

ART. X.—*The Origin of Species.* By Charles Darwin. New York: D. Appleton & Co. 1871.

Within the last few years our literature has been almost flooded with discussions of questions of what is popularly known as the *Unity of the Human Race*, the *Origin of Species*, &c. How far some of the aspects of some of these questions have logical legitimacy, we may hope to inquire in the course of this article.

There is a preliminary point, however, always necessary to be first settled and well understood before any logical discussion can begin; that is, *What is the question?* This question must not only be distinctly assented to, but it must be debatable; and, further, it must be seen to lie within the range of the human understanding. There are many truths which can not be debated.

There may be said to be three classes of doctrine, or hypotheses, respecting this matter, which may, perhaps, be conveniently stated as follows: First, that which is sometimes known as the *Development Theory*; second, the theory of *Severalty*; and third, that of *Unity* in the creation of man.

We must now spend a moment or two in taking an outline view of these several systems as set forth by their respective patrons, merely to see what they are.

The first may be stated in the words of Prof. Oken, that 'man is developed, not created.' The vast variety we now see in all physical nature are the effects of natural forces, acting on each other, producing progressive mouldings, modifications and developments during immensely long periods. Hence, Prof. Heckel talks about 'our animal ancestors'; and, in like manner, these so-called ancestors might talk about their vegetable 'ancestors.' Every thing has grown, or been developed, from the lowest conceivable type of material substance.

The second hypothesis is, that God created man in groups, separate families, or distinct races and nationalities, at different

times, most probably far distant from each other, and not with a single ancestor, as in Adam. This severalty of creation, in groups and at distinct periods, is also the rule in all animal life.

The third hypothesis is, that God created one man and one woman only, and all mankind are their natural descendants. And the differences we now see in men of different countries, families, or races, are but the natural result of the almost endless variety of accidental and fortuitous circumstances attendant on man's history.

We may now inquire how far these differences are real, rational and philosophical; how far they present material for logical difference and legitimate debate about things seen and comprehended, and how far they rest upon false notions, or conclusions hastily and blindly jumped at.

We are told that man *grew*—was *developed*, not created. Now, does this statement, in whatever form of words you choose to put it, contain a denial of either of the others? Most assuredly it does not. It only says, if you trace man back—away back in his ancestral, or, rather, his germinal history, you find his or its form and character to materially degenerate. He was a mere animal, not much resembling what he now is. And far enough back you see his germ slowly emerging or developing from vegetable or chaotic substance for which we have no name.

Now, can these teachings, however far they carry us back, claim or purport to teach that man was not created? Most assuredly not. They present a field and mode of creation different from the suppositions of some others. They tell us something about the chronology and history of his creation. They say he was created by slow degrees of development. These teachings clearly admit man's creation, and claim only to instruct us as to its mode. To say that 'man was developed, *not* created,' is to utter words without meaning. It is not a proposition, but a contradiction. It does not affirm something believed, nor does it deny something supposed. Man being developed does not suppose he was not created, but only someth'ug about the processes and manner of his

creation. It merely says the time occupied in creation was greater than some suppose.

If one man supposes the work of creation was begun about seven thousand years ago, and was finished in two or three days, and another that the process occupied a million of years, this is not a question whether man was created at all or not, but about the length of time his creation required. It is here distinctly denied that the argument called *Vestiges of Creation* pretends to adduce a word of either testimony or argument on the question whether man was created or not. It raises the very different question of the mode of creation, and the time necessary for its accomplishment. If the testimony is true, and the argument good, then it is proved that the time occupied in creation was very long, as well as several other things about it; and if bad, then this is not proved.

This fanciful idea about the former condition and history of the substance which finally became man — its having passed through other forms and stages of existence and of life previously — is much more easily stated than disproved. It is as if a man should affirm that in the exact centre of the north star there is a piece of diamond ten feet in diameter. The statement is easily made, but how could it be disproved? When it is stated, therefore, that the substance which finally became a living man, whatever that was, passed through other forms previously, no matter what forms or processes, the allegation is made with impunity, because, like the diamond in the bowels of the star, it can not be contradicted. That about which we know nothing can not be debated. Such imaginary things are without number; and whether with or without plausibility, it makes no difference; and this notion about ‘development’ is but one of them. Neither reason, nor science, nor experience can furnish any information respecting it.

A score of such fancies, true or false, have nothing to do with that other question, whether man was created or not. They only undertake the obvious impossibility of proving something about the *mode of creation*. They merely set up a theory of creation. They plan and explain an utterly unknown and inconceivable thing. They virtually admit creation, or

imply it, and only express dissatisfaction as to the views of others respecting the mere historic processes by which it was accomplished.

Hugh Miller does not attempt an argument on the subject, except by mere analogy. Looking into man's history and progress in the brief period of our acquaintance with them, things do not seem now to progress as they are said to have done millions of years or ages ago.

What is called *development*, therefore, is, or pretends to be, so far as it can be understood, an attempt to set up a *theory of creation*, and not a theory dispensing with creation. It is a speculation, so far as it relates to man's origin, about which it is impossible we can know anything conclusively; and so, whether true or not, can have nothing to do with any questions of anthropological science. This, it is hoped, will further appear in the course of the present paper.

The second hypothesis affirms a *severalty*, denying a *unity*, of human creation. Having shown, as it may not be thought unfair to conclude, that the development theory is only a wild, unmeaning blunder into which some extravagant men have unwittingly fallen, we proceed to look at the doctrine which teaches that there were *several* primordial creations of man in opposition to the theory of *unity*.

