

D'var B'reshit

Professor Ido Kantor, of Bar-Ilan University, teaches such things as condensed matter physics, phase transitions, theory of neural networks, and quantum spin systems.

These are all things which deal with Bereshit. From the explosion of creation of the light and dark from the Big Bang to the creating and trickery of how we think. From the G-d's voice creating everything, to how something may appear out of seemingly nothing.

Professor Kantor wrote, in 2003, about the missing *samekh* in Bereshit. Every letter of our aleph-bet is accounted for in *B'reshit's* first chapter except for the *samekh*, which doesn't show up until Chapter 2, in verse 11.

Of this interesting phenomenon, he wrote:

The samekh is a geometrically closed letter, [\[3\]](#) as hinted by the word sagur, "closed", which itself is spelled with samekh and by its first appearance in the Torah, in the word ha-sovev, "surrounding".

As we know today, based on cosmological studies, the universe is spreading, expanding in all directions at every moment, and it may even continue to expand forever. [\[4\]](#) Therefore the world created by G-d could not have been created in an enclosed space, and this is hinted at by the absence of the letter samekh in the text of the creation.

I will conclude with the somewhat obscure words of the Sforno, which, however, seem to allude to a similar idea about an expanding universe: [\[5\]](#)

And the earth was desolate and void – That earth, which was created, was an amalgam of primeval matter called tohu and primeval form called bohu, for it would not be suitable

(possible) for primeval matter to exist without being clothed in some form. This, then, was the first amalgam perforce [or necessity], of matter and substance (form). The Torah is explaining that primeval matter was a totally new creation (there being no matter preceding the world's creation). The matter in this initial amalgam is called *tohu* for it only possesses potential but no actuality, as it says *ki tohu hema* "for they are vain" (I Sam. 12:21) that is, something not existing in reality, only in the imagination. The form of that initial amalgam is called *bohu* for in it the *tohu* is found, in actuality. [6] The prophet calls *avne bohu* "stones sunk in the primeval mire" (Is. 34:11), any object which does not remain in a given form for an appreciable period of time, just as we call the initial form *bohu* which immediately clothed itself in a variety of forms (namely the four elements).

Wow. That's pretty thick for three paragraphs, but I'll sum it up.

Obadiah ben Jacob Sforno says we have *tohu* and *bohu*. *Tohu* is the potential of something. *Bohu* is the realization of it.

Traditional Chinese thought sees matter and energy as the same element, the same stuff. Matter, to Chinese traditionalists, is just the corporeal, solid version of energy.

In other words, *tohu* is G-d's intentions manifested through what we come to think of as his voice. *Bohu* is what we are walking on, what we are breathing, what we swim in, and what we cook with. *Bohu* is the elements which we use, *tohu* is the inspiration which we fashion with.

Moving on, one beautiful thing we have in our religion is the knowledge that we will never fully understand Torah. Even so, Torah and science must not contradict each other. Science is truth, as is Torah. Our understanding of each is limited, but as we proceed with either, new avenues of thought, knowledge,

and opportunity open up to us.

We ate from the tree, yes. Perhaps, as I believe, we were always supposed to. We suddenly gained knowledge of our own mortality and the workings of the world. We suddenly gained knowledge of right and wrong. We gained knowledge of vulnerability.

Our own *Etz Hayim*, in the commentary for Chapter 3: verse 22, on page 23, says that “it has been suggested that the tree of life represents the force of instinct, whereas the tree of knowledge of good and evil represents the force of conscience. Once our ancestors acquired a conscience, they could no longer eat of the tree of life, that is, live instinctively, doing whatever felt good to them. People ever since have sought ... to return to the days of childhood before they knew that certain things were wrong; but the way is barred.”

This brings me to my final point.

I don't believe Adam and Eve's sudden discomfort with nakedness was of the flesh. I think it was something far deeper than that. Nakedness of the flesh is one level, but we always delve deeper than one level.

To be naked is to be vulnerable. It is to have no shielding or shell outside of your skin. It is to be exposed, literally to the elements. Psychologically, though, nakedness is to have your vulnerabilities on display.

In 2011 *Wired* magazine wrote an article on how nakedness changes our perceptions. They cited a study from the American Psychological Association, published in the *Journal of Personality and Social Psychology*, and crafted from researchers from the University of Maryland, Northeastern University, and Harvard Medical School. This was a big study from big minds, which confirmed something many of us already know.

That something: people's perceptions of what others are capable of or how well others should be treated are altered by how much skin the one being judged is showing. A woman in a bikini or a man shirtless was viewed as being capable of more licentious acts than they are of mindful acts. Conversely, cutting their body out of the photo made viewers see them as capable of more agency, or mindfulness, than experience, those aforementioned licentious acts.

Adam and Eve had thoughts they hadn't had before. They suddenly knew that they were capable of more than just existing and eating what was provided. They were capable of creation, themselves; certainly not on the scale of Hashem, but on a scale which is not insignificant. They were capable of fashioning *tohu*, their visions, into tangible things with *bohu*.

They suddenly saw themselves and each other as beings who could enjoy things, whether the wonderful crispy yet pulpy texture of a persimmon, or the flavor of a leaf of mint. Whether the touch of your other half's fingers on the nape of your neck, to the fullness of emotion that a loving, sexual relationship can bring.

Adam and Eve suddenly saw these nuances and this potential. They became embarrassed, not because of what they were or were not wearing, but because they were exposed and had not yet accepted each other for these new, glorious potentials. The potential to enjoy art, to enjoy food, to enjoy company, to enjoy creation, to enjoy movement, to enjoy companionship...to just enjoy.

Fig leaves created a cover for them. Fig leaves were the *bohu* for the *tohu* of reflexively wanting protection in this new state. True protection, though, comes not from what we wear, not a bow tie, suit, dress, or coat, but how we act. Accepting each other for what we are, all we are, and who we are is the best fig leaf for our mind and heart.

Torah and science both confirm it.