

# Hebrew Scriptures as an aid to developing a creationist taxonomy

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Serious study of Scripture must always play an important role in guiding the development of creationist models. Here, Hebrew terms used in the creation account of animal life are examined to assess their potential as taxonomic terms. It does not appear that God intended to give us a list of taxonomic terms. Instead, the accounts appear to reflect the fact that God created all life in “every corner” of the earth: sea, sky, and land. Life in all these regions is animate and active. God put them under the dominion of people and provided for them. Of all the groups of creatures listed, the birds (עוֹף, ‘ôp) appear to be used most consistently. These winged flying creatures include more than just birds, but also bats and flying insects. Since the creatures in the water and sky were created on a separate day from terrestrial creatures, there may be some discontinuity between these groups that could be useful in developing creationist taxonomies. Further detailed study of Scripture and baramins is necessary before reaching strong conclusions on this matter.

Many creationists recognize that serious scholarly study of Scripture is necessary to develop a truly biblical view of biology. The Bible includes the only historical account of origins from an eyewitness perspective. It also records the event of the Flood which resulted in a severe genetic bottleneck affecting life on earth. This information is necessary to build realistic models regarding the origin and development of life on earth.<sup>1</sup>

The field of baraminology was based on the Genesis account which indicates that God created (Hebrew: בָּרָא, *bārā*) plants and animals according to their kinds (מִיִּן, *mîn*). Baraminologists attempt to identify extant creatures which would have descended from a single created kind (baramin). Several baraminology studies have examined Hebrew words relevant to the species studied.<sup>2</sup> These have been important, although there is often a limit to the strength of conclusions made from such word studies.

Several detailed studies have examined the biblical view of life.<sup>3</sup> Additional papers have explored the meaning of the Hebrew *mîn* and provide a basis for proper understanding of this term.<sup>4</sup> These studies have highlighted the fact that plants are not considered alive in the biblical sense, even though they are described as being created according to their kinds. The latter papers also cautioned against assuming that *mîn* is a taxonomic term. These insights may prevent unwarranted presumptuous conclusions, particularly when examining the unclean animals listed in Leviticus 11 and Deuteronomy 14.

## In search of a biblically based taxonomy

There have been several attempts to glean higher level taxonomic information from the creation account.<sup>5</sup> As important as such studies are, it appears that several authors have approached the text with the underlying assumption that the Hebrew terms they encounter are inherently taxonomic terms. This introduces a modern bias to interpreting the text

that could lead to incorrect conclusions. Instead, we should remove this assumption and determine *if* any terms appear to be used taxonomically. Even terms that are not strictly taxonomic may still prove valuable in acquiring a more biblically based view of biology.

Taxonomic terms have a single invariable meaning which applies to a specific object or group. This is not typical of most words in a language. Instead, words tend to have a variety of definitions and a range of meaning. This is why dictionaries typically list several definitions for most common words. Also, different words can overlap in meaning. The degree of overlap is quite variable and depends on the specific word. This should be intuitively obvious to anyone who has used a thesaurus. In determining the exact meaning of a word, the context is important. For example, the word “running” has vastly different implications depending on whether it refers to me or my refrigerator.

The readily available Hebrew and Greek study tools are extremely valuable in allowing for detailed study of the Bible in the original languages.<sup>6</sup> However, to be used properly they require some basic knowledge of how languages work. A common error I have encountered in Christian circles is for someone to identify what Hebrew or Greek word is used in a specific passage. The person then consults the Strong’s Concordance and finds the definition of that word that they like best. That definition is then placed back in the passage and the person affirms that this is the “true” meaning of the text. This presumptuous methodology can lead to egregious errors in interpretation when it ignores a basic understanding of how languages work as discussed in the previous paragraph.

In this paper the usage of Hebrew terms in the creation account and other relevant passages will be briefly examined to see if they likely constitute taxonomic terms. This paper is not intended to be the final word on the subject, but is meant to further the discussion and perhaps give a more

realistic view on what can be gleaned from Scripture. It is hoped that future scholarly work will further delineate the meaning of these terms in light of their implications for creationist research.

### Creation of animals

Previous work has focused on the creation account as potentially holding value in developing a more biblical creationist taxonomy. It is interesting to note that this narrative typically describes what God commands or intends to do followed by a restatement of what God did or what happened. This is illustrated in the account of the 5<sup>th</sup> day of Creation:

“And God said, ‘Let the waters swarm with swarms of living creatures, and let birds fly above the earth across the expanse of the heavens’” (Genesis 1: 20).<sup>7</sup>

“So God created the great sea creatures and every living creature that moves, with which the waters swarm, according to their kinds, and every winged bird according to its kind. And God saw that it was good” (Genesis 1:21).