The argument about the near approach, real or supposed, of some brute animals of high type to some races of men of very low type, are utterly illegitimate and surreptitious in an argument of this kind. Assuming or pretending an argument when there is no disagreement is unfair. We have no knowledge of any animals other than *men* and *brutes*. Now, if the question were, whether there is or is not now a natural, radical and constitutional difference between men and brutes, then the nearness of approach would present a question with some meaning in it. It might then be attempted to be shown that the separation is not constitutional, but only circumstantial. But is there such a question in issue?

The question, whether man, in his long, upward process of development, in reaching the point in the scale of being he now occupies, passed through brute animal stages — say he

was once *this*, and then *that*, and then another kind of animal — that he then reached the position now occupied by the monkey, and then, by steady, progressive stages, became man — this is one thing. But whether man, to-day, is radically and constitutionally different in some of his characteristics from all brute animals — this is another and very different question. To prove that man, or rather, more correctly, the substance from which he grew, before it became man — for he was not man when he was a shell-fish, and before he became man — to prove that this ancestral or germinal substance, in its seminal history of past ages, in its genealogical development into manhood, was, millions of years or ages ago, a monkey, would not prove that man is now a monkey. To believe the former would not necessitate the belief of the latter. Hence, in debating the latter question, if it were questioned, the former could very safely be admitted, whether true or false.

It is true that Pouchett, one of the most noted of the French infidels, in writing on this subject, says, ‘There is no human kingdom distinguished from the animal kingdom.’ And others speak in a similar way. The speciousness of this question, with its plain illegitimacy in this argument, are so apparent and so important that a few observations must be directed to it.

Whatever questions might arise about the very ancient or diuturnal history of the material which finally became man’s finished frame; whether it did or did not pass through these or those brute animal stages, or undergo these or those changes — these are very different questions from those which inquire into the present relation of the two departments of the animal kingdom, men and brutes. This latter question is, whether those two departments of animal life are more radically distinct in some material respects, and where they differ. The question, what was the germinal or seminal condition of man’s ancestral beginnings, in its ancient, formative history, before it reached the state of manhood — supposing it to have passed through such creative processes — this is another and different question. An ear of corn is to-day what it is. How corn originated, whether by germinal, creative stages and processes through which it grew, millions of seasons ago, and

what was the character of the soil and of those unformed germinal substances — if that was the way that corn became corn — these are different inquiries, and they do not, in the least degree, involve or support each other.

The present relation between men and monkeys, or between men and mushrooms, or between the different kinds of men, is not matter of dispute. Here there is no difference of opinion among writers on natural philosophy, biology or anthropology. They disagree only as to the ancient *history* — whether creation was performed thus and thus, or so and so. Let us agree where we agree, and dispute only where we differ.

If we were to inquire into the apparent nearness of approach of some of the higher types of brute animals to some of the lower varieties of the human family, we should find that it would neither prove nor illustrate anything at all pertinent to the question in hand. In mere contour it might be supposed, from a hasty glance, that some of the monkey tribes, the gorilla, orang, or chimpanzee, most nearly resemble mankind; but a closer examination shows that in mental and moral characteristics, which are by far the most important, man has a closer affinity to the dog, the horse, and the elephant, than to any of the monkey tribes. The monkey is not even a biped; he is quadrumanous — i. e., four-handed. And yet he has very little, if any, of the wonderful and peculiar organism of the human hand more than the tiger or the squirrel. As to the great, ruling, master-endowments of intelligence and speech, always found in the lowest varieties of the human kind, there is nothing — absolutely nothing — in all the brute creation that even looks in that direction. And as to a sense of right and wrong, the great and distinguishing feature which alone allies man to his Maker, and which, despite the hasty assertions of some poorly-informed travelers, is always found in mankind, not the least vestige of it is ever found among brute animals.

Again, for what purpose is an argument from near approach brought forward, unless it be carried much farther and be made to prove identity? Near approach, however near, amounts to nothing, so long as in some clear and unmistak-

able respects men and brutes are found constitutionally distinct. In many important respects we know they are identical. In the offices of bones, muscle, vision, hearing, feeling, taste and locomotion, as well as in the functions of propagation, gestation, digestion, respiration, the circulation of the blood, &c., they are alike. So we know that not only is there near approach between men and monkeys, but in many vital respects there is identity between men and oxen. This is no question at all. To prove anything to the purpose it must be shown that men and monkeys are radically and constitutionally identical in all things, with only such circumstantial differences as are seen between the high and low classes of monkeys, horses and men. So, if we find near approach, however near, the question then arises, What does that prove? Whatever it might prove on the general subject of biological science, it is obvious that it proves nothing on the question before us.

If some men are capable of persuading themselves into the belief of a plain contradiction, their case is beyond the reach of any assistance that logic or argumentation can furnish. No argument can be made with such men. If they assert that all the varieties of creation known as men, however low the scale, are solely and exclusively amenable to law, and as such actually deem and hold them morally responsible and punishable; and then, at the same time, affect to put them out of humanity on the ground of the alleged discovery that the substance from which they grew into manhood, or from or out of which their manhood was anciently made or created, existed in some other form, inability to meet such arguments must be confessed. Who cares whether the thing alleged be true or not? Even if true it proves nothing.

It is not too much to insist that in reasoning men must have some reason. Animals are either men or brutes. Men are sometimes found in a very low state of both morals and intelligence—far below anything most of us have seen. One, at least, of the great constitutional marks by which men are distinguished from brutes, is a sense of *right*—of *ought*; and so we hold them morally accountable. We deem them capa-

ble of crime, and punish them. Now, is not this the fullest recognition of proper manhood that can be given? Can you accuse a brute of crime? And can you fail to accuse a man? We repeat, that the dog, the horse and the elephant are at least among the most knowing of brutes. But do we accuse them of crime? They are deemed brutes for this very reason, that they are incapable of crime. Read any impartial, scientific treatise on this subject, apart from an attempt to predicate races of creation; turn to Appleton's *New American Cyclopædia*, for instance, and read that the gorilla (which bears the nearest outward appearance to man of any of the ape or monkey races), 'is the most wild, ferocious and irreclaimably vicious of all the beasts of the forest.' Man is capable of *animus*, brutes are not. To charge moral obliquity, and deny the person so charged a proper place in manhood, is a childish absurdity, or insane conceit.

