

The Mathematical Precision of Biblical Hebrew

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Reading ancient Jewish texts, one is often bewildered at the seriousness with which Jewish scholars, as well as other individuals of faith, have addressed words and verses in the Hebrew Bible, in ancient times as well as at present. For example, if the same word appears in two different locations in the Bible, in seemingly unrelated contexts, the general attitude in ancient Jewish interpretations of biblical text is that probably some hidden message is conveyed, which should be uncovered, about the linkage between the different usages of a seemingly identical word.

A famous example is the word "איכה", spelled the same but pronounced differently and also carrying different meanings in Genesis (3:9), where it means "Where art thou?", and in Lamentations (1:1), believed to be written by prophet Jeremiah, where the same word means, in today's everyday parlance, "How come?" (Like in: "How come you are still here?").

One is naturally tempted, or inclined, to relate to this careful analyzing of the meaning of each word and verse in the Hebrew Bible, and the meticulous exploration of hidden meanings in them or in their mutual relationships, as excess and exaggeration of people of faith, who believe in a Divine source for the Hebrew Bible.

Is this inconceivable that the Hebrew Torah had been written with occasional random selection of words and phrases, not unlike one may find in any typical human text? Why treat each word so seriously?

In other words: Have not Jewish scholars, in their lengthy explanations of every single word and verse in the Hebrew Bible, somehow crossed the fine line of reasonable interpretation of sacred text?

The purpose of this blog entry is to demonstrate the mathematical precision of the Torah text. This precision often leaves one stunned at the high level of attention-to-detail displayed by Torah words and their inter-relationships. This knife-sharp precision of expression cannot but arouse respect for Torah text, even for non-believers. Accordingly, none of the four examples, to be expounded below, relates in any way to articles of faith but only to the exactness of expression, which leaves one doubtless about what biblical Hebrew text, words sentences or verses, intended to convey.

Example 1: "And there was evening and there was morning—the first day" (Genesis 1:5)

This is the common translated verse that one may find in English translations of the Hebrew Bible. Alas, this is not what is written in the Hebrew Genesis.

Some years ago, I had spent a year in Madison, Wisconsin, where I stayed as a visiting professor at the invitation of the local branch of the Wisconsin University (in the year 1993-1994). A few days after my arrival, I went to a local bookstore in order to purchase an English version of the Hebrew Bible. I made up my mind in advance that I would buy only a translation that fulfilled a certain criterion that I had set in advance: that the fifth verse of Genesis was properly translated. I had to examine several different translations before arriving at a single version, where the correctly translated verse appeared. The correct translation read:

"And there was evening and there was morning, one day".

Why is "one day" kosher and "first day" is logically impossible?

Simply put: You can denote something "first" when, and only when, it appears at a certain position in an orderly arranged set of objects. When there is yet only one object, it is nonsensical to denote it "first", even if other objects may join at a later time. The Torah makes it no secret that the days of creation occurred consecutively, in an orderly succession. Therefore one cannot logically call the first day of creation "first" when there was not yet a second day, a third day and so on.

"First day", or "Day one", are logically wrong; "One day" is correct, and this is how it appears in the Hebrew Bible.

Mathematical precision; have we mentioned it?

Example 2: "Thou shall love thy neighbor as yourself" (Leviticus 19:18)

This is one of the most well-known verses of the Bible. Alas, this is not what is written in the Hebrew text.

A common joke amongst young Israelis is the following:

Friend 1 (to friend 2): "Tell me: A fisherman, does he love fish?"

Friend 2: "Of course";

Friend 1: "So why does he eat them?"

The source of the joke humor (agreeing that one exists..) is that the same word, "love", is used in two divorced senses. When one asks his friend "Do you love wine?" and "Do you love your child?" the meanings imparted are completely at odds with one another. One loves wine because it satisfies her needs. But when the same question is asked about one's own child it implies total readiness to satisfy someone-else's needs, the child's needs. The first love implies taking. The second love implies unconditional giving. And when one gives it is most often expressed with the qualifying "to", like in: "The money was given to the needy".

