

The First Hanukah Bush: Entropy, Jewish History & the Meaning of Burning Without Consumption

Rabbi Netanel Wiederblank

Faculty, Mechina Jewish Studies Program, YU

The eminent chemist and avowed atheist Peter Atkins considers the philosophical and not just scientific implications of entropy in his book, *The Second Law*. He opens with the following glum observation:

*We are the children of chaos, and the deep structure of change is decay. At root, there is only corruption, and the unstemmable tide of chaos. Gone is purpose; all that is left is direction. This is the bleakness we have to accept as we peer deeply and dispassionately into the heart of the Universe.*⁴⁰

The holiday of Hanukah is designed to address this disconcerting point.

Among the most perplexing elements of Hanukah is the story of the candelabra burning for eight days. While the narrative refers to what is probably the most celebrated theme of the holiday, one wonders why the miracle was necessary, and what it symbolizes. If we are to truly appreciate Hanukah, we must understand the holiday's historical and contemporary significance.⁴¹

A careful examination of the miracle reveals a surprising motif. The oil burning echoes a marvel which took place thousands of years earlier.

And Moses approached the mountain of God, Horeb... and he gazed, and behold, the bush burned with fire, yet was not consumed.

Exodus 3:2

וירא מלאך ה' אליו בלבת אש
מתוך הסנה וירא והנה הסנה
בער באש והסנה איננו אכל:
שמות ג:ב

Just as the shrub of Moses burned but was not consumed, so too the oil of Hanukah blazed but was not depleted.

⁴⁰ *The Second Law*. Scientific American Library (1984)

⁴¹ Many of the ideas in this article are based on a *shiur* I once heard from Rav Moshe Shapiro *shlita*.

The significance of this congruence becomes striking when we consider that the burning bush marks the start of the Sinaitic Revelation and the giving of the Torah (Exodus 3.12). Thus, God begins His correspondence with the Jewish people as a nation with the emblem of a fire that does not devour.

To demonstrate that He continues to rest among Israel — that the covenant of Sinai continues — God performed the same miracle on a daily basis in the Temple. As Rashi⁴² comments on Leviticus 24:3, the western lamp on the Temple candelabra regularly burned without normal oil consumption.

What about Hanukah? *Seder Olam*, a chronology ascribed to the 2nd-century tanna Rabbi Yose, points out that the ascendancy of the Greeks, the villains of the Hanukah tale, marked the end of prophecy.⁴³ One can only imagine the feeling of despondency that must have overcome the Jews at this time. God had communicated with His people since Sinai. Did His muteness now imply a rejection?

The miracle of Hanukah answers that question with a definitive “No!” While God relates to His people differently in the post-prophetic world, He by no means abandons them. Just as God preceded the prophetic period with a miracle of burning without consumption, in order to show His love, so too He precludes the era of Divine silence with the same miracle, to demonstrate His continued affinity towards the children of Israel.

But why, specifically, the miracle of flame without fuel? Basic to the physical universe is the law of entropy. Everything has a cost; one cannot burn without expending energy. Accordingly, the universe is finite, both in time and space. Negative entropy, as expressed by the burning bush or the Hanukah candelabra, represents man’s relationship with the infinite. While earthly fire must devour, heavenly flames linger forever.

Prophecy also symbolizes man’s potential to connect to the eternal. Burning without consumption therefore symbolizes man’s capacity to relate to the Divine, and while the nature of this relationship changed in the post-Biblical world, the ability to connect continues, forming the basis of our religion. The miracle of lights tells us the great correspondence continues. But how?

Numerous sources associate Hanukah with *Torah SheBa’al Peh*, the oral law.⁴⁴ In light of the above we understand why. It is not simply that Hanukah is the only major Holiday not recorded in our written Bible. Hanukah reflects the shift from a religion dominated by prophesy and written law, or *Tanakh*, to a faith shaped by the dynamic and ever-changing oral law.⁴⁵ Through the *Torah SheBa’al Peh* the flame continues to burn. Hanukah thus celebrates man’s relationship with God in a world without revelation.

