

Thoughts on the Goodness of Creation: In What Sense was Creation “Perfect”?

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Abstract

In the early days of the young-earth creationist movement, a number of publications promoted the notion that the second law of thermodynamics was introduced as a result of the curse. This view has been accepted, sometimes blindly so, by certain contemporary creationists as well. This paper surveys a collection of the early creationist publications, and then addresses the question of whether it is warranted to view God’s pronouncement in Genesis 1:31 that His creation was “very good” as necessitating the absence of a tendency toward increased entropy. It also considers whether there is exegetical warrant for linking the curse pronounced in Genesis 3 with the introduction of the second law of thermodynamics. The paper contends that there is no real biblical evidence to suggest that the second law was inoperable prior to the curse. It argues rather that the second law was in effect from the beginning of creation. However, the tendency toward entropy implicit in the second law was never of a kind that conflicted with God’s declaration that the creation was “very good,” or that eventuated in the death of any sentient creature.

Keywords: curse; death; decay; deterioration; entropy; fall; Morris, Henry; thermodynamics, second law; Whitcomb, John; Williams, Emmett; young-earth creationist movement

Introduction

The second law of thermodynamics is a universally-recognized scientific principle. It states that within a closed system, “every naturally occurring transformation of energy is accompanied, somewhere, by a loss in the *availability* of energy for the future performance of work” (Lindsay 1959, p.379). Herein is found a “general natural tendency of all observed systems to go from order to disorder” (Lindsay 1968, p.100). Addressing the consequences of the second law for the theory of evolution, creationist Thomas Barnes correctly argued that the second law of thermodynamics is the “irreversible tendency for processes in a self-contained system to go toward lower order” (Barnes 1966, p.5). He maintained that this invariably results in “an increase in randomness, disorder, and decay if the whole system is taken into account. That is to say that systems run down hill, not up hill; they don’t wind themselves up; they tend to run down” (Barnes 1966, p.5).

At the inception of the modern young-earth creationist movement, a number of important early writings promoted the notion that the second law of thermodynamics was introduced as a result of the curse in Genesis 3. It may be impossible to say where this idea actually began; however, its appearance in *The Genesis Flood* by John Whitcomb and Henry Morris in 1961 can probably be marked as the earliest time that it appeared in a major publication having any notable influence on the creationist movement. Whitcomb and Morris stated, “Creation...actually has been accomplished by means of creative processes, which are now replaced by the deteriorative processes

implicit in the second law” (Whitcomb and Morris 1961, pp.224–225). They attributed the intrusion of the second law to the curse ultimately resultant from Adam’s sin (cf. Genesis 3:17), that is the “bondage of decay” to which the world has been “subjected” to by God for the present age (Romans 8:20–22).

Two years later, in *The Twilight of Evolution*, Morris, addressing the universality of the second law argued, “It is strictly an empirical law, which has always been found to be true wherever it could be tested, but for which there is no known natural explanation” (Morris 1963, p.37). He continued, “the Biblical explanation is that it is involved in the curse of God upon this world and its whole system, because of Adam’s sin” (Morris 1963, p.37). For Morris, the direct equation between the curse—that is, “the second great revealed fact of earth history”—and the second law was obvious. He stated, “The second law of thermodynamics has been seen to approximate a scientific statement of the effects of the curse” (Morris 1963, p.58).

The influence of eschatology weighed heavily on Morris’s view. He argued that the statement “very good” (Genesis 1:31) “is clarified by the description of conditions in the new earth, which will be created by God after this present system has passed away” (Morris 1963, p.72). Revelation 21:4 promises a world devoid of sorrow, pain, crying, and death—all of which are directly associated with the curse as demonstrated by the parallel statement in Revelation 22:3, which says “there shall be no more curse.” Morris concludes, “the Bible teaches that, originally, there was no disorder, no decay, no aging process,

no suffering, and above all, no death, in the world when the creation was completed. All was ‘*very good*’ (Morris 1963, p.37).

