

The Pre-Fall Mortality of Aquatic Autotrophs and Other Designated *Nephesh* Kinds

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Keywords:

aquatic creatures, autotrophs, death, Fall of man, mortality, *nephesh*,
phytoplankton, teleology, vegetation, zooplankton

Abstract

Of three positions regarding the pre-Fall consumption of lower aquatic creatures, one is seldom taken (and rightfully so): that these creatures are actually plants. A second position is that these small creatures indeed experienced pre-Fall death, but that lacking *nephesh* life, this death was and is as benign as vegetative death. Thus, there is an implied creative category between “vegetation” and “creature.” A third view is posited here: that these primary and secondary creatures indeed possess *nephesh* life, yet their original provisional nature for other creatures’ consumption is physiologically evident and biblically allowable. This third view of pre-Fall mortality can be adopted without supporting the evolutionary idea of death as a creative mechanism.

Introduction

The impetus for exploring various aspects of pre-Fall mortality is that present creation scholarship does not offer a normative, compelling position on the matter. In addition, evolutionists might find ample opportunity in this regard to discredit biblical creation presuppositions.

It is not difficult for biblical creationists to envision the pre-Fall “mortality” of vegetation. Plant material was clearly given for original consumption (Genesis 1:29-30). Though consumption need not affect an entire plant, it is nonetheless fatal to grazed herbaceous seedlings, or to seeds themselves (viable embryonic plants) eaten by birds.

In addition to stating this purpose outright, the creation account also gives rationale for this provision, attributing to vegetation none of the *nephesh** [*Consult glossary at the end for definitions of this and other Hebrew words] possessed by creatures (see Figure 1). This *nephesh* principle involves being created from nothing (*bara*) rather than simply brought forth or produced (*asah*, *yatsa*, respectively) of material already in existence. In fact, vegetative kinds are not regarded as “living” (Stambaugh, 1989) or “living creatures” (Morris, 1993; Ham, et al., 1990) in Scripture. These are set apart from prior works of creation in that they follow reproduction according to kinds, but this is the only biblical rationale for regarding vegetation as “living” organisms in the sense used today. Having an entirely unique life nature, it is therefore reasonable to regard vegetative death as unique. In a similar vein, we speak of *apoptosis*, or pre-programmed cell “death” as yet another benign and usually purposeful end.

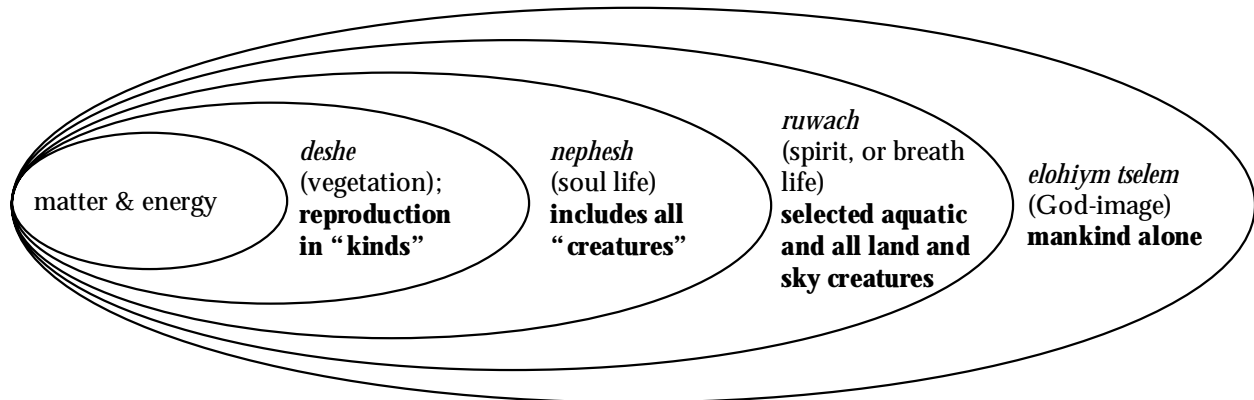


Figure 1. Nested hierarchy of life-natures in the creation. Successive acts of creation established kinds that are inclusive of the life-natures of previously created kinds. For example: An antelope breathes / which animates its life as a creature / that belongs to a unique kind / which is a special information-driven form of matter and energy. An antelope, however, does not possess God-image, and a squid possesses neither spirit nor God-image. See glossary for definitions.

Accepting the possibility of *nephesh* death before the Fall, however, is another matter, resisted by biblical creationists for good reasons including: 1) the biblical inference that such widespread death resulted from the Fall of man, and 2) the biblical fact that death was not offered as God’s mechanism for bringing forth created kinds.