It seems unlikely that God changed his mind and did something different (v. 21) than what he spoke (v. 20). So it seems safe to assume that the animals mentioned in both verses are essentially equivalent. It appears that two types of creatures are mentioned in verse 20: swarmers (שָׂרָשָׁרִים, šeres) and birds (עוֹפֵי, ‘ōp), while a third is added in verse 21, the great sea creatures (תַּנִּינִים, tannîn, which appears in the plural form in this verse). It might seem reasonable that these great sea creatures could be considered a subset of the swarmers (שָׂרָשָׁרִים, šeres) of the waters. However, tannîn is translated elsewhere as serpent (Exodus 7:9, 10, 12; Deuteronomy 32:33) where it clearly refers to a terrestrial creature. Previous word studies of tannîn suggest they were often feared as threatening creatures.<sup>8</sup> Perhaps the great sea dwelling tannîn are specified separately here to emphasize that they were created by God and are subject to Him. This could account for the variation in wording and the apparent emphasis that follows in the phrase: “and every living creature that moves, with which the waters swarm.” Further, the qualifier “according to its kind” is applied twice, once after the creatures in the water and a second time after the birds (עוֹפֵי, ‘ōp).

The account of the creation of land creatures on Day 6 appears straightforward:

“And God said, ‘Let the earth bring forth living creatures according to their kinds—livestock and creeping things and beasts of the earth according to their kinds.’ And it was so” (Genesis 1:24).

“And God made the beasts of the earth according to their kinds and the livestock according to their kinds, and everything that creeps on the ground according to its kind. And God saw that it was good” (Genesis 1:25).

Both verses list three groupings of land creatures: livestock (בְּהֵמָה, b<sup>h</sup>ēmâ), creeping things (רֶמֶשׂ, remeš), and the beasts of the earth (חַיַּת הָאָרֶץ, hayyat hā’āreš). The order and some other details vary between these two verses. For example, verse 25 uses the prefix every (כָּל, kâl) before remeš in the same way that it was used before both living creature and winged bird of verse 21. Again this seems to emphasize that God created all life in these realms.

### Dominion of humans over the animals

Further discussion of the creatures created above continues in the account of the creation of man.

“Then God said, ‘Let us make man in our image, after our likeness. And let them have dominion over the fish of the sea and over the birds of the heavens and over the livestock and over all the earth and over every creeping thing that creeps on the earth’ (Genesis 1:26).

“And God blessed them. And God said to them, “Be fruitful and multiply and fill the earth and subdue it and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth”” (Genesis 1:28).

Verse 26 lists four groups of creatures: the fish of the sea (דָּגַת הַיָּם, d<sup>g</sup>at hayyām), the birds of the heavens (עוֹפֵי הַשָּׁמַיִם, ‘ōp haššamāyim), livestock (בְּהֵמָה, b<sup>h</sup>ēmâ), and every creeping thing (רֶמֶשׂ, remeš). It further has the phrase over all the earth, emphasizing the fact that man is to rule over everything God created on earth. Yet there are several ways in which this list differs from the previous description of creation. Fish of the sea are mentioned instead of swarmers of the water. Are fish of the sea to be understood as a subset of swarmers of the water? If so, it could imply that man was not given dominion over all that God created on earth. Are they to be understood as equivalent phrases?



Photo taken by Rasto Belán, courtesy of <a href="http://www.sxc.hu">www.sxc.hu</a>

Dragonflies clearly have wings and fly, suggesting that they are from a baramin within the ‘ōp (flyers) created on Day 5. The larval form (nymph) develops in the water.

If so this could undermine the idea that fish or swimmers are taxonomic terms.

A second difference is that only livestock and creepers are mentioned from the land animals. What happened to the beasts of the earth (חַיַּיַת הָאָרֶץ, *hayyat hā'āres*)? Is man not to rule over them? This seems highly unlikely given the extra phrase “over all the earth”. Perhaps the three terms associated with land creatures are not strict taxonomic terms.

Even more interesting, verse 28 only lists three groups of animals: the fish of the sea, the birds of the heavens, and every living thing that moves on the earth. The three terms previously used to describe land animals are not directly mentioned. However, the word translated living thing (חַיָּה, *hayyâ*) is identical to that translated beasts previously. The minor spelling difference is due to the noun being in the absolute form rather than the construct form, which gives the meaning beasts *of*. The verb for move (רָמַס, *rāmas*) is used. This is related to the noun for creeping thing (רִמָּשׁ, *remes*). Livestock (בְּהֵמָה, *b'hēmâ*) are not mentioned. This seems to further undermine the assumption that the three terms describing land animals in their creation are taxonomic terms.

### God's provision

God provided food for the creatures he created. In verse 29 he tells people that they may eat seed bearing plants and fruit from trees. In the following verse God describes what he has given the animals to eat.

