

Small Tastings of Torah, Judaism and Spirituality

From Rav Binny

(Portion of Bo)

In 1925, the American Astronomer Edwin Hubble demonstrated (as an extension of Vesto Slipher's discovery in 1918) that the Universe was actually not static; it was expanding: every galaxy in the observable proximity of earth (as far as 6×10^{17} miles away) was actually receding at the same rate of speed. This, along with other discoveries, gave rise to the big bang theory: that the entire universe had once been contained in a singularity, a single dot that sat for an eternity in space before it exploded.

Many, including Einstein, resisted the idea of a non-static universe as it implied a beginning and a supernatural external force that caused the big bang, but eventually, even Einstein had to admit a static universe was no longer likely. Indeed, the death knell of the static universe theory may have been Penzias and Wilson's discovery (for which they were awarded the Nobel Prize in 1965) of the frequency of sound which was the echo of the big bang itself!

Of course, if all matter and energy was initially contained in the original dot of singularity, there was nothing external that could have naturally caused the big bang, which seemed to suggest a Prime Mover (G-d?). Hence Einstein's reluctance to accept a non-static universe and his statement that "I have not yet fallen into the hands of shamans and priests..."

At this point the scientific community suggested another possibility: perhaps the Universe was expanding but would eventually implode back into a singularity and then, when all that energy contracted to its extreme limit it would explode again and the process would start all over again. In other words, the universe could still be viewed as static with no beginning, just of an oscillating nature with an endless succession of big bangs followed by big crunches followed again by big bangs and so on. In order to support this theory there had to be enough average density of mass in the universe to allow for all the matter to eventually slow down and begin to reverse the expansion process. And as it turned out, there simply was not enough mass; not by a long shot.

And this led to a fascinating phenomenon as a plethora of scientists, desperate to be able to conclude that the Universe had no beginning, and that there was indeed no Prime Mover or G-d. Many theories were suggested as to where this massive amount of missing mass might be hidden. Perhaps in black holes? Or maybe behind each observable star lay many more hidden stars? Anything but the most obvious conclusion that the universe had a beginning and that all of creation thus may have been created with ... purpose.

This week in Parshat (the portion of) **Bo**, we witness the tragic and yet inevitable conclusion of the battle of wills between Moshe and Pharaoh. After ten plagues, the destruction of Egypt, and finally, tragically, the death of his own firstborn son, Pharaoh finally exhorts Moshe to leave Egypt; he will finally let the Jewish people go.

And in this dramatic finale the Kotzker Rebbe (Rav Menachem Mendel of Kotzk) takes note of a curious detail:

As G-d visited the plague of the first-born in the middle of the night, there arose a great cry in all of Egypt, for there was no house that was not spared. (Shemot 12: 29-30) And the verse tells us that "*Pharaoh arose in the night*" (ibid v. 30) on which Rashi comments: (he arose) from his bed ("*mi'mitato*").

Think about it: Moshe has given Pharaoh warning of nine plagues, and each one has indeed come to pass. And this time Moshe tells Pharaoh (ibid. 11:5-6) every first-born will die this night, including Pharaoh's own son! And Pharaoh himself according to tradition was a first-born! And... Pharaoh goes to sleep? He is in bed? Seriously??

Says the Kotzker, there is a very deep idea here a person can become so ensconced in their beliefs that no amount of evidence to the contrary can sway them from their beliefs.

This phenomenon is similar to what happened in the plague of the hail, where, after six plagues Moshe warns Pharaoh and the people (ibid. 9:19-20) that whatever cattle are left in the fields along with anyone else, will be destroyed in the fields. After six plagues one would think everyone would immediately move everything into the barns. But incredibly, most Egyptians did not. Because to move the cattle would have been to admit that they were wrong, and that their entire lives had been built on a colossal mistake.

And we sadly see this all too often. Twenty-five years after Oslo, despite all the evidence that 'land for peace' did not work there are still significant groups of people who believe if only we would give away yet more land, we would have peace...

Even Shimon Peres, despite all his accomplishments especially as President of the State of Israel, was never able to admit that Oslo was a colossal error, because to admit that might have meant that his entire adult political career was built on a mistaken assumption; and that is a very hard thing to do.

Fascinatingly, after the hail, unlike the rest of the plagues, where Pharaoh expresses irritation, anger or even fear, here, in the plague of hail, he says to Moshe:

"I have sinned this time. God is the righteous one and I and my people are the wicked ones." (ibid. 9:28)

In a moment of clarity, Pharaoh realizes he made a mistake! G-d gave him a way out, and he should have grabbed it. He was perhaps given a chance to accept that G-d runs the world

Pharaoh actually recognizes here he has made a mistake, and he even regrets it! He is so close! All he has to do to change everything is decide to make a change and the future will be a whole new world. But he cannot make that change, and, failing to capitalize on the opportunity, once the hail has been removed, falls back into his old ways, and the rest is history.

In 1978 Dr. Robert Jastrow, director of NASA's Goddard Center for Space Studies (One of the, if not *the* greatest Astro-physicists of his day), released NASA's definitive findings on this topic after fifteen years of study declaring that the Universe was indeed open and expanding. To quote the article in the New York Times magazine:

"This is an exceedingly strange development, unexpected by all but the theologians. They have always accepted the word of the Bible: "In the Beginning G-d created Heaven and Earth..." But for the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak, and as he pulls himself over the final rock he is greeted by a band of theologians who have been sitting there for centuries..."

Pharaoh teaches us the danger of getting so stuck in the way we see things, we cannot see truth when it stares us in the face. Perhaps that is why the Jews need to leave Egypt; it's time to share with the world a different reality.

There are so many challenges we face as a world; perhaps we need to approach them from a different perspective. After all, only madmen approach the same problems with the same solutions, expecting a different outcome....

Shabbat Shalom from Jerusalem,
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