As to man's *creation*, or *origin*, there is nothing that can be said or believed, true or untrue, respecting it, or his ancestry, near or remote, that can in the least degree affect these plain and unquestioned considerations respecting his condition *now*. Even if he was once a monkey, he is now a *man*.

There is great difference among men — English, French, German, Indians, Negroes, Moors, Chinese, Esquimaux, and hundreds and thousands of others, if you take the trouble to subdivide them. Indeed, no two individuals are alike. The disparity varies in a thousand ways and in ten thousand degrees. You may divide and classify them as you will; you may distinguish the several divisions as you will; you may call them genera, species, varieties, races, nations, or families; you may say what you will about their ancestry or their creation, true or untrue, no matter which; you may say their primordial ancestry was the same, or was not the same; you may say they 'grew,' or were 'developed,' or 'selected' from saurian, mushroom, or monad, or that they existed from all eternity; and supposing all this to be admitted, and as much more as any one may choose to dream or teach on the subject, yet what has all this to do with man's present character and condition? Exactly nothing. There man *is*; and in any supposed

facts respecting the ancient history of his ancestry, back and beyond our historic reach, or the history of that of which he was made, or from which he proceeded, true or false, man is now just what he *is*. Testimony cannot prove that to which it does not relate. The question what man *is now*, is, as we hope further to see, a very different one from the inquiry *how he got here*, or what possible changes, natural or preternatural, may have passed upon his diuturnal ancestry.

As to the *creation* of our primordial fatherhood, whether it was individual or several, that is quite another question. The dispute is not about the dissimilarity. That runs through the entire mass, and is about as great either in kind or degree as any one supposes. The dispute is about things said to have occurred thousands or millions of ages ago, and long before it is supposed on either hand that man, *as such*, existed; not before saurian, fauna or monkeys existed, but before man existed. But whether man came from eternity or from time, from one Adam or from forty, one thing is confessedly true, that the whole human family conjointly, *now*, constitute one great, sole, exclusive, radical and constitutional *genus homo*. Whatever any one may affirm of man, or of that of which he was made, or of anything else millions of years ago, no man considers a man a brute, or a brute a man. A man is a man.

And, then, if in the face of this universal belief men will contradict both their reason and their words, and say that some men are not men, and attribute reason, moral sense and handicraft to brutes, as already intimated, their case is beyond all logical assistance. Sometimes we are told that some peoples are not capable of receiving true religion, because they are superstitious. It requires no little patience to debate with some men. The best proof the nature of the case admits of to show that men *are* capable of religion, is offered to prove that men are not. What is superstition but defective and erroneous religion? There can be no better proof of religious capability than superstition. Superstition, with its errors corrected, is religion; and religion, in its state of dark degeneracy, is superstition.

Setting out, then, with all men of science, from a distinct

constitutional *genus homo*, we proceed more directly to the question of *severalty* as opposed to *unity* in the creation of man. The method shall be short. But, first, it must be ascertained precisely where and about what those disputants differ.

All scientific inquiries on the subject must be confined strictly to the *history and character* of man as man proper, and not as something else before that something else, whatever it was, became man. Anthropology is the science of *man*, not of creation. *There is no science of creation.* Human thought does not extend to that. Not even the imagination, much less the process of thinking, can reach to points or possibilities anterior to creation, or *into* it, if, indeed, there be any such points. Science can know nothing of absolute origin. It *finds* everything already existing, and deals only in being and in changes. All else is veiled.

The argument that there is now a distinct *genus homo*, or human family, settles the question of present unity in the human kind as distinct from all brutes. It is but a different verbal mode of stating the question. So the question is not about unity *now*, but about unity *in creation*. Whether this dispute is real or genuine, or fictitious and imaginary, we hope to show.

We look over the human family and see several millions of individual persons all of a well-known recent but unknown remote ancestry. We examine their character in several ways. We have some little knowledge of procreation, though we know very little of the laws of descent from father to son. No two persons are alike. No children of the same parents are either alike or like either parent. Nothing produces its like, though a general resemblance is seen in most cases, sometimes down to the third and fourth generation, but it is soon lost sight of. As you go out from any centre the disparity deepens and widens more and more indefinitely, and, so far as any one knows, interminably.

No student of nature has intimated the hope of the possible discovery of a line up to which disparity in a genealogical descending process might go in possible time and circum-

stances, and beyond which it could not possibly pass. And most obviously such a line is the only thing that can be supposed to separate races or families radically and fundamentally. You must mark with scientific and unmistakable exactness the farthest possible outward progress of disparity before it can be said that natural generation could not have produced it. Some disparity varies the presumption of indefinite disparity.

The possibility of disparity beyond what has been seen might be illustrated by supposing it possible to produce a race of *one-armed men*. As free use and action tend to enlarge and strengthen the muscles of a limb, so nonuser and inertness tend to feebleness and dwarfishness. And would not this tendency in sufficient time and favorable circumstances acquire an hereditary character? Take a number of children of both sexes, with largely developed chests and arms, and let them all, and all their offspring, male and female, be trained constantly to such hard labor as blacksmithing, or the like; continue this course, retaining for intermarriage only those of the best-developed arms, and in a number of generations you have a race of people of unusual strength of the hand. The children would inherit the acquired and accumulated strength.