⁴² As understood by Gur Aryeh.

⁴³ סדר עולם רבה (ליינר) פרק ל: והצפיר והשעיר מלך יון וגו' הוא המלך הראשון (דניאל ח כא), ועמד מלך גבור וגו' וכעמדו תשבר וגו' (שם יא ג), הוא אלכסנדרוס מקדון שמלך י"ב שנה, עד כאן היו הנביאים מתנבאים ברוח הקדש, מכאן ואילך, הט אנך ושמע דברי חכמים (משלי כב יז).

⁴⁴ See Yoma 29a. The previously quoted paragraph from *Seder Olam* highlights this connection.

⁴⁵ Later we will explain how this description of the Oral Law corresponds to the fundamental belief that the entire Torah, written and oral, was given at Sinai.

For the modern Jew, the possibility of burning without consumption takes on new meaning. In a sense, Atkins is right when he claims that “we are the children of chaos, and the deep structure of change is decay.” From a purely physical perspective, “at root, there is only corruption, and the unstemmable tide of chaos.” But ultimately he errs when he concludes, “gone is purpose.” The miracle of Hanukah reminds us that there is also a heavenly flame that burns but does not consume. It is a *ner tamid*, an eternal flame. Thus, by lighting Hanukah candles we proclaim there is purpose. Indeed, decay is a property of *this* world; however, this world is but the handiwork of its eternal Creator. While the atheist sees only “bleakness” when he peers “deeply and dispassionately into the heart of the Universe,” the great prophet commands the reverse: *שְׁאוּ-מְרוֹם עֵינֵיכֶם וּרְאוּ מִי-בָרָא אֱלֹהִים* “Peer deeply into the heart of the Universe, and behold who hath created these things” (Isaiah 40.26). Flames without fuel affirm that decay is indeed reversible. Each year when we kindle the menorah we latch onto the heavenly fire and free ourselves from the clutches of entropy.

The Transition of Hanukah

Earlier we noted the connection between Hanukah and the termination of prophesy. The overt miracle of Hanukah ushered in a new period of history in which there are no longer overt miracles. During this era God no longer communicates directly with mankind. Instead, the focus shifts from *Torah Sh’Bchtav* to *Torah SheBa’al Peh*. Let us attempt to explain this puzzling transition first by considering the evolution to a world without overt miracles.

Moshe praises God with the appellation the great, the strong, and the awesome:

For the Lord your God, He is God of gods, and Lord of lords, the great God, the powerful, and the awesome, Who regards not persons, nor takes bribes.

Devarim 10:17

כי ה' אלהיכם הוא אלהי האלהים ואדני האדנים האל הגדול והנורא אשר לא ישא פנים ולא יקח שחד:
דברים י"ז

Yirmiyah alters this by leaving out *נורא*, God’s awesomeness:

[God] shows mercy unto thousands [of generations], and recompenses the iniquity of the fathers into the bosom of their children after them; the great, the mighty God, the Lord of hosts is His name;

Yirmiyahu 32:18

עשה חסד לאלפים ומשלם עון אבות אל חיק בניהם אחריהם האל הגדול הגבור ה' צבאות שמו:
ירמיהו לב:יח

Daniel also follows Moshe’s appellation but omits *גבור*—God’s strength. Thus, the verse in Daniel 9:4 records:

And I prayed to Hashem my God, and made confession, and said: 'Please Lord, the great and awesome God, who keeps the covenant and mercy with those that love Him and keep His commandments.

