BOOK REVIEW

Judah Landa, *In the Beginning Of: A New Look at Old Words* New Jersey: Jay-El Publications 2004, 192 pp.

Judah Landa is an important writer on Torah and science. His first book, entitled *Torah and Science* (reviewed in B.D.D. 1), showed Landa to be a person full of new ideas, unafraid to challenge conventional thinking. Therefore, it was with considerable anticipation that I began reading his latest book on this subject, *In the Beginning Of*.

The scope of Landa's book is truly impressive. He proposes a new translation for the first eleven chapters of *Sefer Bereshith* – a translation that is faithful to the Hebrew text and yet consistent with modern science. His provocative title sets the tone, informing the reader that he or she is in for a fresh approach. Right at the outset, with the inclusion of the word "of" in his title, Landa calls attention to the error of the standard translation "In the Beginning" for the Hebrew word "Bereshith," an error that Rashi himself pointed out.

As stated in the very first sentence of his Preface, Landa's goal is "to demonstrate that it is possible to interpret the Bible literally and accept it as divinely inspired ... and, at the same time, not encounter any irreconcilable conflicts between it and the well established tenets of modern science." The vital question is: How well has Landa succeeded in achieving his goal? It is probably not surprising that my answer is: only partially. Nevertheless, before getting into the details, the very scope of this book must engender immense respect for the author and great admiration for the many important insights that this volume contains.

In his Preface, Landa enunciates important key principles without which it is impossible to understand the Torah account of Creation in the light of modern science. First, Landa stresses that not every word in the Torah need be understood in its simplest literal meaning. It is hard to understand why this principle is still a subject for dispute, since it has been repeatedly asserted by major Torah authorities. For example, Rambam devotes an entire chapter (2:25) in his *Guide for the Perplexed* to emphasizing this point, and Rashi does not hesitate to interpret the word "yom" in Hosea 6:2 as meaning "era."

Landa's other key principle is that "the Torah speaks in the language of ordinary people." Although this principle is well established, it, too, is ignored by many. For example, God's promise to Abraham that his descendants will be "as numerous as the stars in the heaven," has led to a debate regarding whether only the stars

Nathan Aviezer

visible to the naked eye were intended (Abraham had no telescope) or whether the divine promise included all stars (God is not restricted by the lack of a telescope). The participants in this debate seem untroubled by the fact that, taken literally, neither position makes any sense, the former leading to a number far too small (only a few thousand), whereas the latter leads to a number far too large (untold billions of billions). One should recognize, as Landa does, that the Torah expression "as numerous as the stars in the heaven" simply indicates a large, unspecified number, because "the Torah speaks in the language of ordinary people."

We now leave general principles and consider some specific examples of Landa's translation. Landa emphasizes that the first two verses in the Torah are introductory and do not describe the creation of anything. He points out that the first verse is not a complete sentence at all but rather a phrase, which is rendered by Landa as follows: "In the beginning of God's creation of the heaven and the earth..." with the second verse continuing and completing this sentence. Only after these two introductory verses does the Torah begin, in verse 3, to describe God's specific acts of creation, starting with the creation of light.

Another point that could have been mentioned is that the word "heaven" in the Torah does not refer to the sky above our heads, and theh word "earth" in the Torah refers neither to the planet on which we stand nor to the soil beneath our feet. Rather, this pair of words – "heaven" and "earth" – occurs repeatedly in the Torah in the sense of "the cosmos" or "the universe." Thus, when God is referred to as "Master of heaven and earth" (*Bereshith* 14:19), God is being described as "Master of the entire universe" with His mastery not being limited to our planet and its overhead sky.

Another feature of Landa's translation that appealed to me was his suggestion that Noah's Flood *need not be understood* as having been global in scope. As Landa points out (p. 124), "The words in verse 6:17 [referring to the Flood] 'upon the earth' and 'under heaven' may refer to a distinct locality which was flooded." He brings convincing support for his suggestion of a non-global Flood by citing parallels in *Sefer Shemoth* 21:6 and 10:15.

I also liked Landa's forthright assertion that the scientific theory of evolution does not contradict anything that is written in *Sefer Bereshith*. Landa calls attention, as have others before him, to the use of the Hebrew verb "vaya'as" (He made), rather than the verb "vayivra" (He created), to describe the origin of terrestrial life. He writes (p. 44): "This is due to the fact that terrestrial life evolved from marine life. The amphibians literally carried themselves out of the water, onto the land. This does not represent a new creation, thus the term 'made' instead of 'created.'

So much for the supposedly irreconcilable conflicts between modern science [evolution] and the Bible!" Landa's perceptive comments take on special importance in view of the current controversy surrounding Intelligent Design.

Another of Landa's interesting suggestions is that the numbering of the verses should be altered in certain places. Landa places the three verses that deal with the Shabbat at the end of Chapter 1, rather than at the beginning of Chapter 2, where they are usually found. The Shabbat marks the completion of the biblical account of Creation. Therefore, these three verses clearly belong at the end of the first chapter, being the finale to the creation story – and this is exactly where Landa places them. It was the Catholic Vulgate that shifted these verses to the second chapter, separating them from the creation story, because, in the view of the Catholic Church, the significance of the Sabbath is unrelated to the creation of the universe.