Now pursue the opposite course. Colonize a number of children of both sexes, and in every case, from the very first, let the left arm be folded and bandaged as closely as consistent with the general health. The left arm is never straightened or used. They never saw a person with two well-used and useful arms. Let this course be rigidly pursued long enough, and a general tendency to withered dwarfishness of the limb would after a time appear. How long it would require for this hereditary tendency to establish itself in the occasional, or frequent, or uniform production of children with a defective limb, or an imperfect stump, or none at all, is another question. But would not the tendency appear in ten generations, or ten thousand, or, more probably, in three or four? The best analogies we have certainly point to such a conclusion. And does not the establishment of such a *tendency* establish the certainty, in sufficient time, of a complete *one-armed race*?

The utmost possible disparity and divergence in the human family proper has most certainly never been discovered. The rule is the same in man as in other animals, and, indeed, in the vegetable kingdom.

We trace back man's history in his physiology, in tombs, in osseous and cranial formations and fossil remains, in monuments and inscriptions, but still more in what he has written of himself, so far as these histories go. When we trace this history back about two thousand and nine hundred years the marks become exceedingly dim; and in about five hundred years more there is scarcely a footprint to be seen. Beyond about three thousand and seven hundred years, which is most probably but little, if any, over half way back to the Adamic period, we have not even a fragmentary outline beyond the very few isolated scraps in Genesis, which, for the present, we are not considering.

Now, what is science? What is its mission, and what its domain? It is the business of the science now under consideration to divide, classify, examine and demonstrate *man* in his physical, moral and intellectual character; and the field of research is the history of man—the current history—reaching back by no means into the scenes of his creation, if, indeed, creation had any scenes, but stopping clearly and distinctly this side of his origin. The student of nature can no more teach you about the *creation* of man than of the stars, or of the origin of Deity himself.

What does all human science teach, or pretend to teach, about creation? The answer is, *nothing*—absolutely nothing—either affirmatively or negatively. Creation, if there ever were such a thing, is no part of either nature or its history. Science does not know, nor can it by possibility know, that man was ever created; or, if created at all, whether by one single stroke of omnific power, or by a series of successive operations stretching over a period as long as an hour, a day, a year, or myriads of ages. Human knowledge can no more say whether man was made in unity as in Adam, or in severally by five hundred beginnings, than could unlettered igno-

rance itself. Here, where nothing can be known, wisdom and ignorance are on the same level.

If we know anything at all about the creation, either of man or of anything else, we are certainly not in the least indebted to the investigations of science for the information. Human science *finds* man, at the first, already in being, and the whole constitution of nature already in progress, performing its various functions, but can affirm nothing as to how or when things got into existence. It can examine rocks, chalk, etc., and ascertain of many things, with greater or less certainty, that they must have been in existence many years or ages gone by, but of their origin it can inform you nothing. Metalography might essay to inform you about the quality or the origin of the metal of which the sword was made that guarded the tree of life, or of the botany of the tree of life itself, and the information would be just as reliable as the teaching of psychology or anthropology, when they undertake to tell us about the processes by which man did or did not *become* man. Indeed, there is more of plausibility in the former than in the latter, because the sword and the tree, if there were such things, have some historic place in creation *as we now see it*.

It is clearly impossible that science can know anything of any direct act of God. To inquire scientifically into man's origin would be the same as to inquire what man was before he became man; or about the quality or proper adaptation to this end of the material of which he was made. How can science know he was made of anything, or was made at all? How can science distinguish between *one* and *several* acts of God, or know that there is a difference? Who knows that creation was an act, or can distinguish between an act, or acts, and an absolutely continuous and never-ending or slackening process? Who knows *anything* about it?

It is said that Prof. Agassiz has stated that 'man was created in nations.' It may be admitted as possible, however impracticable it might be found to be for science to teach, that man has existed in a state of separate nationality or familyship for any given number of years. But it is denied that science can conduct us back beyond his history and teach us about him

before he was, and so prescribe rules for his creation. Science being limited to the history of material existence, the above declaration, if ever made, has no meaning. The words do not convey an idea; or else a vague, nebulous and nugatory one.

Man, not being able to conceive of an act or process of creation at all, can not, of course, imagine or distinguish a difference between creation in nations and some other way. Suppose another should say that man was created by *one* single act; and a third that man was individually and severally created — each one being a separate and distinct creation. These are not three several hypotheses; for an hypothesis that is not clearly conceivable is not an hypothesis. No man can say whether the three statements mean the same or different things. There is and can be no rational hypothesis of creation, because creation is inconceivable.

To this it may be replied that the idea of severalty in the origin of man does not necessarily inquire into or affirm anything as to the acts or processes of creation, but only that whenever or however he was created it must have been with severalty of beginning, because the different parts are too widely separate now to suppose the possibility of oneness ever, at any time, in his former history.

This is only putting the same proposition in different and even more fallacious verbiage, though its speciousness requires a little care and analysis. It affirms that God *in creation* was shut up to certain necessities — that he could not, or, at least, that he did not, endow the one man with so great and wide a power of procreative diversity as could have been bestowed on several. The proposition does not relate to the powers of mere procreation in man, but to his procreative endowments *conferred in his creation*. The two things are widely different. The allegation relates to the laws of seminality, as they were fixed in the acts of creation, and not to the mere exercise of them by man in his after-history. Change the verbiage as you may, and the allegation is in regard to the creation, not the history of man. And this present argument alleges that while science is free to investigate the one, it is wholly ignorant as to the other. The *onus probandi* must rest where

it naturally belongs. If a declaration is naturally incapable of proof, it must be content to come down and take the place of a mere conjecture. A statement about *creation*, beyond the simple fact, is not a logical proposition.

