

## ABRAHAM AND THE STARS

ALLAN A. MACRAE, Ph.D.

Since God, who inspired the writers of the Bible, is also the Creator of nature, it is to be expected that the Bible and nature will fit together.

This, of course, does not mean that we can construct a complete science of physics, chemistry, botany, astronomy, or even history, from the study of the Bible. This was not its purpose. The Bible was written to tell us what we need to know about God, about man's sin, about the possibility of reconciliation to God, and about God's plan for man. These are great and vital subjects, and it is difficult to get a true understanding of them into the heart of sinful man. To do so is the purpose of the Bible.

Nevertheless, if the Bible is to fulfill this purpose, it could hardly be expected that its Divine Author would allow it to be in error with regard to other subjects. Even though the full explanation of such matters is no part of its purpose, its incidental references to them could hardly be erroneous. It is the claim of Jesus Christ and His apostles that God's word is entirely true.

This does not mean, of course, that the Bible will use the scientific terminology that is in vogue today. Such terminology changes from time to time. What the word "science" generally meant a century ago, the word "philosophy" means today. What the word "philosophy" generally meant a century ago, the word "science" means today. English words are constantly changing their meanings. Scientific terms are often redefined in order to fit with advancing knowledge and with newly suggested theories. Thus, under the modern scientific system of classification, the word "fish" is used to denote an animal that has certain specific structures. In ancient times the word was used to designate any animal that habitually lives in the water. Modern science has a perfect right so to define the words that it uses as to fit its attempted classification and interpretation, but we are wrong if we insist upon attempting to interpret the Bible as if its words were written with today's usages in mind. We must take words and phrases in the meanings that they possessed at the time when they were written.

A similar situation exists in connection with the use of the word "day." Nowadays it is quite customary, for the figuring of interest, or the arranging of railroad or airplane time-tables, to think of a day as indicating a period of 24 hours. Yet it is comparatively seldom that any of us use the term "day" in common speech in this particular sense. No one, meeting a friend in the late evening, would say, "Isn't this a nice day?" He would be more apt to say, "We had a very pleasant day, and the evening is nice too!" In common use a day ordinarily means a period of light between two periods of dark-

ness or a period of activity whether short or long. A radio speaker began a statement with the words: "Al Smith used to say, in his day that . . ." Here it is clear that the word "day" did not indicate any particular period of 24 hours, but rather a period of activity which ran for several years. Similarly in John 8:56, Jesus said, "Abraham saw my day and was glad." He did not here refer to a period of 24 hours, but to the time of His activity on earth.

There is also the matter of phenomenal language. We do not believe that the sun goes down and up but that the earth turns; yet no one has any difficulty in understanding what we mean when we speak of sunset and sunrise.

Through the ages it has been the belief of the Christian church that the statements of the Bible, if correctly and carefully interpreted, will not contradict any aspect of God's creation or of God's universe. Sometimes the incompleteness of our knowledge of some phase of science or history may cause us to think that a statement in the Bible is wrong. A little later, when our knowledge has moved forward, we are enabled to see clearly that the Biblical statement revealed a knowledge on the part of the Divine Author beyond what was known to man. The Bible is never out of date, but it is often ahead of date.

This is well illustrated in the divine promise to Abraham regarding the stars.

Today most people know very little about the stars. A century ago the appearance of a comet in the sky would be immediately noticed and would produce wide-spread discussion. If a comet should now appear, most people would know nothing about it, except what they read in the newspapers, or hear on the radio.

The reason for this, of course, is the tremendous increase in the lighting of our streets. During the last fifty years artificial light has become so strong and so extensive in most of our populated areas that very few people ever get more than a tiny glimpse of the stars. It is an entirely different situation from that of a century ago, when everybody saw a great deal of the stars and most people came to know the major constellations almost as if they were friends.

We can be sure that Abraham had this sort of knowledge. There was hardly any artificial lighting in the areas where he spent most of his time. He was often outdoors when the heavens were covered with brilliant stars and must have known a good deal about them. In addition Abraham had come from Ur of the Chaldees and had spent a large part of his life in Haran. Both of these were towns that were dedicated to worship of the moon god. Babylonian astronomy and astrology were widely cultivated. Even though one held an entirely different religion, he could hardly spend years in a Babylonian environment without knowing a good deal about the stars, to say nothing of the many observations that he would naturally make during long evenings in the out-of-doors, undisturbed by the artificial light that now keeps

most of us from paying much attention to them. In view of all this, it must have been a very great surprise to Abraham when God gave him the particular promise recorded in Genesis 15:5.

In Genesis 12:3 God had already promised Abraham that He would make him a great nation. Having lived in the great nations of Mesopotamia, Abraham would hardly think of a group of a few thousand people as being a great nation. He must certainly have thought that this promise meant much more than that. Yet in Genesis 15, when Abraham was enduring depression and discouragement, the Lord directed him to look at the stars, saying: "Look now toward heaven, and tell (count) the stars, if thou be able to number them." And he said unto him, "So shall thy seed be" (Genesis 15:5).

This must have impressed Abraham as a very strange promise. He could hardly have been ignorant of the fact that all the stars that can be seen with the naked eye from any place in the Near East would total well under 4,000 (and no one in that day would have any reason to think that stars existed that could not be seen with the naked eye). Four thousand might appear like a large number of dots, but it would hardly represent "a great nation."

Abraham may have thought: "Look at the wonderful beauty of the stars. God has promised that I am going to have descendants who will shine like the stars, and will be indeed a heavenly progeny." Yet as he thought it over, he would know that this was a mere rationalization. After all, God had said: "Look toward heaven and count the stars, if thou be able to number them; . . . so shall thy seed be." It was not a difficult task to number the stars that could be seen with the naked eye. More than three thousand years were yet to pass before the telescope would be invented and it would be possible to learn that there are far more stars than the naked eye can see.

In Genesis 17:5 God promised Abraham that he would become "a father of many nations." This must indeed have seemed incongruous to Abraham, after the comparison of his descendants to the number of the stars. Four thousand descendants would not be enough for one great nation, and certainly not enough for many nations.

In chapter 22 God repeated His promise to Abraham, saying, in verse 17: "I will multiply thy seed as the stars of the heaven, and as the sand which is upon the sea shore. "Now," Abraham may have said, "here is a real promise! Who can count the sand that is on the seashore? If my descendants are to be as numerous as the seashore, I shall indeed have a tremendous progeny!"

More than three thousand years passed, and then the telescope was invented. Soon men were able to observe great numbers of previously unknown stars. According to the latest estimates, there are about two hundred billion stars in our galaxy alone. Within the present century it has been found that our galaxy is only one of millions of galaxies, each of which also contains great numbers of stars. It is now believed that there are far more stars in

the heavens than there are grains of sand upon all the seashores of this earth put together!

At this point a question may reasonably be asked. Are we assuming certain things about Abraham's knowledge for which we have no proof? Can we be sure that Abraham knew so much about Babylonian astronomy? Can we be sure that Babylonians had counted the stars as early as the time of Abraham? Is it not possible that Abraham actually knew very little about the stars and that from merely glancing at them he received the impression of a tremendous number and therefore considered it a marvelous promise that his descendants would be as numerous as the stars? In answer let us assume that either or both of these objections should be correct. What would it do to the argument that we have advanced?

Actually, it would only make the argument stronger. On the assumption that God gave Abraham a promise that would appear very wonderful to Abraham but which actually would not amount to much, we have a situation in which people a thousand years later might easily have been inclined toward skepticism regarding the whole truth of the Bible.

By the time of the great astronomical researches of Ptolemy it would have been apparent to any careful investigator that the total number of stars visible from any point on this earth would hardly pass beyond four thousand. At the time of Christ any skeptic could easily have declared that, while the statement in Genesis might have been quite natural in a time of ignorance, knowledge had now advanced to the point where any intelligent person could easily see the absurdity of the use in Genesis 15 and 22 of the number of the stars as indicative of a great number of descendants. After all, four thousand is hardly sufficient to describe a great nation, to say nothing of a whole group of nations.

This attitude toward Genesis could easily have been maintained by educated people for at least another thousand years. No one would have any reason to think that there were other stars which were not visible. To make such an assumption, without proof, would be utterly unscientific. Only after the telescope was invented were we able to see that the Bible was right all along.

God who is the Creator of nature is also the Author of the Bible. He knows many facts that science never dreamed of in Abraham's day. He knows many facts that science has not yet discovered. If, as was formerly true in this case, a clear statement in the Bible disagrees with a present observation or theory of science, let's just wait until science discovers more facts. Genesis 15:5 is very appropriately followed by the words: "And he believed in the Lord; and He counted it to him for righteousness."

Faith Theological Seminary  
Elkins Park, Pa.