Daniel 9:4

ואתפללה לה' אלהי ואתודה ואמרה אנא אדני האל הגדול והנורא שמר הברית והחסד לאהביו ולשמרי מצותיו:
דניאל ט:ד

The Talmud discusses with wonder how the *Anshei Knesset HaGedolah*, the Men of the Great

Assembly, restored the appellation of הַאֵל הַגְּדוֹל וְהַנּוֹרָא when composing the *Amidah*:

Said R' Yehoshua ben Levi, why were they called the Men of the Great Assembly (*anshei kneset hagedolah*)? Because they returned the crown [of God's glory] to its original luster. Originally, Moshe said "the great, powerful, awesome God." Then came Jeremiah and said: Behold, strangers are croaking in His sanctuary, where are His displays of awesomeness. He therefore did not mention awesome. Came Daniel and said: Behold, strangers are enslaving His children, where are the displays of His power. He therefore did not mention powerful. But then they came and said: On the contrary, This is His magnificent display of strength, for He restrains His will [all these years that His people are subjugated] in that He shows long-suffering countenance to the wicked [by not punishing them immediately.] And these are indeed great displays of His awesomeness, because were it not for the awe of the nations of the Holy One, Blessed be He, how could one solitary nation survive among the 70 nations of the world.⁴⁶ Now the Rabbis [i.e. Jeremiah and Daniel] how did they act thus and abolish the institution of Moshe? Said R. Elazar: because they knew about the Holy One Blessed Be He, that He is truthful, therefore they could not speak falsehood of him.

Yoma 69b

אמר רבי יהושע בן לוי למה נקרא שמן אנשי כנסת הגדולה שהחזירו עטרה ליושנה אתא משה אמר (דברים י) האל הגדול הגבור והנורא אתא ירמיה ואמר נכרים מקרקרין בהיכלו איה נוראותיו לא אמר נורא אתא דניאל אמר נכרים משתעבדים בבניו איה גבורותיו לא אמר גבור אתו אינהו ואמרו אדרבה זו היא גבורת גבורתו שכובש את יצרו שנותן ארך אפים לרשעים ואלו הן נוראותיו שאלמלא מוראו של הקב"ה היאך אומה אחת יכולה להתקיים בין האומות ורבנן היכי עבדי הכי ועקרי תקנתא דתקין משה אמר רבי אלעזר מתוך שיודעין בהקב"ה שאמתי הוא לפיכך לא כיזבו בו
יומא סט:

The Talmud states that initially Moshe referred to God as הַאֵל הַגְּדוֹל הַגִּיבּוֹר וְהַנּוֹרָא. However, Yirmiyah and Daniel could not utilize this appellation because they lived in a world where evil triumphed. The *Anshei Knesset HaGedolah* restored the crown to its former glory when they once again identified God as הַאֵל הַגְּדוֹל הַגִּיבּוֹר וְהַנּוֹרָא.

Questions abound when considering this passage. Firstly, what did the *Anshei Knesset HaGedolah* see that Yirmiyah and Daniel did not see? Moreover, how could Daniel deny God's power, and how could Yirmiyah deny God's awesomeness?

The answer is that certainly Daniel knew of God's power, and Yirmiyah knew of His awesomeness. However, it is inappropriate to praise God about a trait which one cannot see. For example, if, in the summer, one were to say מְשִׁיב הַרוּחַ וּמְרִיד הַגֶּשֶׁם, i.e. pay tribute to God for bringing rain to the world, one would repeat Shmoneh Esreh. Why? מְשִׁיב הַרוּחַ וּמְרִיד הַגֶּשֶׁם is not a request—it is praise to God for bringing rain to the world. Why can't we praise him in the summer as well? In the summer, at least in the land of Israel, it does not rain; it is therefore inappropriate to extol God for bringing rain.

Thus, Daniel felt that a world in which strangers are enslaving God's children is a world in which

⁴⁶ Likewise, see Tanchuma which states: Vespasian asked R. Joshua: Great is the lamb that stands among 70 wolves? He responded: Great is the shepherd that saves it.

אדרינוס שאל את ר' יהושע גדולה הכבשה שעומדת בין שבעים זאבים א"ל גדול הרועה שמצילה...