“And to every beast of the earth and to every bird of the heavens and to everything that creeps on the earth, everything that has the breath of life, I have given every green plant for food.’ And it was so” (Genesis 1:30).

Aquatic life is not mentioned in this verse, although undoubtedly God provided for them.<sup>9</sup> Birds, beasts of the earth, and creepers are mentioned. Either all the beasts of the earth (חַיַּיַת הָאָרֶץ, *hayyat hā'āres*) and all creepers (רִמָּשׁ, *remes*) are equivalent to the animals created previously (vv. 24, 25) or the livestock may end up dying of starvation. This seems to further undercut the idea that God is using taxonomic terms. Instead, it is apparent that there are several different ways of referring to life on earth. This is consistent with more commonly observed patterns in language and undermines the idea that God intended these terms as taxonomic designations. Further examples can be seen in the account where Adam names the animals (Genesis 2:19, 20) and the Flood account (Genesis 6:7, 17, 19, 20; 7:2, 3, 8, 9, 14–16, 21–23; 8:1, 17, 19). For the sake of brevity, these will not be examined in detail here.

One thing that is interesting is the frequency with which three groupings of animals are mentioned in a verse. This appears in Genesis 1:21, 24, 25, 28, and 30. It could be that



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While most amphibians lay eggs directly in the water, the nocturnal red-eyed tree frog lays eggs on the underside of a leaf over a body of water. When the young develop to tadpoles, they hatch and drop to the water below to continue development. Since the adult phase lives primarily on land, it can be argued this frog is from a baramin created on Day 6 as a land animal.

this has some significance. For example, the phrase “from Dan to Beersheba” is commonly used to refer to all of Israel (Judges 20:1, 1 Samuel 3:20, 2 Samuel 3:10; 17:11; 24:2, 15, 1 Kings 4:25, 1 Chronicles 21:2, 2 Chronicles 30:5). Dan was a city far north in Israel and Beersheba was a city in the south. By mentioning these cities at the extremes of Israel geographically, it was understood that all of Israel was meant. This concept might apply in Genesis 1:28 where the fish of the sea, birds of the heavens, and every living thing that moves on the earth are mentioned. This certainly describes life “in every corner of creation”. Furthermore, the use of three groupings of land animals in the account of their creation (vv. 24, 25) may be intended to emphasize that God created all the different types of land animals.

### Other considerations

The Hebrew word *b'hēmâ* has a broad semantic range according to Strong's Exhaustive Concordance.<sup>10</sup> It can refer to domestic animals, as implied by the translation livestock in Genesis 1, or wild animals. In Genesis 7:2, God tells Noah to take with him on the Ark seven of every clean animal and two each of the animals which are not clean. In each case the word *b'hēmâ* is used for animal, indicating a much broader meaning in this context.

The word *hayyâ*, used in construct form to designate beasts of the earth, is a general noun used for animals over 100 times in the Hebrew Scriptures. The corresponding verb, *hāyâ* (חָיָה), is used 180 times. As mentioned above, it appears unlikely that the designation beasts of the earth (חַיַּיַת הָאָרֶץ, *hayyat hā'āres*) is a taxonomic grouping since it is not consistently used across the creation narrative in Genesis.



The noun *šeres* appears 15 times, all in the Pentateuch. Twelve of these are directly preceded by the Hebrew word meaning “all” or “every”, suggesting that a broad group of creatures is being described. While it initially is used to describe creatures in the water, it is used extensively in Leviticus to describe unclean animals on earth. It is related to the verb *šāraṣ* (שָׂרַץ) which appears 14 times in the Hebrew Bible. Again, this verb is used for more than sea creatures. In fact, it is used in reference to humans in Genesis 9:7.

“And you, be fruitful and multiply, *teem* on the earth and multiply in it.”

The broad use of *šeres* and its related verb suggests that it is not strictly a taxonomic term. Instead, it seems to imply creatures that are active and moving, a characteristic of animate life.

The noun *remeś* and its verbal form *rāmaś* each occur 17 times in the Hebrew. Again these words imply movement and overlap the semantic range of *šeres*. For example, while Genesis 1:20 and 21 use *šeres* to describe aquatic creature, Psalm 104:25 uses *remeś*. Further, the verb *rāmaś* is used to describe movement in the *šeres* created on Day 5.

The word *‘ōp* is used the most consistently throughout the creation narrative. The *‘ōp* fly (עָרַף, *‘ōp*) and have wings (Genesis 1:20, 21). This brings out an important pattern in the creation account. The swarmers (*šeres*) swarm (*šāraṣ*) in the waters, the birds, or flyers, (*‘ōp*) fly (*‘ōp*) in the heavens, and the creepers (*remeś*) creep (*rāmaś*) on the earth. Throughout all of creation there is movement associated with life!

