achievements in literature, science, and finance. speaking largely, of course, for the limits of the different centuries are not very definable. There is not only the question whether they begin at the end of the old century's last year, or the end of the new century's first year, but there

is a considerable space of time in which the spirit of the one is preparing to become the spirit of the other. that each has its distinctive spirit there can be no doubt, and there are some of the wisest and best who hold that the spirit of the eighteenth century was on the whole civilizing and the spirit of the nineteenth was on the whole barbarizing. The one tended to unite, to fraternize, and to civilize mankind, and the other tended divide, to provincialize, and to brutalize mankind. Under the specious show of struggles for nationality, for the unification of races, at one time, and at a later time in the guise of conquests for the exploitation of the weaker peoples by the stronger in every part of the world, especially in the free and enlightened part, the nineteenth century was false to the example of the eighteenth, in which the greatest thoughts and deeds of men were for freedom.

With many appearances and evidences to the contrary, there seems to be really a Zeitgeist, which is neither quite angelic nor quite diabolic, but which is mainly of one cast or the other, and this Zeitgeist is distinctly different in the two cycles. In this view, what is chiefly interesting in Dr. Wallace's postulate is the spirit which it evinces, and which is a spirit as diverse from that of the nineteenth century as the spirit of the nineteenth century was diverse from that of the eighteenth. We may therefore call it. not too confidently, the spirit of the twentieth century, and we may possibly discern in this the renewed light of the faith so long in eclipse.

After its tremendous affirmations and negations, the moment came for science when it could no longer affirm or deny so unsparingly, and when it began to say that it denied nothing: that it merely ascertained and registered, but that, so far as it knew, all things were possible to protoplasm. It was at this moment, perhaps, that religion began to draw a free breath again. For it cannot be gainsaid that in the realm of thought, which is spiritual as well as mental, science is now sovereign, and will probably always be so. What science says, goes, at least with the unscientific; religion is, above all things, unscientific, and religion had be-

come, in spite of the creeds and churches, subject to science, so that nothing in its inspirations was found so uplifting as the scientific inference of such a philosopher as John Fiske when he came to the rescue of the soul, and proclaimed that if a certain formation in an insect necessarily implied the existence of a plant or flower adapted to the insect's use, then the instinct of immortality in the human race implied as absolutely the existence of a life hereafter for its satisfaction. Till some other scientist, or philosophizer of science, came to prove the contrary, that hope could not be taken from men, and as yet that hope remains to us. Indeed the general trend of science, in recognizing the unity of the universe, is to the support and lasting establishment of that hope.

III

Dr. Wallace in his startling claim of centrality for our solar system, and of primacy for the earth as the sole inhabited or habitable planet, among all the worlds of the universe, says nothing in question of this universal unity. On the contrary, he constantly affirms it. Not only are all men of one blood, but all the things that live are of one blood, animal and vegetable alike. All the suns are akin, and the planets are of the same earth-stuff as our own little orb, and the same earth-stuff as the minutest particle of star-dust that flies and flashes through space. As far as matter is concerned, we are not wanting in society. But when it comes to life, it seems that we are islanded in a measureless solitude. where no life has been or ever will be but our own. When this fact, if it is a fact, is brought home to the consciousness of the race, or such part of the race as does the thinking and feeling for the rest of it, what will be the moral effect? That, after all, is the only interesting question for men who are not engaged in scientific research. We survived under the theory that the-

bright stars which gem the night Were each a blissful dwelling-sphere,

or at least as blissful as our own, and we supported with fortitude the notion that our earthly race was as a drop of water in the ocean of human-being;

but with what result in personal character, for it must come to that in the end, can we accept the belief that amidst universal death we alone live on the only planet where man can live? Shall we each count his fellow man more precious, more sacred, because there are, after all, only a few millions of us? Shall we bow meekly before the mystery by which we were posited here, in the heart of a system existing for us alone? Or shall we arrogate to ourselves a portentous consequence, not easily predicable of some of us on closer acquaintance, or even on thorough self-knowledge? Shall we, more than in the past, conscientiously hold ourselves responsible for what we say and do? Or shall we go on being greedy. and cruel, and silly and vulgar, quite as if there were myriads of us on every visible and invisible sphere in the firmament, and it did not really matter much what we were in our behavior?