God's strength is not being displayed. To praise God's strength is almost hypocritical—not because it isn't true, but because he didn't see it.⁴⁷ Likewise, Yirmiyah recognized the falsehood of extolling God's awesomeness in a world in which idolaters were croaking in His sanctuary.

So we must consider what changed for the Anshai Knesset HaGedolah. If anything, the dominance of evil only proliferated during their tenure. To answer this, let us turn to another passage in the Talmud.

What did Titus do? He seized a harlot in his hand and entered the holy of holies. He spread out a Torah scroll and committed a sin upon it. Then he took a sword and slashed the curtain, and a miracle happened and blood bubbled out of the curtain. Titus thought that he killed God... Abba Chanan says: [scripture states] Who is like you, O Strong One, God? [meaning to say] Who is like You strong and firm for You hear the insult and blasphemy of that evil man and yet You remain silent? In the academy of R. Yishmael it was taught: [scripture states:] Who is like You among the mighty ones Hashem? [This is homiletically interpreted to mean,] who is like You among the mute ones?

Gittin 56b

מה עשה [טיטוס] תפש זונה בידו
ונכנס לבית קדשי הקדשים והציע
ספר תורה ועבר עליה עבירה ונטל
סיף וגידר את הפרוכת ונעשה נס
והיה דם מבצבץ ויוצא וכסבור הרג
את עצמו... אבא חנן אומר
(תהילים פט) מי כמוך חסין יה מי
כמוך חסין וקשה שאתה שומע
ניאוצו וגידופו של אותו רשע
ושותק דבי רבי ישמעאל תנא
(שמות טו) מי כמוכה באלים ה' מי
כמוכה באלמים
גיטין נו:

The Talmud wonders how are we to portray God at the moment of Titus's most despicable abomination. It answers with a play on the verse praising God for the most stupendous of miracles—the splitting of the sea. After the Jews victoriously crossed *Yam Suf*, witnessing the termination of their evil oppressors, they triumphantly declared to God: “Who is like You among the mighty ones.” How does this relate to God at the moment when Titus sins with a harlot on the floor of the Holy of Holies?

The answer emerges from our thesis above. Jewish history can be divided into two broad stages. The pinnacle of the first stage, which was marked by prophesy and miracles, was the splitting of the sea. When the Jews witness this marvel, they declared ה' מי כמוך באלים—who is like You among the mighty ones, O God. In the second stage, however, God no longer speaks directly to people. Likewise, He no longer performs overt miracles. However, even as He hides His face we must endeavor to see Him. Not only that, but we can see His greatness by considering His restraint. His might and awesomeness emerge not from His intervention but from His discipline. The pinnacle of this restraint is His silence during the despicable act of Titus. Thus we declare ה' מי כמוך באלמים—who is like You among the mute.

Yirmiyah and Daniel still lived during the first stage, albeit during its demise. Therefore, in a world of divine manifestation they could not declare His might and awesomeness when idolaters were enslaving His children and croaking in His Temple. The *Anshei Knesset HaGedolah*, however, lived during the second stage. During this phase we glimpse greatness in hiddenness--

⁴⁷ This is because, in general, we as finite beings are unable to relate to God's infinite essence. We therefore can only perceive Him through the manner in which He relates to us.

not in revelation. Therefore, it once again becomes appropriate to declare האל הגדול הגיבור והנורא. Today we do see His might and His awesomeness, though not in the traditional way.

Just like our current era demands that we must find God within nature and not above it, it demands as well that we must seek to hear God within Torah, and not through prophesy. R. Zadok HaKohen of Lublin argued that this encounter with God occurs through the proliferation of the *Torah Sh'Ba'al Peh*, the oral law.⁴⁸ At Sinai, Moses received the Torah, but according to R. Zadok, the human intellect was not the critical factor in the interpretation of the Torah, because the entire Torah was received prophetically. R. Zadok presents two systems of Torah knowledge, one rooted in prophecy and the other in intellect. Although the Talmud states that a sage is superior to a prophet, nevertheless, the sage's understanding lacks the absolute certainty of a prophet. On the other hand, while a prophet knows the absolute truth, his knowledge is inherently limited to the specific cases in which he received prophecy. Since it was not derived through intellectual efforts, this knowledge could not be reapplied to other contexts, so no general precepts could be established. Even more importantly, the human initiative in the derivation and interpretation of the law allows the student to acquire the Torah and internalize it in a way not possible with prophesy. As opposed to prophesy, which comes only from above, as a gift, Torah study allows one to arrive at the truth from within.⁴⁹