Following this line of reasoning, Morris further claimed that in the heavenly state, “there will be no evidence of the effects of sin, disorder, decay, and death. The second law of thermodynamics will no longer control physical processes” (Morris 1963, p. 72).

Soon after Morris’s work, Emmett Williams latched on to Morris’s view of the connection between the curse and the second law of thermodynamics. His conclusions were perhaps more extreme than those of Morris. He wrote, “The creation process would be of course directly opposite to the entropy principle of present scientific processes.” Similarly, “If the perfect holy God created; then the creation would be perfect. Here would be perfection in nature, perfection in the universe, and as for the solid state, perfect crystals” (Williams 1966, p.23). This is, of course, in direct contrast with what is found today. Williams thus argued that this drastic change from order to disorder “must have occurred by divine edict later than Genesis 1:31. He spoke all nature into being, and then cursed His perfect creation because of man’s sin” (Williams 1966, p.23). As it relates to the physical world, he suggested that, “the perfectly ordered crystalline materials that God created have degenerated into atomically disordered materials because of the operation of the second law of thermodynamics” (Williams 1966, p.23).

In expanding upon his point, the fact that Williams invariably saw the deterioration and decay processes implicit in the second law as resulting in death is evident. He wrote, “Death causes the body to return to the dust, or in other words, the body has now come into equilibrium with its surroundings. Ecclesiastes 3:20 has been satisfied; death is a manifestation of the second law of thermodynamics” (Williams 1969, p.144). He later surmised, “The second law of thermodynamics is a scientific statement of the Scriptural principle of disorder and death” (Williams 1969, p.147). Williams further stated, “Morris suggests that the second law of thermodynamics originated when God cursed the creation because of Adam’s sin. At that point death entered the physical universe. Disordering and decay processes began in all natural operations (Romans 8:20, 22)” (Williams 1969, p.146). So too, in a later publication he said of Romans 8:20 and 22, “These are essentially scriptural statements of the second law of thermodynamics” (Williams 1970, p.49).

Williams was not the only proponent of this position. Writing in 1972, John Whitcomb’s book *The Early Earth* briefly echoed the argument set forth

in *The Genesis Flood* a decade before. He described the present state of humanity as one “subject to the Edenic curse” and “trapped in the pincers of the first and second laws of thermodynamics,” such that “we cannot really picture a genuine creation of things, or a sudden reprogramming of living things to ‘the bondage of corruption’” (Whitcomb 1972, p.136).¹

To this point, arguments connecting the second law of thermodynamics with the curse had appeared in specialty creationist publications. However, in 1976, the view was advanced in Morris’s *The Genesis Record*, which became a popular commentary among conservative evangelical Christians. Commenting on Genesis 3:17–19, Morris wrote:

It is universal experience that all things, living or nonliving, eventually wear out, run down, grow old, decay, and pass into the dust. This condition is so universal that it was formalized about a hundred years ago (by Carnot, Clausius, Kelvin, and other scientists) into a fundamental scientific law, now called the Second Law of Thermodynamics. (Morris 1976, pp.126–27)

He further pointed out the obvious contrast between the creation account and the present world, “Instead of all things being ‘made’—that is, organized into complex systems—as they were in Creation Week, they are now being ‘unmade,’ becoming disorganized and simple. Instead of life and growth, there comes decay and death” (Morris 1976, p.127). He concluded, “This, then, is the *true origin of the strange law of disorder and decay, the universally applicable, all-important Second Law of Thermodynamics. . . . Man is a sinner and has brought God’s curse on the earth*” (Morris 1976, p.127, emphasis added).

The notion that the second law of thermodynamics began with the curse has major ramifications concerning the natural order. Perhaps recognizing some of the difficulties of his position, Morris later modified his view somewhat. In 1981, he wrote:

In the primeval creation, however, even though what we might call “decay” processes certainly existed (e.g., digestion, friction, water erosion, wave attenuation, etc.), they must have all balanced precisely with “growth” processes elsewhere either within the individual system or, perhaps more commonly, in an adjacent system, so that the entropy of the world as a whole would stay constant. . . . Every process and machine would have 100% efficiency, with all input energies being converted completely into useful work. Even the heat energy employed in processes necessitating the force of friction for their operation would be completely productive, with no energy being “lost.” No parts would wear out, no organism would “age” past the point of maximum vigor and

¹ Whitcomb’s remark has remained the same in the third edition of his book, released in 2010.

productivity, and everyone could easily design and build perpetual motion machines! The above is obviously imaginative, and no doubt imprecise and incomplete, but it could not be too far off. Everything was designed by an omniscient, omnipotent God to be “very good.” (Morris 1981, p. 129)

Morris maintained, however, that, “there has been a drastic amendment to the second law.” Whereas the death of animals and humans had not existed before the Fall, “now everything is proceeding back to the dust, according to the second law of thermodynamics.” He contended, “The formal announcement of the second-law in its post-Fall form is found in Genesis 3:17–20” (Morris 1981, p.129). Morris therefore surmised, “The curse extended in like form to all of man’s dominion. Man had brought spiritual disorder into his own dominion; God appropriately imposed a principle of physical disorder on that dominion as befitting its spiritual condition” (Morris 1981, p. 130).

It is debatable whether this clarification helped, for it arbitrarily distinguished the working of the second law of thermodynamics before the Fall and its working after the Fall. It so qualified the second law’s operation before the Fall that it does not sound anything at all like the second law that is active in the world today. If anything, Morris’s modified position was more of a fanciful conjecture than a theory (cf. Faulkner 2013, p.401). Morris concluded, “Thus, as best as we can understand both Scripture and science, we must date the establishment of the second law of thermodynamics, in its present form at least, from the tragic day on which Adam sinned” (Morris 1981, p. 130).

How much resistance there was to this view in the first several decades of the modern creationist movement would be impossible to quantify. Unfortunately, little in the way of scientific or theological critique of the equation between the second law of thermodynamics and the curse was ever published in creationist literature. The dissenting position was, until quite recently, perhaps best represented by Thomas Barnes: “*The Second Law of Thermodynamics began after the existence of a fully wound-up system with Living Maturity*” (Barnes 1966, p.7). This statement strongly implies that Barnes believed the second law began *before* the Fall.

More recently, other creationists have objected to the equation between the second law of thermodynamics and the curse; however, again, little has been written at length on the subject other than the brief remarks of Jonathan Sarfati (2002). He notes that the second

law and its accompanying tendency toward disorder is not always harmful. He names several examples where this is the case: (1) digestion, that is, the breaking down of complex food molecules into their simple building blocks; (2) friction, which turns ordered mechanical energy into disordered heat; (3) heat transfer (for example, from the sun to the earth); and (4) breathing, that is, the movement of gas from a high pressure to a low pressure. According to Genesis 1 and 2, all of these processes were part of the pre-Fall world. Sarfati concludes, “all beneficial processes in the world...increase the *overall* disorder of the universe because the disorder of the surroundings is increased more than that of the system is reduced, showing that the second law is not inherently a curse” (Sarfati 2002, p.216).²

As Sarfati explains, there are scientific problems with the notion that the second law of thermodynamics did not exist prior to the curse. The question to be asked, however, is whether the biblical text actually makes any claim regarding the existence or non-existence of the second law prior to the events of Genesis 3. Specifically, (1) does the pronouncement of “very good” in Genesis 1:31 indicate, as some would claim, that the second law was non-operational? (2) Does “very good” equate to the type of perfection assumed that would exclude the transfer of energy as required by the second law? Furthermore, (3) if the text does not exclude the existence of the second law prior to the curse, need it be assumed that the effects of the second law invariably resulted in physical decay, unhealthy deterioration, and, ultimately, death? The following section of this paper will examine the factors involved in answering these questions.

Evaluation

On evaluation of the history of the view that the second law of thermodynamics began with the curse, it can be seen that the crux of the issue revolves around the pronouncement in Genesis 1:31, that all was “very good.” It is assumed that the pronouncement equates to the total absence of any kind of tendency toward entropy, or, at the very least, that all such tendencies were neutralized in a way so as to retain absolute efficiency; but is this really what is meant?

The concept of “goodness,” represented in Genesis 1:31 by the Hebrew טוב, is outlined by Koehler and Baumgartner (2001, pp.370–71).³ Its semantic range includes (1) *merry* (Esther 5:9; Proverbs 15:15); (2) *pleasant, desirable* (Genesis 2:9; 3:6; 49:15); (3) *in*

² Cf. Sarfati n.d. and Ross 1994, pp.65–66. Ross, of course, does not approach the issue with a young-earth creationist perspective. Because he assumes that death preceded the fall, he requires the presence of decay from the beginning of God’s creative work. However, his comment is nonetheless significant: “Without decay, work...would be impossible....Without work, physical life would be impossible, for work is essential to breathing, circulating blood, contracting muscles, digesting food—virtually all life sustaining processes.”

³ For more information, see also Bowling (1980, pp.345–46), Clines, et al. (1996, pp.351–358), Gordon (1997, pp.353–357), Höver-Johag (1986, pp.296–317), and Stoebe (1997, pp.486–495).

order, usable (Genesis 41:35; 2 Kings 3:19, 25); (4) qualitatively good, efficient (2 Samuel 17:7; Job 10:3); (5) pleasing, beautiful (Genesis 26:7; Exodus 2:2); (6) friendly, kind (Genesis 31:24, 29; 2 Chronicles 10:7); (7) good as to character and value (Genesis 2:12; Exodus 3:8; Ecclesiastes 7:1); and (8) morally good (Hosea 8:3; Micah 6:8).⁴

Clearly, טוֹב has an expansive semantic range, expressive of the concept of “goodness” in relation to the practical, the esthetic, and the moral. Robert Gordon rightly summarizes:

In general usage “good” indicates a state or function appropriate to genre, purpose, or situation. Thus, the fruit of the trees in Eden is described as “good for food” (Gen 2:9; cf. 3:6), and the first ears of corn in Pharaoh’s dream are “good” (41:5, 22, 24, 26). Words uttered appropriate to a situation or need are similarly described (Prov 15:23; perhaps cf. 1 Sam 9:10), and the advice of Ahithophel in relation to Absalom’s battle plans is pronounced “good,” even though in the event it was not followed because “the LORD had determined to frustrate the good advice of Ahithophel in order to bring disaster on Absalom” (2 Sam 17:14). (Gordon 1997, p. 353)

Andrew Bowling, though arranging his categories of meaning slightly differently than do Koehler and Baumgartner, makes a crucial point in noting that these meanings are not mutually exclusive; there is flow and overlap between them. He writes:

Some usages blend two or more of the meanings discussed above. The “good land” of the Old Covenant included practical, economic, and esthetic overtones (Deut 1:25; Josh 23:13). Likewise, the concept of God as “good” is rich with the overtones of all possible meanings of the term “good” (1 Chr 16:34; Ps 145:9). (Bowling 1980, p. 346)

The pivotal question, however, is, in view of the immediate context of Genesis 1–2, what can be said about the extent of the meaning of “very good” in Genesis 1:31? The goodness of creation as indicated by pronouncement in Genesis 1:31 is commonly viewed in relation to three aspects of goodness, each of which can be validated by the surrounding context

and other Scriptures: completeness, purpose, and morality. Genesis 1:31 thus proclaims the creation complete, lacking in nothing with respect to what God intended to create (cf. Genesis 2:1–3). Additionally, it proclaims that creation fulfills its purpose, achieving that for which God designed it (cf. Romans 11:36; Colossians 1:16).⁵ Moreover, especially when understood in light of the events that transpired in Genesis 3, indicates that creation is morally good, without sinful corruption.