Suppose you ask the skeptical anthropologist if each and every individual person was not separately created. He would hardly deny it. And, then, if you ask him to point out the difference between those creations and that of Adam, or of any of the several 'national' Adams, or the difference between the creation of one and several Adams, could he do it? Can science tell you anything about the laws of seminality, *as established in creation*, or even in their natural operation, either in the animal or vegetable kingdoms, beyond some of their gross and visible effects? Or can it distinguish a difference between those powers as bestowed upon *one* and *several* progenitors? Can science distinguish a difference between a primary and secondary creation — that is, a creation with and without natural parentage? What does science know about the difference between forming a man out of the dust of the ground and some other way? Or can it know that there is a difference? These, or any other questions about creation, do not pertain to science; they lie quite beyond its domain.

Again, it might be suggested that the inquiry is not what God could, but what he did, do in creation. And, then, when it is said that man was created in *severalty*, and not in *unity*, and the proof is asked for, we are referred to the present wide diversity. But how is it ascertained that a wide diversity — not extending beyond the limits of humanity — is any more indication of *severalty* in creation than a narrower diversity? Most assuredly it is not. To prove that any given instance of diversity could not have proceeded from *unity* of origin, would be to ascertain, by scientific demonstration, the exact limit of *possible* divergence from any ancestral starting-point. But it would be absurd to say that diverging dissimilarity could not possibly extend to this or that line — there being no pretense to experimental knowledge — and yet not be able to point out the precise line of possibility and the law of propagation fixing it.

Prof. Huxley, of London, in a recent lecture on 'A Piece of Chalk,' says, 'How is the existence of this long succession of different species of crocodiles to be accounted for? Only two suppositions seem open to us. Either each species of crocodile has been specially created, or it has arisen out of some preëxisting form by the operation of natural causes. Choose your hypothesis. I have chosen mine.'

But the Professor ought to be reminded of what he has evidently overlooked — viz., that here are not two hypotheses, as he supposes — one of 'distinct creation,' and one of being brought into existence by 'the operation of natural causes.' The one is as much an hypothesis of distinct creation as the other. To be understood, he must explain to us the difference, upon scientific principles, between 'distinct creation' and the 'operation of natural causes.' Until he explains to us the scientific principles of creation, how can we distinguish between it and the operation of natural causes? How do we know but they are one and the same thing? or, if not, *what* is the difference?

Mr. Huxley has not yet explained to us what he means by 'creation.' If he gets his idea from Scripture, and refers us to that, then he is confined to its verbal revelations, where we find nothing but a very few dogmatic expressions referring, in great brevity, to something by no means subject to scientific examination. He will not ask us to look far enough into Scripture to discover some imaginary *kind* of creation, fitted to his argument, and no further.

The error underlying this whole subject, as presented in such arguments as *Vestiges of Creation*, *Darwinism*, *Origin of Species*, &c., is hardly an opinion soberly entertained, but a blunder which, when pointed out, is apparent. It assumes — most strangely — that *creation* is something historic, sensible, phenomenal, effected by rational processes and in chronological periods; whereas, it is no more a subject of philosophical examination than the being, the history or the attributes of God himself. You might as well attempt to apply natural laws and scientific rules to the architecture of heaven, to the chronology of eternity, or to the anthropology of future

life, as to the creation of man. Creation is no part of nature. And if asked what it is, the proper reply* would be, That is a question which no man can answer. The inquirer can only be referred to half a dozen very short sentences of purely dogmatic Scripture. There the inquiry begins, and there it ends. You may debate about the literature, but you can not debate about the phenomenon. To do so would be absurd, because it would be an attempt to discuss things inconceivable. Science has its domain. Absolute truth occupies a much larger field. If this reasoning denies a rationale to creation, be it so. That is no more than to say that some things are supernatural. Objectors must be referred to Nature's Maker.

There are two, and but two, general sources of human knowledge. The one is the external constitution of nature, and the other the verbal revelations of Scripture. It is the business of science to explore and investigate the former. Here its labors begin, and here they end. But when natural science would undertake to subject those revelations to its arbitrament, and say that a bush could not burn without being consumed, or that God could not create except under such and such limitations and restrictions, and in such time and manner, it becomes infidel in its pretensions and mischievous in its effects. The idea that geology may possibly be brought into conflict with Genesis, is the fruit of this very blunder—that science is competent to teach about the *origin* of things. Creation is purely miraculous.

It is proper, therefore, to repeat, that if we have any knowledge whatever of creation, we are in no wise indebted to human science for the information. The words of Scripture furnish us our entire stock of knowledge of this whole subject. Science knows no more about it, pro or con, about its facts, principles, chronology, history, possibilities, or seminal character and powers of procreation, than of the Christship of Jesus of Nazareth, of prophecy, of revelation itself, or of anything else purely miraculous. What is written is written; what is not written is unknown. To affirm or deny, to teach or dispute, outside the revealed Word, is but an attempt to know the unknowable.

Men of science, like all other men, can learn the mere *fact* that man was created, but cannot discuss the question whether in creation man was or was not seminally endowed with these or those powers of genealogical divergence. How do we know that *any* procreative power is conferred *at all* in creation? Perhaps all prolific seminal force is given to each individual separately at his birth, or before, or after. Then there are abnormal offshoots, as we may call them. Of these we know very little, either of their character or possible results. Who knows but that something of this kind might change the character of a genealogical, descending current very materially. Most astounding instances of this sort, entirely unaccountable, are known to genealogical history and medical jurisprudence.

When it is said 'Men were created in nations,' nothing can or need be said of it but this: that that is a fanciful construction to put upon such words as these, 'And the Lord God formed man of the dust of the ground.' For the only information we can have about creation is by properly construing the language in which, and in which alone, we are informed of it. Remove these words from before us and no man can teach, or know, or learn anything at all about the *origin* of man. You might as well debate about the metre in which the morning stars sang together when the sons of God shouted for joy. There are the words, make the best of them. What you read you read.

Outside the revealed words we may reason *a posteriori*, that as things now exist they must at some time and in some way have begun to exist. But even this reasoning, though conclusive as far it goes, is quite incomplete as a rationale of creation. It amounts merely to this, that we cannot conceive of existence but by supposing a beginning of some sort. But this gives no information as to any mode or historic circumstances of creation.

It might be supposed that all existence of every kind came instantaneously into being by one single omnific act; or that each department, or each family, or even each atom of the universe, was the subject of a separate and distinct act of creation, and that these several acts were chronologically separate

from each other, according to any one's fancy. And no man, on any philosophical grounds, could deny any of these suppositions. Outside the revealed words all notions about the origin of men are mere conjecture and vapid speculation.

What — let the inquiry be made — what is the entire sum of human knowledge respecting man's creation? This is it: 'And the Lord God formed man of the dust of the ground.' And, 'Male and female created he them.' These, and a very few subsidiary observations of about the same import, make up the entire sum of earthly knowledge on this whole subject. To attempt to extend it is to attempt that which is clearly impossible. If we do not read these words correctly, let the meaning be corrected. That is another matter. Bible criticism, the correctest conversion of the lean, skeleton, antique Hebrew into our rich Anglo-Saxon, with the least possible loss or addition, is one thing, and scientific explorations and deductions are another and very different thing. In the former field we have dogmatic teaching about Divine agency, angelic life, creation, etc. In the latter we get knowledge of comprehensible things *since* creation.

If any man wishes to make an argument to prove the *possibility* of genealogical divergence into all the known varieties of human kind, let him know that he is attempting to prove plenary power in the plastic hand of God. And if any one chooses to attempt an argument denying such possibility, let him know that he is marking the boundaries of omnipotence. But neither has the logical form of *even an attempt* to prove either unity or severalty.

What, then, is the real issue between those who contend for *unity* and those who contend for *severalty*? Suffice it to say that there is no difference between them as to the present condition of mankind, but only as to how his primordial progenitor or progenitors got into existence. The present constitutional oneness and family exclusiveness of man as to all other animals, with all its known and multiform variety, widespread and deeply-marked, is fully assented to by both. No man believes that some men are brutes, or that some brutes are men, or that some animals are neither men nor brutes, nor both

men and brutes. While it is conceded that the general doctrine of Darwinism would seem to result in a lack of specific identity in the two respective divisions of the animal kingdom, men and brutes, yet such a constitutional oneness is not held by any writer as a presently existing fact, but merely as a philosophical theory or logical consequence.

Then the debatable question, if it is debatable, is respecting the history and physiology of *creation*. How far such a debate is real, rational and logical, it may be well further for a moment or two to inquire. Is it about matter or substance, or mere curiosity and idle speculation?

The first practical inquiry in regard to any declarative proposition is, *What of it?* Supposing it to be admitted or proved, what does *it prove?* If it proves nothing essential, why not show its non-essential and inconclusive character, as the lawyers do in what they call *demurrer*, and thus throw it aside as of no worth? Why assist an irrelevant argument to work itself up into logical respectability by joining and debating its irrelevant and inconclusive issues? Nobody cares whether it is true or not. Here truth is often a great loser, and error an apparent gainer.

We can suppose that about seven thousand years ago, there being then no man living, God took a few pounds of earth, and in an hour or so it became an adult man, with all his extensive physiology; and that soon after, by some equally unknown process, one of the ribs of the man became a woman, and that since then all men are born of their parents.

Another might object to this history, and say that the process occupied much more time, the procedure was very slow and gradual, the material passing through various forms and shapes before it became man; moreover, there were several beginnings—men were created by nations, with five or six primordial beginnings.

‘Well,’ a third might say, ‘gentlemen, you seem to differ about the historic processes and manual work of creation. With only human faculties I am quite unable to discern anything at all of these processes, if, indeed, there were any; and of which, knowing nothing, I am compelled to say noth-

ing. So I may not be a very good judge between you. One thing, however, I can safely say, *your dispute must be referred to the Book of Genesis.* The student of nature, beginning his labors among things clearly subsequent to your matters of dispute, can give you no help whatever. You might as well ask a mariner how and where magnetic attraction was created, or the optician of what materials light was made. The only thing I can decide is, that that theory is nearest right that gives the best exegesis of Genesis.'

This is sober counsel. It may be asked, What is the practical difference between these disputants? They agree that now mankind exists in sole and exclusive unity as to all other animals, but disagree about the history and character of his *origin.* That is, the dispute is about man's history *before he became man.* What was he before he was? And if that is an absurdity, this argument is not responsible for it.

As to the actual disparity, irregularity and unlikeness of different races, nations, families, or individual persons, there is no material dispute about that. It is conceded to be about as great as is generally represented. The question, then, is, What does the disparity prove about man's creation? As if it were possible it could—even though it were ten times as great, or a tenth part as great—prove anything.

Or suppose all men were born equal, as, with some hidden meaning, some have asserted. Would that prove unity of origin? So far from it, it would not prove that man ever had any origin of any kind.

The denial of the doctrine of unity, then, we repeat, or of severalty, is not the denial of something about *man*, but about what God did or did not do with or about the material of which men were made before man was made. Suppose that material was once inert clay, and once something else, and then again something else; trace it where you will and through whatever forms it may have passed in its diuturnal history; suppose it was animal, or animalcule, of *this, that* or the *other* kind, what does all this prove as to the question before us? Obviously nothing. It would prove something, or it might do so, if such debaters would also prove that God was restricted

to the use of precisely such and such material for man's formation. But, in the absence of such proof, the other argument proves nothing.

Suppose science should argue, as most certainly it might, that a woman could not be made from a man's rib—that there is evident lack of physiological propinquity. Look, it might be said, at a bone, and then at the many and diversified organs, tissues, fibres and life of a woman. Science pronounces it impossible. The 'theologians' are fools. 'Science gives no countenance to such a theory,' to use the words of Prof. Huxley. And so it has been proved a very easy thing to 'prove' that man's existence at all is impossible.

Now, how will you meet that argument on scientific grounds? How can you meet *any* argument or deny any statement about creation, or any other unknown and inconceivable thing on scientific grounds? Can you prove it possible to make a woman out of a bone? And is not such an argument just the same and just as reasonable as that which attempts to prove the impossibility of giving to one man by creative endowment as wide a scope of seminal power as might be bestowed upon five or ten primordial progenitors? It is manifestly just as easy to prove that procreation at all is impossible as that one original pair could not be the common parents of the several existing races. Nay, the argument that proves the latter necessarily proves the former! This a logician would call proving too much. Mr. Darwin, Mr. Huxley, Mr. Tyndale, and others of that class, are responsible for this blunder.

And also for the following, to which attention is called: It is held to be impossible for any one primordial pair to be the common parents of the Caucasian, the Mongolian, the Ethiopian, the Malayan, and the American Indian; and yet it is possible and perfectly natural for a monad, a mushroom or a monkey to be! 'Natural selection' is so far superior to Almighty power! This is the doctrine we are asked to believe! They may believe in their monads, their mushrooms, or their monkeys; we believe in God.

The logical fairness, if not the sincerity, of those are to be

Christianity does not claim to be exempt from legitimate consequences resulting from investigations of natural science. But here science seems hard to please. And the thought involuntarily suggests itself, whether it would not be well for it, first, to try to please itself. As things now stand, the difficulty is to frame an argument to meet the condition of the man who can believe both these theories.

These philosophers ought to be asked to explain the possibility of science 'giving its countenance' to any theory of creation.

If there were several created progenitors, then they were all endowed, seminally, with the procreative powers and principles of both the similarity and the diversity we now see. That is, in that case they have produced the present state of man — i. e., they have performed *their* assigned agency in producing it. And if there were but one, then that one was similarly endowed and placed under the very same law of procreation. So that the capabilities of man for propagating his kind are the very same in either case. If we came from five or ten different progenitors, we came; and if from one, we came; and under the same law and with the same results in either case. But what that law is — how much and what agency progenitors perform in producing progeny — is a matter to which 'science has not given its assent.'

It belongs to the advocates of that doctrine to prove that original severalty, if proved, proves something constitutional in the procreative law now. Severalty, if proved, establishes an historic fact. But what of that? The debate is not historic for the mere sake of the history. It is not whether certain ancient men, known or unknown, lived here or lived there, or were born or created here or there. All that amounts to nothing, unless it establishes some procreative principle in man now. Why might not the descendants of our original progenitor exhibit as wide a diversity as those of two or twenty, they all being human? It might just as well be said that two ancient men lived on opposite sides of a river, and, therefore, their joint progeny could not amalgamate. Or that the progeny of two ancestors living two thousand years apart could

not amalgamate and form a common brotherhood. Why could they not? And why, if they lived or were created millions of years apart? How is human diversity any better accounted for by supposing several primordial creations than by supposing one? Manifestly, the severalty accounts for nothing. If proved, it proves nothing.

Suppose the progenitor of the Malayan race lived ten thousand years before that of the Caucasian. What of that unless it be also proved that families, anciently separate, cannot come together and amalgamate? The proof, if admitted, proves nothing. Is it any proof of essential difference and non-assimilation in the parts of the waters of a river to prove that the stream rose in different heads many miles apart? One difficulty with the doctrine of primordial severalty is, that if true, it proves nothing, amounts to nothing, and explains nothing, about unity or severalty now, even if there were such an open and debatable question among men of science — a point which is by no means conceded. If the doctrine proves anything, it proves vastly too much — viz., that the descendants of several ancestors — whether primordial or not could make no possible difference — could not mingle in a common race. How is it ascertained on scientific principles that any certain person now is not the joint product of confluent lines of five or ten original creations millions of years apart?

The question of primordial severalty is like any one of a thousand other historic questions that might be raised quite immaterial to any practical questions now. It proves just what unity proves — viz., that, in some unknown way, progenitors are used, instrumentally we suppose, in the production of progeny. Scripture, and Scripture alone, unfolds to us another fact — viz., that we have proceeded from a created progenitorship. This is a flat, naked dogma, presented without proof, or, we may presume, the possibility of proof.

If some men look and talk much alike, is that any evidence that they descended from the same original parent? And if they look and talk much unlike, is that any proof of different origins? Certainly not the least.

Take two specimens of humanity presenting the widest

known diversity. They came either from one primordial father or from several. Now, *why* is it more easy, on scientific principles, to suppose they came from two than from one? Has any man ever attempted to show a reason? Can a reason be conceived of? The *diversity* has been paraded and paraded; and we are left to infer or suppose the impossibility of a common parentage for both without a particle of proof, or attempt at proof. Can any man see that it would not be just as good evidence that two other men could not be descended from the same parents where one had black eyes and the other grey? Mere diversity — this degree or that — proves nothing, unless you show the law admitting and precisely limiting it, as fixed in creation. If some diversity does not prove original severalty, then *how much* — exactly how much — will prove it? Show the exact limit of possible divergence?

The matter of man's origin being quite beyond the reach of scientific investigation, it cannot, on the one hand, be denied that there were ten or ten thousand separate origins, nor, on the other, that there was but one. In the nature of things, knowledge on the subject must be pure revelation. Exegesis, and exegesis alone, must settle all possible points here. Impossible ones must be let alone. All the information we have on the subject is exclusively dogmatic, didactic and verbal. It does not admit of scientific reasoning.