The Jews who lived during the intensive period of prophecy were not suited to deep analysis of the Oral law. R. Zadok explains that "All the wisdom of the Oral Torah [consists] of apprehending truth from darkness and hiddenness, but in the era of the indwelling of the Divine Presence in Israel, the [Israelites] did not condescend to perception through darkness at all".⁵⁰ Therefore, after the termination of prophecy the Oral Torah was neglected and largely

⁴⁸ R. Zadok's position is beautifully presented in "R. Zadok Hakohen On the History of Halakha" by Dr. Yaakov Elman in *Tradition* 21.4 (1983): 1-26.

⁴⁹ We do not wish to imply that the oral law is simply the invention of the Talmudic scholars. Heaven forbid. Certainly the entire Torah and its interpretation were given at Sinai. However, as Rambam explains in his introduction to *Mishneh Torah* this basic premise does not preclude further elaboration and interpretation. Thus he writes: "Behold, we cannot say that everything the Sages brought forth through the Thirteen Principles of Torah Interpretation were said to Moses at Sinai -- נאמר שהוא -- הנה לא כל מה שנמצא לחכמים שהוציא בהיקש משלש עשרה מדות נאמר שהוא -- נאמר למשה בסיני."

The exact role of human initiative in this process is subject to great debate. Some, like *Sefer Ha-Ikharim* (3:23), place great emphasis on the scholar's interpretation and extrapolation. Thus, *Shmot Rabba* 41:4 states וכי כל התורה למד משה כתיב בתורה (איוב יא) ארוכה מארץ מדה ורחבה מני ים ולא רבעים יום למדה משה אלא כללים למדה הקב"ה למשה. R. Albo explains that based on these general principles המתחדשים הדורות הפרטים שבכל דור ודור הפרטים המתחדשים. Others, such as the Geonim (as expressed by R. Abraham ibn Daud in his introduction to *Sefer ha-Kabbalah*, R. Nissim Gaon in his introduction to *Mafteach le-Man'ulei ha-Talmud*, and R. Shriria Gaon) adopt a more conservative approach in which the debates of the Talmud are forms of retrieval. Many approaches between that of the Geonim and that of the *Ikharim* have also been suggested. (For example, consider the comments of *Ritva Erubin* 13b, *Shelot u-Tshuvot min ha-Shamaim* 3, *Yam Shel Shlomoh* introduction to tractate *Hulin*, and *Havot Yair* 192.) I believe that R. Zadok's thesis, albeit with slight modifications, maintains even within the view of the Geonim. This is because whether we see the Talmudic discussions as retrieval or as constructive they are nevertheless products of human ingenuity and intellect.

⁵⁰ Resisei Laylah (Lublin, 5663, repr. *Bnei Brak: Yahadut*, 5727), pp. 160-61 translated on page 12 of Dr. Elman's article

forgotten. However, from this period of darkness shined the genius of the *Anshei Knesset HaGedolah* and the Oral Torah flourished. All this was only possible in a world without prophesy and overt miracles.⁵¹ The holiday of Hanukah commemorates this transition.

Besides the obvious sociological theories, perhaps the deeper reason why Hanukah is so widely celebrated is because Hanukah relates to our current existence more than any other holiday. It is the holiday of the Jew in the world without prophesy and without overt miracles. Each year when we light candles we therefore remember that entropy is not inevitable, and that God continues to communicate even though He is sometimes hard to hear.