With respect to the completeness of creation, Umberto Cassuto commented:

[N]ow God saw EVERYTHING that He had made, the creation in its totality, and He perceived that not only were the details, taken separately, good, but that each one harmonized with the rest; hence the whole was not just good, but very good. An analogy might be found in an artist who, having completed his masterpiece, steps back a little and surveys his handiwork with delight, for both in detail and in its entirety it had emerged perfect from his hand. (Cassuto 1961, p. 59)

Kenneth Matthews has likewise pointed out the importance of completeness:

[God’s] highest acclaim is withheld until the completed creation because only after the six creation days has the lifeless earth been fully changed (1:2). Now the earth as a result of God’s “Spirit” and animated word is well-ordered, complete, and abounding in life-forms under the watch care of royal humanity. (Matthews 1996, p. 175)

James Dixon, though writing with a more devotional flavor, remarked similarly:

The “very good” statement of 1:31 shows completeness. Each entity of creation is good, but when it is seen in complement to the other parts of creation, it is very good. Each part has independence as a direct creation of God, but it needs the rest of creation to fulfil its own intended purpose. (Dixon 2005, p. 44)⁶

Dixon’s remark also hints at the second aspect of creation’s goodness brought out by God’s pronouncement, that is, its ability to fulfill God’s purposes for it. He further noted:

⁴ H.J. Stoebe notes, “The meaning of *ṭob* as ‘good’ in a religioethical sense is not the result of a late spiritualization. The impetus is given by *ṭob*’s direct relationship to life. In the background stands the knowledge that life is possible only through the order to which the *ṭob* declaration simultaneously relates because there is no life outside it.” Also, he writes, “Wisdom too wishes to teach the way of life (cf. Prov 2:19; 5:6; 6:23; 12:28; 15:24; 16:17). It is the ‘way of the good’ (Prov 2:9, 20; cf. 2:12 ‘way of the evil’). Wisdom too seeks morality and recognizes the good person (Prov 2:20; 12:2; 13:2; 14:14, 19). The norms of this way are ‘justice’ and ‘righteousness’ (Prov 2:9; cf. 12:28; 16:31), the aids ‘wisdom’ and ‘insight’ (Job 34:4; Eccl 7:11; cf. Prov 4:7; 9:6). Indeed, these contexts do not lack expressions that point beyond actual wisdom thought (Prov 2:9; 14:22; 15:3). Consequently, one may not construe an exclusive contrast between piety and wisdom . . . nor may one see this piety as merely a form of wisdom thought, for it is oriented beyond norms to God himself.” Furthermore, he argues, “This impetus is deepened in the prophetic proclamation (e.g., 1 Sam 15:22; Mic 6:8; Hos 6:6); it can share individual formulations with wisdom. Particularly informative is the proclamation of Amos (Amos 5:4, 14f.). The notion of life occupies a decisive position; granting life is a matter for the living God. One can find it in community with him only if one observes his directives. Thus, ‘to seek God’ and ‘to seek good’ become nearly identical concepts” (Stoebe 1997, p. 492).

⁵ Note also Romans 8:20, wherein the world’s subjection to futility suggests that the creation cannot fully achieve the purpose for which it was created.

⁶ Gordon Wenham (1987, p. 34) likewise points out, “The harmony and perfection of the completed heavens and earth expresses more adequately the character of their creator than any of the separate components can.”

God is saying, “It is what I intended it to be.” Everything created is capable of fulfilling its intended purpose. The creation is not “good” in the sense that goodness is inherent in the creation. Inherent goodness can belong only to God. “Goodness” in the creation is derived from fulfilling God’s intended purpose for it. As God completes his creation, everything is in place for the complete fulfillment of God’s purpose. (Dixon 2005, p. 44)⁷

The goodness of creation with respect to the fulfillment of God’s purpose for it is a point discussed at some length by Francis Schaeffer:

[V]erse 31 sums up the whole of God’s judgment. . . . This is not a relative judgment, but a judgment of the holy God who has a character and whose character is the law of the universe. His conclusion: Every step and every sphere of creation, and the whole thing put together—man himself and his total environment, the heavens and the earth—conforms to myself. Everything at each of the various levels of creation fulfills the purpose of its creation. . . . Thus we find a doxology in all of creation—everything glorifying to God on its own level. . . . Each thing stands in proper relationship to God and speaks of what God is. And because each thing is functioning in the total context of what God is (God’s being there as the Creator) and because each is functioning perfectly on the level for which it was made, all things are fulfilled on their own level—the machine, the animal, and man himself. (Schaeffer 1972, pp. 55–56)

C. F. Keil, though briefer, has stated essentially the same thing:

God saw His work, and *behold it was all very good*; i.e., everything perfect in its kind, so that every creature might reach the goal appointed by the Creator, and accomplish the purpose of its existence. By the application of the term “good” to everything that God made, and the repetition of the word “very” at the close of the whole creation, the existence of anything evil in the creation of God is absolutely denied, and the hypothesis entirely refuted that the six days’ work merely subdued and fettered an ungodly, evil principle, which had already forced its way into it. (Keil 2011, pp. 41–42)

Notably, Keil asserted that the pronouncement, “very good,” is, in addition to all other things that it indicates, a moral evaluation. Gerhard von Rad is also correct in his observation:

This statement [“very good”], expressed and written in a world full of innumerable troubles, preserves an inalienable concern of faith: no evil was laid upon the world by God’s hand; neither was his omnipotence limited by any kind of opposing power whatever. When faith speaks of creation, and in doing so directs its eye toward God, then it can only say that God created the world perfect. (Von Rad 1961, p. 59)

Eugene Merrill likewise commented on the moral goodness of creation specifically as it relates to humanity:

The biblical record clearly asserts that man was a perfect being at creation, one of whom the Creator could say that “it was very good” (Gen. 1:31). While this may be taken as an assessment as to the aesthetic value of what God had done, it certainly includes also a moral evaluation of mankind, the only [earthly] creature possessing such a faculty. In fact, that man was the image of God in a pristine world before he sinned presupposes his perfection, for God could hardly have been well represented by a flawed being. (Merrill 2006, pp. 199–200)⁸

To summarize, all three of the aspects of goodness previously mentioned—completeness, purpose, and morality—are wholly consistent with the context of Genesis creation account (as well as other Scriptures) and widely affirmed by qualified biblical scholars; however there is nothing in the context to indicate that God’s pronouncement in Genesis 1:31 ought to be construed, as Williams suggested, as necessitating an unrealistic degree of “perfection” in crystals; that is, materials without any irregularity in their crystalline structure. Furthermore, there is no exegetical data to support Morris’s fanciful conjecture about processes operating with 100% efficiency and the possibility of building perpetual motion machines.

All of this goes beyond the bounds of what may be assumed in the statement “very good” as shown by the semantic range of טוב and the contextual indicators surrounding the statement. Moreover,

⁷ Derek Kidner (1967, p. 53) fittingly notes, “And if the details of His work were pronounced ‘good’ ([vv.] 4, 10, 12, 18, 21, 25), the whole is *very good*. Old and New Testament alike endorse this in their call to a thankful acceptance of all things material (e.g., Ps. 104:24; 1 Tim. 4:3–5) as both from and for God.” John Calvin’s words are also worth consideration: “Therefore, the final judgment of what Moses speaks is like a bridle to hold back men’s foolish curiosity and especially that diabolical audacity which transports them when they want to contemplate God and his works and say, ‘I do not think that is good. I think it would be better done differently.’ But because God found his works good, nothing remains except for us to consider them quite humbly, knowing that he did everything with such wisdom that, if we do not understand it, it is because our senses are dazzled, indeed completely blind. . . . So let us learn not to be judges of God’s works, but to yield to the judgment he has given concerning them, and let us find everything good since he has declared it so, and let us know that to battle against him is like butting our heads against a wall. . . . According as God’s blessing shone upon all things above and below without exception, God’s goodness was visible in all things created” (Calvin 2009, pp. 118–120).

⁸ Notably, Sarna also writes, “Following the creation of all living things, we meet with the climatic observation that God saw all that he had made and found it to be ‘very good’ (1:31). . . . The basic belief in the essential goodness of the universe was, of course, destined to exert a powerful influence on the direction of the religion of Israel and to affect the outlook on life of the people. It found its expression in the covenant relationship between God and His people and ultimately achieved its most glorious manifestation in the notion of Messianism—two uniquely Israelite contributions to religion” (Sarna 1966, p. 18).

since processes requiring the normal operation of the second law of thermodynamics were in place prior to the curse (e.g., Genesis 2:10, 15, 16, etc.), it is almost surely unwarranted to suppose that the second law was introduced at the time of the curse.

Solution

In view of the preceding argument, it may be proposed that the curse in Genesis 3 did not initiate the second law of thermodynamics; rather, it brought about a change related to the effect and eventual results brought about by the second law. Though the second law was operative prior to the curse, it was never permitted by God to result in disease, suffering, death, or extinction.

Stated another way, the curse did not introduce entropy—at least not as currently understood scientifically. Rather, it is what altered the final result of entropy, so that it now eventuates in death. This probably means that the force restraining the second law from resulting in death lies outside of the bounds of the scientific and squarely within the realm of the supernatural, but this is not a problem within the framework of a biblical worldview. That being said, it is not impossible that, prior to the curse, some of the effects of the second law were counteracted in living things by natural repair mechanisms that were removed (or made less efficient) at the pronouncement of the curse. Of course, this would not have mitigated the effects of the second law on the universe *as a whole*, necessarily; though it might have negated any harmful decay with respect to living creatures. However, there is simply no way of knowing about these things for sure, the pre-Fall world having now been lost to history.

Nevertheless, there are hints in the text, even in the post-Fall world, of occasions whereon the effects of the second law were miraculously restrained. Deuteronomy 8:4; 29:5; and Nehemiah 9:21 all refer to Israel's desert wanderings, during which time, "Their clothes did not wear out and their feet did not swell." The means by which the second law was counteracted (or, at least, its effects delayed) is not mentioned, but it seems fairly obvious from the biblical text that the second law did not eventuate to the same end that it normally would have.

Perhaps, then, the sustaining power of God mentioned in Colossians 1:17 and Hebrews 1:3 was operative in the pre-Fall world in the same exceptional way spoken of in reference to the Israelites in the desert.⁹ As Sarfati perceptively notes (2002, pp. 226–227), it is possible "that God withdrew some of His sustaining power...at the Fall so that the decay effect of the Second Law was no longer counteracted,"

specifically with respect to the allowance for the death of sentient creatures, both man and beast (cf. Romans 5:12).

The bottom line is this: There is no biblical warrant for denying the presence of the second law of thermodynamics prior to the curse. At the same time, there must be a clear distinction made between the second law and the full extent of the effects associated with it in the post-Fall world. Stambaugh presents a biblically-balanced conclusion:

[T]here would be entropy in the physical universe during the creation week. But whether human and animal death and disease were a part of this entropy before the Fall, that is, in God's "very good" creation, is another question. It should be noted that the causes of aging are not well understood. There is neither scientific warrant nor biblical warrant to think that aging, as a decay process, was part of the original creation. So, the second law was certainly functioning before the Fall. But that does not mean that there was decay and physical death among the living creatures ...before the Fall. (Stambaugh 2008, p. 382)

Author's Note

Be sure to read also the companion paper to this work, "The Second Law of Thermodynamics and the Curse" by Dr. Danny Faulkner (2013).

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⁹ Colossians 1:17 and Hebrews 1:3 specifically attribute this power to the Son, in whom "all things hold together" and who "upholds all things by the word of his power" (New American Standard Bible).

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