Difficulty in the matter of pre-Fall death arises when discrimination is unclear between vegetation and “creatures,” or between the life nature of plant cells and the life nature of creatures. For example, aquatic producers include “phytoplankton” that are no longer regarded as “plants” merely because of their photosynthetic nature, nor as “animals” simply because of their motility. The five-kingdom system now has these former “plants” distributed among two new kingdoms other than the *Plantae* and *Animalia* kingdoms. The cyanobacteria, or blue-green bacteria, for example, are placed in the *Monera*, and the dinoflagellates, euglenoids, and diatoms are found in the *Protista*. In the scheme of the days of creation, though, where do these phytoplankton forms belong, and what is their place in the pre-Fall food supply?

Possible Biblical Classification Scenarios

Three biblical scenarios have been offered for classifying the phytoplankton:

1. Perhaps these photosynthetic organisms should be regarded as day three vegetative kinds because they are photosynthetic, in which case the idea of no pre-Fall creature death is preserved. Understandably, one is hard-pressed to find this position in creationist literature, because it places too much value on the criterion of photosynthesis, and is therefore at odds with both biblical and present taxonomic categories.
2. These organisms (and perhaps others) might be regarded as “non-*nephesh*” animals, allowing for them to be day five (or day six) creatures while retaining a benign death akin to that of vegetation. Many hold this position, but it is a biblical stretch. Several creationists state this absence of *nephesh* in some creatures explicitly, as characterized perhaps by the absence of consciousness (Stambaugh, 1989), or by the lack of blood, though problems are admitted with this criterion (Ham et al., 1990). At other times the qualifying term “*nephesh* animals” (AiG, Illustrations) is used, which also suggests, though less explicitly, that there are some animals that do not possess *nephesh*. It seems that this special classification is inserted so as to not compromise with the death generalization made by the same scientists, such as “death only entered the world when sin came in through man” (Morris,

1976), or “death, both physical and spiritual, entered into this world subsequent to—and as a direct consequence of—man’s sin” (AiG Statement of Faith). Considering these prevailing interpretations, here is one biblical indication that *nephesh* should instead be applied more liberally:

And God created great whales, and **every** living creature [*nephesh*] that moveth, which the waters brought forth abundantly... -- Genesis 1:21a (KJV, emphasis and brackets added)

The NIV renders this passage as follows:

So God created the great creatures of the sea and **every** living and moving thing with which the water teems... (emphasis added)

At the very least, then, any creature that is self-motile cannot be placed in a non-*nephesh* life classification between vegetation and *nephesh* creatures. Nonetheless, “moving” need not be restricted to self-powered locomotion, and is likely stated simply in contrast to the rooted nature of vegetation. To designate a small classification of creatures that are not self-motile at any stage of development (and perhaps that also lack consciousness or blood) is not warranted by the biblical record. Therefore I do not accept the existence of “non-*nephesh*” animals. Note that such a designation would produce an additional “bubble” in Figure 1 (between the second and third groupings) which would have no biblical Hebrew descriptor.

3. These organisms can be assessed as day five creatures, possessing *nephesh*, and thus some pre-Fall *nephesh* mortality is implied. I argue for this position. Doing so does not necessarily justify pre-Adamic death as a mechanism for evolution, nor need it lead to a watering-down of the primary physical consequence of the Fall of man. Mankind and all kinds were created originally complex and by God’s supernatural action, not through processes involving death, as maintained in evolution theories. And mankind’s death is a direct consequence of the Fall. The contention here is simply that the physiological evidence and the biblical record both suggest that certain designated *nephesh* creatures possessed a purposeful pre-Fall mortality.

Arguments for Designated Pre-Fall *Nephesh* Mortality

First, we should establish that mortality among non-vegetative kinds is indeed implied by the biblical record of creation. It can be argued biblically that aquatic autotrophic creatures are by default a provision for the aquatic food chain. To see this, we look at the provision that is explicitly stated for mankind, and creatures of land and sky:

And God said, Behold, I have give you [mankind] every herb [*eseb*] bearing seed, which is upon the face of all the earth, and every tree [*ets*], in the which is the fruit of a tree yielding seed; to you it shall be for meat. And to every beast of the earth, and to every fowl of the air, and to every thing that creepeth upon the earth, wherein there is life, I have given every green herb [*eseb*] for meat: and it was so. – Genesis 1:29-30 (KJV, brackets added)

Originally, all vegetative kinds, herbaceous (*eseb*) and woody (*ets*), were given to mankind. Only herbaceous vegetative kinds (*eseb*), however, were given to creatures of the land and sky. Aquatic creatures are conspicuously absent from receiving either provision. What they were supposed to consume is left to reason. If plants were the only autotrophic organisms, this would indeed be puzzling; yet one can observe very small aquatic organisms that are food by design, for other aquatic creatures. Aquatic autotrophs can be inferred to fit this biblical void regarding aquatic provision.

Second, we can further examine the physiology of phytoplankton to see that they indeed would have carried out this role from the outset, and not simply as a post-Fall modification. One can realistically posit the extravagant (but bounded) expression of a genome as sufficient for the “switching” on of carnivorous mechanisms in many animals today (Tyler, 1996; Catchpoole, 2000; Wieland, 1995). Yet it is unlikely, and not observed, that photosynthetic processes emerged after the Fall in formerly non-photosynthetic creatures. Photosynthesis is irreducibly complex, and very much a part of the essential teleonomy of an organism that possesses it. Creationists acknowledge God as the designer of irreducibly complex structures. A distinction can be made, however, between developmental programs (those embryological processes that govern differentiation itself), and genetic programs (that express those fixed structures in various ways). The level of complexity of photosynthetic mechanisms is something dictated by innate developmental programs, and not an expression of minor genetic alterations. To be sure, it is possible that God might have overridden and augmented such large-scale body type characteristics after the Fall, but this type of “re-creation” is not necessitated biblically, and such a mechanism is typically not favored by creationist biblical scholarship, as indicated by the authors above as well as Morris (1976). One might also note that suggested post-Fall expressions of latent genes are thought to affect an organism’s advantage in predation (e.g., attack instinct or sharp claws) or defense (e.g., disguise or foul taste). Yet an emergence of photosynthetic mechanisms would not be consistent with such advantages.

Pre-Fall mortality in phytoplankton having been established, the third matter is to discern that these are indeed *nephesh* organisms. They cannot be regarded as “vegetation” biblically, just as they are no longer regarded as “plants” taxonomically. Biblical vegetation, or *deshe* (see Figure 1 and glossary), is “sprung forth” from the land and rooted, not motile. Never are the main biblical Hebrew words for vegetation (*deshe*, *eseb*, and *ets*.) used in any other context. The creatures of day five, however, are regarded as “moving” (*sherets*), and this would include the phytoplankton, whether actively motile or passively motile, in contrast to the rooted nature of vegetation. As stated earlier, the biblical record of creation moves directly from vegetation to creatures, and does not indicate an in-between category. In this regard, the former two-kingdom taxonomic system more closely parallels biblical criteria (other than in its treatment of mankind), as it forces organisms to be regarded as either plant or animal based on motility rather than devising other large-scale kingdoms based on other criteria, e.g. *Monera* as unicellular and prokaryotic, *Protista* as unicellular and eukaryotic, or *Algae* as photosynthetic yet unlike “higher” plants physiologically. The suggestion of pre-Flood “floating forests,” with radial roots and hollow interiors (Wieland, 1995) may call into question whether all vegetation is originally rooted in land, but this is another topic for discussion that does not bear upon the minute organisms in question here. Such floating vegetation would still be accepted unilaterally as a day three work.

Fourth, one can examine the comparatively benign type of death that these aquatic autotrophs experienced before the Fall. Even as *nephesh* organisms, their death was not the cessation of breath, or *ruwach*, a higher mode of life than *nephesh* alone (see Figure 1 and glossary). (This distinction may be in part why some persons intuitively endorse fishing while abhorring hunting and whaling.) Furthermore, their death was not disease-induced, or the result of lifespan limits. Even today, their consumptive death is not wasteful, because the whole organism is completely acquired for energy. And it is not extended in suffering, since the organism is consumed immediately. Death in such small autotrophs is not the cruel “futility of nature” (Stambaugh, 1996) that “makes God out to be a monster” (Morris, 1976), leading the uninformed theist to question God’s goodness (Morris, 1993); nor does it support theistic evolution. To be consumed was their essential purpose, and it is a purpose preserved among these aquatic autotrophs today. In short, the teleological considerations outweigh the mortality “problems.”

Fifth, one must acknowledge that the death introduced at the Fall of man is spoken of explicitly regarding only mankind. One can infer that the “groaning” and “decay” of creation is a result of man’s death. Creatures die, not because they have sinned (Morris, 1976), but because of the condition to which the creation has been subjected. But this does not mean that all types of death were introduced at the Fall.

For the wages of sin is death, but the gift of God is eternal life in Christ Jesus our Lord. – Romans 6:23 (KJV)

Note the specific context of the above: The wages of [man’s] sin is [man’s] death, but the gift of God [to man] is eternal life.... Paul obviously was directing both sides of this verse to human beings only. Other Scriptures reinforce the same specificity:

Therefore, just as [man’s] sin entered the world through one man, and [man’s] death through sin, and in this way death came to all men, because all sinned—for before the law was given, sin was in the world. But sin is not taken into account when there is no law. Nevertheless, [man’s] death reigned from the time of Adam to the time of Moses, even over those who did not sin by breaking a command, as did Adam, who was a pattern of the one to come. – Romans 5:12-14 (KJV, brackets added)

And the LORD God commanded the man, “You are free to eat from any tree in the garden; but you must not eat from the tree of the knowledge of good and evil, for when you eat of it you [mankind] will surely die.” – Genesis 2:16-17 (KJV, brackets added)

Finally, one might note that most of the arguments above need not be restricted to autotrophs. Given the ambiguity of the original aquatic food provision, the uncertain scope of non-human death resulting from the Fall, and the presence of similar non-*ruwach* modes of *nephesh* life in many aquatic creatures other than the autotrophs, one is left to wonder whether *other* aquatic creatures were also producers originally. If God employed one original level of consumption (of chemosynthetic and photosynthetic producers), what is to say that a second level (zooplankton, or secondary producers) was not also in place? Perhaps all self-sacrificing kinds are not necessarily autotrophic. Diatoms, cyanobacteria, and other autotrophs could just as well have joined ciliates, small crustaceans, and other zooplankton in providing nourishment for the rest of aquatic creatures. As support, consider that baleen whales obtain their plankton by straining large volumes of water, without the capacity to select only autotrophs. Though feeding selectivity *by* zooplankton may be observed, according to size, shape, and smell, these creatures can only discriminate proportionally (not completely), and do so typically *among* autotrophs (Koehl, 1984). Can one suppose realistically that much larger consumers somehow accomplished selectivity between minute autotrophs and non-autotrophs before the Fall?

Conclusion

We can thus see that the recognition of pre-Fall mortality of autotrophs and other *nephesh* organisms hinges largely on two matters: First, the acceptance that primary and secondary producers other than vegetative kinds must have had an original place in supplying the aquatic food chain, and second, that these organisms indeed possess *nephesh* life.

Editor's Note: Interested readers may wish to consult the following *CRSQ* notes and letters dealing with the subject matter in this article.

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Glossary

deshe: Used first in Genesis 1:11, translated as "grass" (KJV, NKJV), or "vegetation" (NIV, NASB, RSV). From the root *dasha*, which carries the idea of "springing forth" (Online Bible, 2001). Although several translations and commentaries (Morris, 1976) regard *deshe* as one in a list of three broad orders of plants, e.g. "let the earth put forth vegetation [*deshe*], plants [*eseb*]..., and fruit trees [*ets*]..." (RSV), the NIV regards *deshe* as inclusive of the latter two by following it with a colon. The author prefers the latter, in which *deshe* is the most generic word for vegetation (Berndt, 2000). Vegetative kinds, though clearly unique from non-living matter, are not regarded biblically as a "living souls" (*chayyay nephesh*).

nephesh: Used first in Genesis 1:20 at the creation of water and sky creatures, and correlated to the words for movement (*sherets*) and life itself (*chay*). Translated as "soul" primarily in the KJV, and "creature" primarily in the NIV. Paralleled by the New Testament's Greek word *psuche*.

ruwach: Not used until the Flood account in Genesis 6:17, yet ascribed to both mankind and many creatures (Morris, 1976). Most often translated "spirit," but also "wind" or "breath." Its less-frequent counterpart is the word *neshamah* which is used in Genesis 2:7 of man's creation and typically translated "breath [*neshamah*] of life [*chay*]." Thus, the emphasis is made of God's personal breathing of life into man, such that he became a living soul [*nephesh*] in this special way. It is this emphasis, taken without comparison to Scriptures outside of the creation account, that perhaps leads to the erroneous understanding that "spirit" is what sets mankind apart from animals. *Neshamah*, as with *ruwach*, is not exclusive to mankind, as it is ascribed to other creatures in Genesis 7:22. For a further discussion of the distinction between *ruwach* and *neshamah* in biblical use, see reference (Berndt, 2002). *Ruwach* is paralleled by the New Testament's Greek word *pneuma*.

elohiym tselem: This "God-image" is what ultimately sets man's life nature apart from all other organisms. (Man is also set apart in his mandate to rule over the earth and its creatures, in the personal manner of his creation, and in the fact that he is the lone kind in God's final act of creation, created with no other creatures simultaneously.) Some writers have attempted to define the characteristics and outworking of this God-image through observing mankind in the present. Consult references for further reading on the characteristics of God-image (Gitt, 1999; Morris, 1976).

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