The Hebrew Torah, in an obvious effort to clarify that the intended meaning is "Love in order to give", rather than "Love in order to take", formulates the

command to "love thy neighbor" as follows (my literal (word-for-word) translation):

"Love to thy friend as yourself".

Interestingly, this is the sole chapter in the whole of the Hebrew Bible, where this bizarre combination of "love to" appears (it re-appears in verse 34 of same chapter). Apparently, when a command is given in the Torah, the language of the law should be clear-cut, as in a legal document, leaving no space for confusion.

Mathematical precision.

Example 3: "If in spite of this you still do not listen to me but continue to be hostile towards me, then in my anger I will be hostile towards you, and I myself will punish you for your sins seven times over" (Leviticus 26:27-28)

Here the various translations diverge quite a bit mainly because the word that is at the heart of these verses, *Keri*, appears only in this chapter (several times) and nowhere else in the Bible. Furthermore, *Keri* is not explained and is hard to come by based on relevant context. So naturally interpretations diverge but they all imply rebellion against God.

But what does "rebellion against God" mean?

In my book I dedicate a whole section to how the Bible, and Torah in particular, relate to randomness (therein, Section 3.3). The key word here is *Keri*, the root of which is K.R.H, shared by all words relating to randomness or to "occurring by random". In fact, the Hebrew *Karah* (meaning occurred) and the English counterpart sound alike.

Employing this insight, the above verse can be literally translated from the Hebrew origin thus (my literal translation):

"If in spite of this you would not obey my laws and walked with me in *Keri*, then I would walk with you with the wrath of *Keri*, and would also be tormenting you seven times over for your sins".

The original Hebrew contains only 19 words (versus 41 for both alternative interpretations displayed earlier). Therefore some further explanation seems due. "Walk with God" appears earlier in the Torah, for example: "and Noah walked with God" (Genesis 6:9). It means, simply, that Noah related to God, with no further qualification. Apparently, taking account of the Hebrew root of the word "Keri", "walking with God in Keri" implies a belief that God's code for leading his world is completely incomprehensible to humans and therefore it looks to humans as utterly random. God's response: If you hold on to this belief, that whatever occurs to humans is independent of their own conduct, then I will punish you with further randomness. In other words, if you do not believe that justice prevails in how the Divine "manages" the world (like in "why bad things happen to good people?"), then I will burden you with further randomness so that you will be tormented by turning blind to how Divine justice permeates world affairs. Thus, your belief in randomness will transform into a self-fulfilling prophecy, tormenting you seven times over by your inability to establish linkage between your own conduct and whatever happens to you.

In nineteen words, selecting a magically concentrated single word, "Keri", the Bible conveys precisely the idea intended.

Mathematical precision at its best in biblical Hebrew text!

Example 4: "Thou shalt not... put a stumbling block before the blind" (Leviticus 19:14)

The English translation of the original Hebrew verse, and as it commonly appears in various English versions of the Bible, distorts the original meaning of the Hebrew text. The latter appears, bizarrely one may add, with the word "give" rather than "put", namely:

"Thou shalt not... give a stumbling block to the blind" (Leviticus 19:14)

This lends the verse a whole new meaning, and Jewish scholars painstakingly interpreted it using a panoramic view of the basic idea the text intends to impart to the reader.

I have addressed this verse in great detail, based on traditional Jewish scholarship, in Section 1.3.3 of my book.

(Book downloadable free at my personal blog haimshore.wordpress.com).

Conclusion

The four examples intended to deliver to the reader a taste of the mathematical precision with which the Hebrew Bible succinctly conveys ideas and information. These examples may hopefully generate deeper understanding of why Jewish scholars have traditionally attributed so much importance to the exact articulation of every verse and word in the Bible; and why the Hebrew Bible has so meticulously been duplicated (copied) over the generations in order to guarantee that the exact wording of the Bible be preserved and that the mathematical precision of biblical text will not be lost.

As a result, current day Bible continues to serve, as it did in the past, a source of inspiration and of guidance to humankind.