### Taxonomy for the birds

Of all the Hebrew words we have examined, one still seems to hold potential as a taxonomic term. The word *‘ōp* is commonly translated bird, although it is known to refer to more than just birds. For example, bats are listed among the unclean *‘ōp* in Leviticus 11:13–19. Two previous studies disagree on what other animals might be included with *‘ōp*. Berndt argued that all flying insects would be included.<sup>11</sup> The only qualifiers for *‘ōp* in Genesis are that they have wings and fly, which clearly allows for the inclusion of animals besides birds. Further, Leviticus 11:20–23 discusses flying insects (שָׂרְצֵי הָעוֹף, *šeres hā‘ōp*), which could be more literally translated “the swarmers of the flyers”.

Klenck argues against inclusion of insects within the *‘ōp*.<sup>12</sup> He assumes that *šeres* is a taxonomic term. Having noticed the overlap in usage between *šeres* and *remeś*, he concludes they are synonymous. He believes them to be a broad taxonomic category that includes certain aquatic and terrestrial life, but not *‘ōp*. He argues that the word *‘ōp* in the phrase *šeres hā‘ōp* in Leviticus 11:20, 21, and 23 is merely pointing to the idea that these *šeres* can fly. The argument does not appear to be strong given that *šeres* is used as a construct noun, giving it the meaning “the swarmer(s) of”. The absolute noun is *hā‘ōp*, “the flyer(s)”. Further, the TWOT (Theological Word Book of the Old Testament) defines *‘ōp* as a collective noun meaning bird, fowl, or insect.<sup>13</sup>

Berndt points out some of the challenges that are still faced if insects are included within the *‘ōp*. Not all insects have wings and fly. Loss of structures such as wings is not uncommon.<sup>14</sup> Berndt considers that all true insects flew at Creation and states: “Insects that used to fly ... but have lost the information content for wings, either entirely and preferentially (New Zealand’s weta, with no natural predators), or in part within their Kinds (ants, cockroaches), are still to be regarded as insects.”<sup>11</sup> This still leaves some creatures with three body segments and six legs that may never have had winged ancestors. It seems more natural to me to leave the standard definition of insects alone and just recognize that most were probably associated with the *‘ōp* at creation. It doesn’t appear to be a problem that different mammals were created to inhabit land, sea, and air.

The creation account seems to suggest some discontinuity between creatures inhabiting the sea, air, and land. Land animals were created on a separate day from creatures of the seas and sky. Furthermore, creatures in the water and sky seem to be portrayed as being distinct. This may provide some guidance to creationist taxonomies. However, within a creature’s life-cycle they may inhabit several different realms. In insects, larvae may develop in the water while the adult forms fly. It might be inferred that life was created fully formed and ready to reproduce and fill the earth. This would suggest that dragonflies are flyers created on Day 5 and amphibians are land creatures created on Day 6.

Still, classifying animals according to whether they originally inhabited water, land, or air may pose some challenges in classifying certain animals, such as turtles, where adults vary in the amount of time they spend in the water. For example, hybrids have been identified between the Wood Turtle (*Clemmys insculpta*) and Blanding’s Turtle (*Emydoidea blandingii*).<sup>15</sup> In our current understanding of baraminology, this means the two species are derived from the same baramin, yet the first is largely terrestrial while the second is semi-aquatic. In fact this family, Emydidae,



Turtles in the family Emydidae vary from terrestrial to aquatic. It may be that they are land creatures created on Day 6 and some have adapted to spend more time in water. They lay their eggs on land.

includes terrestrial box turtles and aquatic sliders, although not all Emydidae species are linked by current hybrid data. Some allowance may need to be made for adaptations, as with loss of wings (or flying ability) in םֶדֶּ. It could be that adaptation to a new environment may explain some aquatic forms of turtles. Further study is warranted to see if these general categories of water, air or land creatures are useful in creationist taxonomy.

### Conclusions

Serious study of Scripture must always play an important role in guiding the development of creationist models. From a limited examination of the Hebrew terms used in creation, it does not appear that God intended to give us a list of taxonomic terms. Instead, the accounts appear to reflect the fact that God created all life in “every corner” of the earth: sea, sky, and land. Life in all these regions is animate and active. God put them under the dominion of people and provided for them. Of all the groups of creatures listed, the birds (אָוִי, םֶדֶּ) appear to be used most consistently. These winged flying creatures include more than just birds, but also bats and flying insects. Since the creatures in the water and sky were created on a separate day from terrestrial creatures, there may be some discontinuity between these groups that could be useful in developing creationist taxonomies. Further detailed study of Scripture and baramins is necessary before reaching strong conclusions on this matter.

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