These few examples do not exhaust the list of important and wise comments that can be found in Landa's translation and explanations. However, it is now time to turn to the other side of the coin. What bothered me about this book?

I was most troubled by the many times that Landa's explanations seemed contrived. This was particularly disturbing when a straightforward explanation is perfectly adequate. Let me cite a striking example.

The very first act of Creation, the creation of light in verse 3, is in *perfect agreement* with the Big Bang theory of cosmology – a theory that is supported by a vast array of scientific evidence, was awarded the Nobel Prize, and has attained the status of being denoted by scientists as the *standard theory of cosmology*. The Big Bang theory asserts (i) that the universe began with an event of creation, and (ii) the object that was created was an enormous ball of light, referred to by cosmologists as the primeval light-ball, but having the popular name of the "Big Bang" and hence the name of the theory. For what more could one ask! Even secular cosmologists recognize the striking correspondence, without of course giving it any significance, between the Big Bang theory and verse 3 of the Torah that asserts: "And there was light" at the very beginning of time. For example, Professor Joseph Silk of the University of California, a prominent, secular cosmologist, begins his book on modern cosmology (*The Big Bang*, 1989) with the following sentence: "The big bang is the modern scientific version of creation."

However, Landa chooses to give verse 3 an entirely different explanation. He writes (p. 17): "The third verse of Genesis refers to the period of time during which the laws governing the production, transmission and reception of light were promulgated and made into a reality. During this time frame, the bulk of the light sources in the universe came into existence as millions of new stars were ignited."

Nathan Aviezer

Note that Landa's explanation of verse 3 contains *not one word* about the creation of the universe, and *not one word* about the sudden appearance of the light of the Big Bang that heralded the creation! Instead, we are told that this verse is about the laws of nature that govern light and the formation of the first stars. According to Landa, the creation of the universe is never mentioned in *Sefer Bereshith*!

Another feature of the book that I found disturbing is that, in a number of areas, Landa ignores modern scientific findings. Consider his discussion of the extreme ages recorded for the early generations in Chapter 5, where people are described as having lived for many hundreds of years. Landa concludes (p. 123): "The individuals from Adam to Noah who lived such extraordinarily long life-spans, did so miraculously. This would not be the first, nor the last, miracle to be described in the Bible." The obvious problem with this interpretation is that these extreme ages are *not* described in *Sefer Bereshith* as being miraculous.

Landa seems unaware that modern science has provided a non-miraculous explanation for the extreme ages in *Sefer Bereshith*. Recent dramatic advances in the science of aging ("a revolution in aging research") have shown that it is indeed possible for people to live for many hundreds of years. The 22 June 1996 issue of the British journal *New Scientist* asks (cover page): "Will We Always Grow Old?" The cover story, dramatically entitled "Death of Old Age," begins as follows: "We can live healthy lives for hundreds of years, researchers claim." This claim is confirmed by Professor Michal Jazwinski, Director of the Center on Aging at Louisiana State University and a major figure in aging research, who asserts (*Scientific American* [December 1992], p. 95): "the maximum human life span might reach 400 years." In view of these scientific findings, it is not necessary to invoke miracles to explain the extreme ages recorded in *Sefer Bereshith*.

To take another example, Landa asks (p. 49): "When did the chain of evolution yield a product [human beings] that began to appear God-like?" He answers: "This occurred *gradually* over a long period of time ... there is *no distinct point in time* to which the transition to God-like status can be assigned [to human beings]" (italics added).

This assertion ignores the Agricultural Revolution. In recent years, many scientists have written about this dramatic revolution in human cultural history, which occurred only a few thousand years ago and marks the abrupt beginning of civilization. The Agricultural Revolution was a sudden explosion of cultural and technological innovations of enormous dimensions that was so comprehensive that it completely revolutionized human society. If one seeks a "distinct point in time to which the transition to God-like status can be assigned [to human beings]," then

the Agricultural Revolution is certainly the leading candidate! Before the Agricultural Revolution, human beings lived by hunting and gathering – not much different from the apes. Then, suddenly, civilization sprang on the scene. As scientific journals proclaim: "A crucial event in human history was the beginning of agriculture in the Near East ... resulting in the sudden emergence of Western civilization" (S. Lev-Yadun et al., Science, 288 [June 2000], p. 1602) (italics added).

To summarize, I consider this book to be an important addition to any Torah-and-science library. Its overall theme cannot be repeated too often. It is possible to understand the Torah account of the origin and development of the universe *without* abandoning science and *without* doing violence to the biblical text. If certain verses in *Sefer Bereshith* appear inexplicable at the moment – and I believe that such verses do exist – there is every reason to believe that further thought and study will, one day, shed light on these verses. We have achieved so much understanding in recent years that one can approach the remaining questions in a spirit of optimism.

Nathan Aviezer