As one modest plural inquirer in so dark a realm of doubt, we own to rather a lively hope that the acceptance of the new truth, if it is a truth, or if it is new, will be for our good. Responsibility was always believed to steady men. and it must be that the acceptance of such a creed will lay new responsibility upon men. In that event one cannot be just the one he was when he supposed there were countless millions of him scattered about in the myriad worlds of the universe. He must feel himself more obviously differenced and individualized. with peculiar duties as well as rights. We all know what the white man's burden has done for him, and how it has exalted and ennobled him in the South, in the Philippines, and potentially in Panama; and it cannot be that when man comes to realize that the whole treasure of mortal life has been intrusted to him here on earth, he will not rise equal to the claim upon him, or at least rather more equal than he has yet shown He will be carefuler of huhimself. man life, he will try to make it more noble and beautiful, he will not befoul it with vice, or stain it with crime, and he will not waste it in the wars which, as Voltaire said, have made of the earth "a bloody nest of ridiculous murderers." This, at any rate, is our lively hope of him, and we are not much afraid that

he will be demoralized by the appalling fact that the universe, so far as it has any imaginable use, has been created for the behoof of his home and himself, and will not even try to live up to it.

Man will, of course, be conscious of the apparent disproportion of the means to the end, but so far as he is scientific man, or merely well-informed man, he will not be ignorant that this is the appearance in the whole geologic history of our own minute globe. At every step of his knowledge won from the rocks he will have had to ask himself—

Are God and Nature then at strife, That Nature lends such evil dreams? So careful of the type she seems, So careless of the single life.

So careful of the type? But no.
From scarped cliff and quarried stone
She cries, "A thousand types are gone:
I care for nothing, all shall go."

In the starry heavens he will only find repeated in millionfold iteration the story of the bewildering superfluity, the spendthrift creative force, of nature by which—

... out of fifty seeds She often brings but one to bear.

In the new view the cosmical field is indeed the greatest field of what seems the universal order of overdoing, but which cannot be overdoing. Out of all that countless skyey host, this tiny ball swings round its sun, the sole bearer of any sort of imaginable life. Why it should be so is not practically imaginable, and the mind reels baffled from the attempt to surmise the reasons for choosing and fashioning the earth to be the unique vessel to bear from everlasting to everlasting the masterwork of the Almighty. For it cannot be but that it was intelligently designed for this end, and purposely created by-

La somma sapienza e il primo amore.

Any possibility of accident is more unthinkable than the reason why the earth should have been so designed, and why all those flaming ministers of ours should be as lifeless as the void through which they wheel, forever blind, whether they shed the radiance of noons remote beyond hundreds of light-years, or only

reflect the glory of our sun through our own familiar nights.

IV

The new notion of man's place in the universe, which goes back in its novelty to the earliest conjecture of the race, does not make its appeal to the moralist alone. It stirs again the hope, the longing, which has been eloquent or inarticulate in every human heart since the beginning. If a man die, shall he live again? That is the question which asks itself with fresh poignancy in the presence of science rising in her spiral round to the old belief that all the things which are were made for earthly man's behoof. Without the faith of a life hereafter, in some state or place,

Where kindred spirits reunite That death has torn asunder here,

the doctrine, new or old, that our place is in the centre of the universe, embodies a dead fact and not a vital truth. Except that it is stupid for the enlightened man to be wicked, why should we be better rather than worse, in the few years we have or the few years of life we share with our planet amidst the universal death? It was ill enough before, when we supposed ourselves mere atoms of sentience abounding in all the worlds of the universe; but now, when we are required to live up to the conception of behaving like the sole intelligences in the cosmos, we may well feel ourselves wronged if we cannot extort some response to the eternal cry of our hearts. Was it for threescore years and ten, at the most, that we were called from non-being into being, and set here in the heart of all the tributary systems. on a planet chosen above the myriads of mightier worlds to be the home of life so elect as ours? Geology itself has no record of waste like that of our spiritual destruction, always an intolerable thought; but in the perspective now opened to us, the mind staggers at the vision of a wanton omnipotence undoing the greatest wonder of its doing. It is now not merely the little old earthly man, parallelled if not companioned by men of like make on other planets, but a creature of hitherto unimagined significance, who turns to Supernature from Nature when she answers him—

Thou makest thine appeal to me:
I bring to life, I bring to death:
The spirit does not mean the breath:
I know no more.

This finally brings us in touch with something which we wish to touch reverently. The acceptance of the latest doctrine of man's place in the universe may involve the removal of a stumbling-block in the way of many, very many, devoutly doubting minds which could not answer the grim query: "Why, out of all the worlds of the universe, was a Saviour divinely sent to the earth alone?" The inconceivability of a cosmical Christianity must have had finally much to do with weakening the hold of a terrestrial Christianity upon some of the gentlest and finest spirits; for if all His human creatures, on whatever star, were not equal before Him, He could not be the Father in Heaven to whom men prayed to be saved from themselves. But if we suppose, or if we believe, that there is no inhabited world except this, and that this alone has been brought to life through the nature that brought to death, from everlasting to everlasting, in the whole universe besides, there is no longer the devastating doubt.

