Pi Day, Stephen Hawking, and the Wonder of the Universe

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I knew more places as a kid.....

This past week, on March 14th, we celebrated Pi Day. Of course,

March 14 does not work as Pi Day in Europe since they begin their dates

with the day and then the month, but so it is....

Having Stephen Hawking, the British physicist, die on that day seems a bit of an eerie coincidence. It was also Albert Einstein's birthday, which is probably even more interesting. Hawking was also born 300 years to the day after Galileo.



I remember reading his book: A Brief

History of Time in college. I was intrigued by his relentless curiosity – his explanations of the big bang, the history of our universe, and then his understanding of black holes. Black holes, which erase all information of that which has fallen inside of them, yet radiation can actually escape from them.

His understanding of the universe having no boundaries was spellbinding – he invited us to imagine space-time as the globe of our own planet with time beginning at the North Pole. Thus, you could never ask what came before the big bang since it would be "like asking what was north of the North Pole?"

He then eliminated the need for God in his mind; he did that by explaining there was no need for God even at the inception of the universe.

Just as nothing strange happens at the North Pole on Earth, the laws of physics would still work just at the moment time begins.

Now, we could challenge him as to why space-time exists at all, but the overwhelming feeling from reading his books is exactly the opposite.

Reading his descriptions of the enormity, the complexity and the majesty of our world, I could not help but feel God's presence throughout his words.

A BRIEF

At the end of *A Brief History of Time*, he claims that if we can discover a unified theory of physics, then we could all "take part in the discussion of why it is that we and the universe exist.

If we find the answer to that it would be the ultimate triumph of human reason – for then we would know the mind of God."

How cool would that be!

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Now, our tradition does not make any bold claims about the unified theories, but it does offer us something else – a path to live a life of meaning, a moral and ethical life.

It offers us ideas about why we exist and maybe even more importantly, what is our purpose.

Now, while I do not know what Hawking would have thought about this Shabbat, given his love of big ideas and hype, he might have appreciated this Shabbat with its three Torah scrolls, along with a fourth scroll, our *Sefer Haftarot*.



This is an event that only occurs in our tradition every two or three years – a Jewish solar eclipse of sorts.

So, what lined up this morning?

We began a new book of the Torah – Sefer VaYikra, the Book of Leviticus and we also read the reading for Rosh <u>H</u>odesh, the beginning of the month, when the new moon appears in the sky.

Of course, we experience it as the absence of the moon – the darkest moment, but like the Big Bang, the most full of potential light. It represents new beginnings, creation itself.

And finally, today is *Shabbat Ha<u>H</u>odesh* – the Shabbat of the original new month – the month of *Nisan*, the month of the Exodus, the month our people were born, the month of spring (Hopefully! Recent weather forecasts may be pointing back to winter!)

So we read a special *maftir* portion from the 12th chapter of Exodus that narrates the laws of *Pesah* which frighteningly for those of us who can get pretty immersed in it, begins two week from last night – yikes!

But all three of these together: quite a trifecta of moments!

The key one to me is the *maftir*. The Torah states: "*Hahodesh hazeh lakhem rosh hodashim* – this month shall be the beginning of the months" (Ex.12:2) and proceeds to explain the elaborate rituals that are to take place during this month, notably *Pesah*, Passover.

Thus, we learn that celebrating *Rosh <u>H</u>odesh* is the first commandment given to the Jewish people.

Rashi famously quotes his father who asked: why didn't the Torah simply begin here with this *maftir* portion, with this, the first commandment given to the Jewish people?

There are different answers, but I find the most compelling is that there is a greater story than just the Jewish people. Our story is bound up in the narrative of all humanity, which in turn is enveloped in the fabric of all of space-time.

The Torah begins its arc with Genesis since it wants us to appreciate the grandeur of creation. But it does not leave us to simply dangle as our eyes ponder the wonder of the stars and galaxies. It roots us in the sanctification of time.

The first commandment given to the Jewish people is to appreciate the phenomenon of nature, the new moon, and then create something sacred within it: sacred time.

Time may be only one of the dimensions of the universe, but its meaning for us as people is in how we utilize it, how we appreciate it, and how we sanctify it.

That has been at the core of Judaism. Whether it is Shabbat, *Rosh <u>H</u>odesh*, *Shabbat Ha<u>h</u>odesh*, or today, all three – the key is that we are creating holiness in time, as Heschel taught.

We do not merely marvel at the motion of a molecule, but we hold onto the wonder to elevate our



relationships with ourselves, with others, with a sense of justice and with our tradition. We understand where we stand in this miraculous universe by appreciating our history, which propels us and all humanity, hopefully, to a better tomorrow.

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All of this brings me back to Stephen Hawking. While I do not like everything about him – <a href="his embrace of the BDS movement and his complicated relationship with Israel">his embrace of the BDS movement and his complicated relationship with Israel</a> for starters, I neglected to mention one of the most salient facts about him.

At the age of 26, he was diagnosed with Lou

Gehrig's Disease which slowly paralyzed him over the

course of five decades. Now, most people with ALS

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only live for a few years, but like the black holes he studied, Hawking was a bit of a singularity.

But what most impresses me were not all of his scientific achievements, but how he lived his life to the fullest, despite his disability. He relished life and never stopped being curious.

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In a couple of weeks at
the Passover *seder*, we will do
lots of strange things from
hiding a broken piece of *matzah* to eating bitter herbs.
All of which are to get us (and



our children) to ask why, to ask questions.

The greatest learning comes from questions. Judaism has been built on asking questions.

Stephen Hawking's insatiable curiosity never stopped him from asking more and more questions which led him to new understandings – his brief understanding of time.

Our tradition asks us to appreciate and celebrate time and to always ask more questions.

May both science and our Torah lead us to deepen our appreciation of this miraculous world.