That all *men* are now capable of universal amalgamation, in sufficient time, no man will question. Such capability is what we mean when we say, human family — *genus homo*. The universal exclusiveness is implied.

Mr. Darwin very properly distinguishes between *man* and the material, be it what it may, animal or vegetable, from which he sprung, or out of which he was produced, on this wise: 'Therefore, we may infer that some ancient member of the anthropomorphous sub-group gave birth to man.' (Descent of Man, Part. I., c. vi., Brit. Ed.) This means that something — and we may infer it was one of the lowest of the monkey tribe, on some particular occasion — '*gave birth* to man.' Man did not exist before this period, nor otherwise than by

this *birth*. Now, at that time, and in that place, *man* began to live. That, in other and interchangeable terms, is to say, God did not use mere ordinary clay, or loam — i. e., plastic alumina, silica, magnesia, oxide of iron, &c., solely in making man, but made use of another animal which had probably been previously made out of those ingredients in the process of creation. The question Mr. Darwin presents, then, is, whether the piece or pieces of clay of which God made man was strictly pure, primitive ‘clay,’ or earthy substance in some secondary form, with some of its exact chemical ingredients absent, or with some foreign particles intermixed, the whole entering into the composition of a then living animal. This is substantially the question, in plain English, put by Mr. Darwin! Perhaps it might be answered by saying that the only account we have of the ‘birth’ is quite brief, and does not give a very exact chemical analysis of the clay. Indeed, it does not so much as state whether it possessed animal life or not.

This is the grave and ‘philosophic’ teaching of Mr. Darwin. And so, he and his opponents are debating about the chemical properties of the ingredients, and the mode of moulding them, by which ‘birth’ or *origin* was given to man!

The Scripture tells us that man was made of *dust*, and, again, in *clay*, and, in part at least, of a *rib*, as the words are in our English version. From this it might be safe to conclude that in the *creation* or *formation* of man — which ever it was, for both words are used — in some way utterly unknown and unknowable, some kind of preëxisting material was used. But as we know little or nothing about primary material substance, what it is, or whether there are more kinds than one, it would be strange to undertake to argue *what kind* of substance it was, or to contend that it was used as an ingredient at all. We may conjecture or surmise, but cannot argue about that of which the account does not inform us. Do we suppose that man was *constructed* out of suitable material, as a workman would construct a house or a machine? We are not informed, either in the Bible or out of it, that man was constructed or fabricated in the beginning, or

what was then done toward bringing successive generations into being.

The theory that 'all organic beings which have ever lived on this earth have descended from some one primordial form into which life was first breathed,' as was also long since announced by Mr. Darwin, necessarily involves other considerations besides those which lie in the past history. If the theory be the true one, then it follows, necessarily, that 'all organic beings' which now live, as they descend the chronological current, are continually ascending in the general scale of being. And so the mouse of to-day is destined to become the mammoth of the future; and so the 'man of destiny' in coming time. This law of biology is, we must suppose, a general law. It could hardly be designed to bring the world down to the Darwinian period and there leave it. It will, therefore, continue to be the law. And so 'all organic beings' are still rising higher and higher — traveling farther and farther from the 'primordial form,' and so, in sufficient time, men will be angels, and then archangels. The monkeys of the nineteenth century will be mermaids, and then men in the future; and so 'all organic beings' will, in sufficient time, become archangels. But the great law of 'natural selection' continuing in force, what is to be the ultimate result? Why, of course, there can be no ultimate result. We are still in the early morning of time. Deity, *at least*, is the heritage of 'all organic beings!' And how much farther we are to go in this direction of improvement Mr. Darwin will answer! This is another of our lessons in biological science!

Then why keep up this debate about things not debatable? What right have men of science and literature to call public attention to, and keep the popular gaze upon, false and fictitious issues quite irrelevant to the questions they raise. Anthropology as a science, new as it is, when viewed in its various branches, is of great and acknowledged importance among the natural sciences, and is destined to unfold much from the great storehouse of facts it has so successfully entered. But its very name, ambiguous as it is, seems to forbid the

unlawful use of it so often attempted. If men wish to question or underrate the plain dogmatic Scriptures, let them not violate the simple rules of logic and argumentation in doing so. There are other and less disingenuous modes.

If the language of Scripture admits a greater antiquity to the earth or to its human inhabitant than some suppose, then let its words be so understood. And if it be naturally impossible and contradictory to suppose a verbal rationale of inconceivable or preternatural things, then let that, like other impossibilities, be submitted to. But that God has spoken one way in words and a contrary way in nature is an impossibility about which there ought to be no debate.

ART. XII.—*THE FUNERAL OF LEE.*

I.

Through yonder shaded, silent streets see slowly wind along,
 With drooping head and softened tread, a melancholly throng;
 No bugle sounds its warlike note, they raise no battle-cry,
 No cannon from its brazen throat now bids them on to die;
 The fierce delight that warriors feel amid the deadly fray,
 Nor hissing ball, nor clashing steel, shall thrill their hearts to-day.
 Full oft they rushed upon the foe, oft flashed their swords on high,
 With battle light in mad'ning fight oft gleamed each glowing eye.
 Their useless swords are rusted now, doffed is the martial gray,
 Nor aught of war's proud pageantry appears in their array;
 But oft-recurring waves of grief sweep, like a moaning sea,
 O'er each brave breast that erst has pressed to victory with Lee;
 And every face in sorrow clad, each heart attuned to woe,
 To lay the hero-saint to rest with solemn step they go.

II.

With rustling as of thousand wings o'er mount and vale, and sea,
 The spirits of the fallen come who fought and fell with Lee;
 From mad Missouri's turbid flood to Rio Grande's wave,
 From many a quiet churchyard, many a nameless grave,