⁵¹ R. Zadok further argued that based on the verse (Kohelet 7:14), which indicates that the world is always marked by parallel and opposite forces, the first stage of Jewish history, that was defined by miracles and prophets also experienced *kishuf* (magic/sorcery) and false prophesy. In the second stage, marked by the development of the oral law through the intellect, there was a parallel advancement of wisdom in the non-Torah world, beginning with Greek wisdom and continuing through the various intellectual movements continuing to our time. Thus he writes:

ר' צדוק הכהן מלובלין - פרי צדיק בראשית לראש חודש כסלו: שכבר אמרנו שבמצרים שהיה הכנה למתן תורה והיה אז חכמת מצרים כישוף בלא שכל אנושי רק חכמה עליונות מהקליפה. והוא זה לעומת זה נגד חכמת תורה שבכתב שהוא מן השמים. וחכמת יונית דשם התחילה הפילוסופיא שהוא חכמה שכליית דעות כוזבות ומינות והיה אז בזמן אלכסנדרוס מוקדון. והוא זה לעומת זה נגד חכמת תורה שבעל פה בקדושה שהוא גם כן מתחדש בלב חכמים אשר מופיע בלבם דברי אלהים חיים מטלא דעתיקא. ואז בזמן אלכסנדרוס מוקדון היה שמעון הצדיק כמו שאמרו ביומא (ס"ט א) שהיה משיירי כנסת הגדולה ואז התחיל התפשטות תורה שבעל פה. וזה עסק חודש זה לתקן האש של היצר הרע הרוב כעס. ברוגז האש של תורה שבעל פה שהיא אש אוכלת אש כאמור:
ר' צדוק הכהן מלובלין - פרי צדיק דברים פרשת נצבים: ואם ישתו בני נכר תירושך אשר יגעת בו הענין הוא שבכל פעם שמתגלה בעולם דרך חדש בתורה שבעל פה מתגלה לעומת זה חדשות בחכמות חיצונות באומות. כמו שמצינו בזמן שמעון הצדיק שהיה משיירי אנשי כנסת הגדולה שהם יסדו התורה שבעל פה אז היה כנגדו אלכסנדרוס מוקדון ורבו שהפיצו החכמת יונית שהוא מינות ואפיקורסות שזה לעומת זה וכמו שנתבאר במקום אחר שבזמן שהיה צריך להיות התגלות התורה שבכתב היה אז חכמת מצרים ואחר כך בבבל היה עוד אשפים וחרטומים לעומת שהיה אז בישראל נביאים. ובזמן שהתחיל להתפשט חכמת תורה שבעל פה שהוא על הגוון משכל החכמים שבאמת הוא מה שמופיע בהם ה' יתברך. התחיל אצלם לעומת זה חכמת יונית שהוא גם כן מה שמחדשים משכלם. ועל זה נאמר ואם ישתו בני נכר שהם האומות העולם תירושך שמרמו לתורה שבעל פה. וכן איתא בתיקונים (תיקון ח') ובושה החמה ס"מ וחפרה הלבנה נוקביה דס"מ שהם אומרים שלהם הוא התורה שנמשלה לחמה וכעין שמובא בזה"ק (ח"ב קפ"ח א) שאמר ההגמון שאצלם הוא השפת אמת שתכון לעד וזה נגד בחינת תורה שבכתב ועל זה אמר ובושה החמה. וחפרה הלבנה הוא מה שמחדשים הם בשכלם ועל זה אומרים שהוא הלבנה שלהם סיהרא דמקבלא משמשא. על זה אומר ואם ישתו בני נכר תירושך. כי מאספיו יאכלוהו הוא נגד אם אתן דגנך וגו' שבאמת על ידי האכילה יבואו לדברי תורה והללו את ה' ומקבציו ישתוהו הוא נגד התירוש וזהו ישתוהו בחצרות קדשי שיהיה בבחינת היין שזכה משמחו שהיא סוד תורה שבעל פה וכאמור: