

## The First Chapter of Genesis.<sup>1</sup>

By E. WALTER MAUNDER, F.R.A.S.,

*Late Superintendent of the Solar Department, Royal Observatory, Greenwich.*

OUR subject is the First Chapter of Genesis. I take it that all here are agreed upon two points—

First : We believe that God is.

Next : We believe that He made the world—that is, the entire material universe.

There is a third proposition which we must also accept absolutely, if we are to discuss our chosen subject to any profit. That third proposition is : God is Himself the Author of this chapter, which tells us how He made the world.

For there are only two possible sources for the chapter : God Himself, the Creator, Who knew the mode and order of creation ; or man, who did not know, but imagined it.

It is manifest that the act of creation cannot have come under human observation ; it predated man, it escaped his experience entirely. Nor could he learn of it by tradition ; there was no one to hand down any account of it to him. Nor could he infer it from any study of what we term the processes of nature. For the act of creation is not one of the processes of nature : it preceded them all as assuredly as it preceded man himself.

That which men can observe and experience and have recorded is of value to all whom the record reaches, but if the record rests upon no experience, upon no observation, if it deals with facts that lie outside all human experience and observation, and is built up merely of suppositions, then it has no value : it is the baseless fabric of a dream. This first chapter of Genesis is only valuable if it comes to us from knowledge.

We are thus brought face to face with the fundamental question of the actuality of Revelation, for whatever may have

<sup>1</sup> Abstract of a paper read at a meeting of the Victoria Institute on Monday, April 6, 1914.

been the process by which this first chapter of Genesis was given to man, the chapter is either a revelation which came from God, or it tells us nothing.

Most men are content to accept the universe just as they find it, without inquiry as to how it came into existence or speculation as to its beginning. But there are also those in whom the sight of the order and beauty of the universe raises deep thoughts and questions, who desire to know how the universe came into existence. Many who put this question desire, and indeed expect, that the answer should be expressed in the terms of natural science. They have so ill-defined a conception of the character and scope of science that they suppose that the answer falls within its powers.

But science has its limitations as well as its powers. It deals only with relations; its observations, its deductions are only relative. The movements of the sun were noted, first, because they were movements relative to the earth; the movements of the planets were relative to the stars, and so on; of absolute motion we know nothing.

Further, the discoveries of science give us no final explanations; for, when an explanation is discovered for some mystery, the explanation itself consists in the bringing to light of something, perhaps of many things, that are themselves unexplained, and for the time inexplicable.

Again, science knows nothing of the ultimate; however far we go in any direction, whether in time or space, the inquiry of science will still be, "What is beyond?" And, if it were possible to give the decisive answer "There is nothing beyond," then science would find that it had passed the limit of its powers; it would have no further ability to deal with the situation.

The progress of science has been marvellous, and we may expect that its future will be much more wonderful than its past. But the very fact that it is progressive carries with it a necessary drawback. Science has no finality; we can never rest and be thankful that there is no more to learn. The

hypotheses which men accept to-day in science may be rejected to-morrow, and will certainly be modified. It is with things that change that science concerns itself, and with their changes, and it is the changing thought of men concerning them.

From each and all of these considerations we see that the limitations of science preclude it from giving us any message on that which is avowedly the subject of the first chapter of Genesis—the Beginning.

And the first chapter of Genesis does not give us the message of science. One example is sufficient. Astronomy is the oldest of all the sciences, but there is not a hint of even its earliest discoveries, not a single astronomical technicality is introduced; even the sun and moon are not named; we are told nothing except what an intelligent child might perceive for himself—namely, that there are in the heavens a greater light, a lesser light, and the stars also. There is nothing contrary to science told us, but neither is there any scientific revelation. Herein the chapter stands in striking contrast to all other accounts of creation; for all, whether they proceed from savage or from cultured nations, attempt to explain the origin of the universe by supposing it to have been built up out of similar materials. Similarly, Haeckel, and the school of which he is a representative, build the heavens and the earth from the primordial atom; but less logical than the pagans of old, they deny the existence of any person or force outside the universe thus self-constructed.

It is not possible to explain in terms of itself that which needs explanation. But the answer of the first chapter of Genesis is of another kind: "In the beginning, God." Here the origin of the universe is found, not in itself, but elsewhere. It is true that, if God be also unknown, we learn nothing; but, if God can be known, then His bringing the world into existence is no longer unexplained, though it may transcend our understanding. The method of His working may escape us, yet if we can know God Himself, we can learn something of His purpose,

and therefore the significance of what He has wrought. The true explanation of created things is found in the Creator.

How can God be known? The analogy of science may help us. That which men have learnt concerning sun, moon, and stars, they have learnt in one way and in one way only : it is from the sun, moon, and stars themselves that men have derived their knowledge of them ; the sole foundation of astronomy is observation. As the science has developed, and become more complex, there has been division of labour ; and now some men are observers, others are computers, and others, again, subject the results of computation to further discussion and analysis. But actual observation comes first and last and in between ; the whole structure of the science is built upon it.

So with the other sciences, as geology, biology, and the rest. We have learned of the rocks from the rocks ; of life from life. If we would learn of God, our knowledge of Him must come from Himself ; there is no other source possible. Some scientific men have argued as if, since they have learnt of nature from nature, by observation of nature, and through their natural powers, they could also learn of God from nature by observation of nature, and through their natural powers, without God having aught to do with their learning of Him.

But God must be the only source of light concerning Himself. We know of Him that which He has told us ; we can learn nothing more. He is our only possible source of knowledge in this field ; it is only in His light that we can see light.

Here, then, is the importance of the first chapter of Genesis. It is no record of events that came within human experience ; it is no inference from human speculation ; it is the word of God Himself to man. What is the message which He desires us to hear ?

There are seven great truths which, I believe, are taught in this chapter—

1. That God is.
2. That He Himself created all things.
3. That He created all things, not in one act, but in several.

4. That He made man in His own image.
5. That He gave man dominion over all the earth.
6. That He rested from creation on the seventh day.
7. That He hallowed the seventh day.

These seven great truths present us with the true relations of man to God, his Creator, and to nature, his fellow-creature. Above man is God, the infinite and eternal Creator; below man is the great and glorious universe which God has called into being. Between the two stands man; in himself, small, feeble and insignificant, but, by virtue of God's patent conferred upon him, endowed with power to have communion with God, and dominion over nature—to follow Religion, and develop Science.

To bring out these seven truths from the chapter before us is no triumph of forced and ingenious exegesis; they lie upon its surface, plain to every man. If the chapter be read to a child or to an unlearned peasant of ordinary intelligence, both would draw from it the same conclusions that I have done; indeed, in almost every case I have used the very words of the chapter itself. And these seven truths are fundamental: the teachings of this chapter are necessary—necessary for all men. They furnish the great safeguard against idolatry and polytheism, and all the unspeakable degradations of body, mind, and spirit to which these lead. This chapter declares to man from the outset his true position in the universe, and enables him to take his first step in the knowledge of God, which is Religion, and his first step in the knowledge of nature, which is Science.

The basis of all the science of to-day is found in the principle of continuity; the principle that like causes produce like effects, or, to use less debatable terms, that like antecedents are followed by like consequents, and that the phenomena perceived to-day follow necessarily and continuously from the phenomena of yesterday.

The first chapter of Genesis is not concerned with such continuity. Six times it is recorded "And God said," and in answer to that Word a change in the condition of nature followed immediately. We often speak of creation as a single

act, and there is a sense in which that holds good. But this first chapter of Genesis declares the truth that God accomplished creation, not in a single act, but in several—there were six creations.

This was not because the first creation broke down or was a failure. The creation of the first day was good and complete in itself; it has never been superseded. Light is with us to-day in all its beauty and worth; it was created good, it remains good. And so with the other creations, each in their turn.

But because these six separate fiat were creations, they escape the research of science. Science deals only with relations, the relations between created things; it can only consider secondary causes, and it is limited by the continuity of their operation. That which precedes the continuity of nature is creation; that which follows creation is continuity. Hence the two terms are mutually exclusive; any event or phenomenon that falls within the range of continuity is not creation, and the act of creation is no incident of continuity.

What was the nature of the six "days" of creation? What was their length? And where are we to place them in the course of time?

An astronomical day, or rather let us put it, "a day of man," involves four things: an earth that has obtained definite form; that has begun to turn on its axis; a sun that shines; and a man upon the earth to see. In order that "evening" and "morning" may indicate definite points of time, a fifth requisite is necessary—a selected locality upon the turning earth, from which the sun may be seen to set and to rise.

The chapter before us gives us no hint that at the moment when the word of command of the first day was spoken, the earth had received any definite form. There is no hint of its rotation, nor of any choice of a special locality. It was not until the fourth day that the sun was set in the firmament to give light upon the earth; nor until the sixth day that there was a man to perceive the succession of evenings and mornings. Surely, then, the seven days of Creation are not seven days of

man, but seven days of God. But this must give them a stronger, not a weaker, claim to be rightly called days. If God regards them as days, then days they were in the fullest sense; no matter how difficult—nay, perhaps impossible—it may be for us to define them in our vernacular. Yet, since man was made in the image of God, it may well be that the days of man are faint types or images of the days of God; the six days of man's labour, of God's six days of creative work; the seventh day of man's rest, of the day which God blessed and sanctified.

But if it is impossible for us to define the days of God in the terms of our human experience of time, is it impossible that God should translate them for us? We find that the record of each day's work is concluded by the same formula—"and there was evening, and there was morning." This expression is both unusual and striking, particularly in the case of the first day. "And there was evening and there was morning, day one."

The suggestion to my own mind is that each "day" was bounded by its evening and by its morning. The natural objection to this view is, that the interval between evening and morning is not "day," but "night"; but the objection itself recalls the suggestion once put forth by Hugh Miller, and adopted by the late Rev. Professor Charles Pritchard, in his work, "Nature and Revelation," that the seven days of Creation corresponded to seven successive dreams given to some prophet of old.

But if the record of Creation was the record of a series of visions, there must have been a reality which it represented and expressed.

Five times over in the chapter we read "God saw." How often have these words been read as if they ran, "man saw"? It is not the same thing, for "the Lord seeth not as man seeth, for man looketh on the outward appearance" (1 Sam. xvi. 7). Man sees the outward appearance, the effect, the phenomenon; God sees the inward substance, the causes, the reality—that which lies at the basis of nature, as well as that which is at the basis of character.

This thought is strikingly expressed in the 139th Psalm:

“ My substance was not hid from Thee,  
 When I was made in secret,  
 And curiously wrought in the lowest parts of the earth.  
 Thine eyes did see my substance yet being unperfect ;  
 And in Thy book all my members were written,  
 Which in continuance were fashioned,  
 When as yet there was none of them.”

And these words are as applicable to the weaving of the wondrous fabric of the Cosmos as to that great mystery, the formation and growth of the yet unborn child.

“ Which in continuance were fashioned.” The continuity of nature is the dominant note of science to-day, the thought that nature as it now is has been “ fashioned in continuance ” from its condition in the past. It is a new thought in these our times ; it has hardly found general recognition for three generations of men, yet it is clearly intimated here and elsewhere in the Scriptures in documents that were written nearly three thousand years ago.

We have seen that creation precedes continuity, and is not an incident in its course ; but when did creation take place ? The answer to that question is not so obvious as some have been ready to suppose.

The existence of man as recognized by God Almighty did not begin with man's own consciousness of it, but with the beginning of that continuity of nature which eventually resulted in man's coming into living, conscious existence. He existed to God long before he existed to himself. This truth is set forth with great distinctness in the address of Wisdom, in the Book of Proverbs, where the work of creation is especially referred to.

“ The Lord possessed Me in the beginning of His way,  
 Before His works of old,  
 I was set up from everlasting from the beginning,  
 Or ever the earth was.

\* \* \* \* \*

When He appointed the foundations of the earth,  
 Then I was by Him, as One brought up with Him :  
 And I was daily His delight,  
 Rejoicing always before Him ;  
 Rejoicing in the habitable part of His earth ;  
 And My delights were with the sons of men ” (Prov. viii. 22-31).



Six times God uttered the creative word ; six times that word was followed by the instant coming into existence of that which had been commanded. But when God beheld that which He had made and saw that it was good, does it follow that, could a man have been there to look on, there was anything present which would have been apparent to his sight—anything, that is to say, that he could have recognized as an accomplishment of the command? Turn back to the text which I have already quoted : “Thine eyes did see my substance yet being unperfect, and in Thy book all my members were written, which in continuance were fashioned when as yet there was none of them.” Is not the Psalmist here enunciating a truth that concerns much more than his own bodily existence? If this earth of ours had consciousness and spirit, as well as mass, might it not repeat the very words of the Psalmist? Might not sun and moon and all the heavenly host join in the same ascription, and so with all the forms of life and energy?

And this not only because God is all-knowing, foreseeing the end from the beginning, and beholding the thing that is afar off as if it were near ; but because He can perceive and gauge the outcome of the hidden forces now secretly in operation. To Him the far-off results are present, both because He is not subject, as the creature is, to the limitations of time, and because He sees the causes that are working towards the final effect. When God spoke it was done, and God saw it, and saw that it was good, for He had then put forth the power that would accomplish His entire purpose. “So shall My word be that goeth forth out of My mouth : it shall not return unto Me void, but it shall accomplish that which I please, and it shall prosper in the thing whereto I sent it” (Isa. lv. 11).

In the foregoing paper I have tried to bring out the thoughts which this first chapter of Genesis have impressed upon me.

I think it tells us of the Beginning ; that God created all things ; that He created all things in seven days of God. By creation I do not understand the bringing of all things into

their final manifestations, but the bringing into operation of the essential powers and principles which should lead to those manifestations in the fulness of time.

I do not know when the beginning took place ; I do not think the slightest hint is afforded to us. I do not think that we can determine how long in human measure were those seven days of God. The suggestion pleases me, I must admit, that they were revealed to man in symbol and in vision in seven consecutive nights ; that between the evening and the morning the seer, whoever he was, saw in dream the work of the successive days of God's week. It may be that God, in His acts of creation, may have consented to limit Himself by the very limitations of time which hereafter would be the necessary limitations of His predestined creature, man, and that the week of God may have been, in absolute duration, exactly equal to a week of man. It may be, but unless God tells us so in so many words we cannot know, and I do not see that it matters to us.

The first chapter of Genesis is no handbook of science, no epitome of the course of evolution. It is the revelation of God. "God said" ; "God saw" ; "God created" ; "God called" ; "God made" ; "God appointed" ; "God divided" ; "God ended" ; "God rested" ; "God blessed and sanctified."

If I am right, it is through missing this essential thought that the idea has arisen that there is some conflict, some opposition, between the teaching of this chapter and the discoveries of science.

Science deals only with the relation of created thing to thing within the continuity of nature, and can in no direction extend its researches to its origin and beginning, its creation. This chapter does not deal with the relations of thing to thing, but reveals God the Creator, the Origin and Beginning of all things. Our powers of observation and reflection were given to us by God in order that we might acquire the knowledge of external nature for ourselves. But the Creator Himself is here

revealed to us, because our natural powers of observation and reflection are incompetent to make Him known to us.

And this revelation is for the purpose of teaching man his true relation both to God and to nature. He is made in the image of God, after His likeness. Here is the high dignity of man, his solemn responsibility ; the duty is laid upon him of showing forth to his fellow-men and to his lower fellow-creatures the love and mercy, the truth and justice, the wisdom and patience, of Almighty God, the God whose image he was created to bear and to make manifest.

Here lies his right to dominion over nature ; not in his own essential worth, but in the fact that he is God's chosen representative. Independent power and authority he has none ; as the son of God, made in His image and likeness, deriving all his life and power and authority from Him, God "hath put all things under His feet."

Here has arisen the conflict between Religion and Irreligion ; there is none between Religion and Science. "Religion" means "the binding of man to God," a binding which, if he is to manifest God's image, and to rule as God's representative, is essential. Irreligion means the dissolution, the denial, or at least the neglect of this relation. Hence there are many who are ready to admit in words that there is a "Great First Cause," but in practice they ignore Him ; He is to them merely "a negligible factor."

The brute beasts know not God, and cannot hold intercourse and communion with Him ; they follow their natural propensities and passions, for they are not capable of anything higher. But if man, by creation the son of God, made in the image of God and to manifest His likeness, holds himself separate from and independent of God, the beauty and perfection of created nature is destroyed, and man, the highest of created things, becomes most out of harmony with the purpose of his being. For Manhood consists in this, that Man show forth God's image and make manifest His likeness.