## Vayera 5774 Higgs Boson Appears

Shabbat Shalom!

Since our recent trip to Israel fell at a difficult time on the calendar - the first full two weeks of work and school after a month of Jewish holidays - I decided I needed to be able to work in Israel.

Luckily, we had WIFI.

Sharon and I could work and send email, and our kids could access their homework, which increasingly relies on an internet connection.

On our second-to-last day in Israel, Talya and I realized that we each had work to do, and so we stayed in the apartment while Sharon and the boys went out to a park.

As I sat down to write, an update flashed on my phone "God found."

God found?!?

I blinked a few times, figuring that my eyes were deceiving me or that the holy air of Jerusalem somehow inserted God into my phone.

I looked again: "God Particle Found so Higgs and Englert are Awarded the Nobel Prize."

The God Particle?

What is that?

Should I get one for the shul?

Maybe I could still buy one in Jerusalem...

Actually, it turns out that the God Particle is the nickname; the real name is the Higgs Boson Particle.

What is it? you might ask.

"According to this theory, there is an invisible ocean of energy suffusing space that is responsible for the mass and diversity of the particles in the universe."

(See <u>http://www.nytimes.com/2013/10/09/science/englert-and-higgs-win-nobel-physics-prize.html</u> and <u>http://www.nytimes.com/interactive/2013/10/08/science/the-higgs-boson.html? r=0#/?g=true</u>)

First proposed almost fifty years ago, this theory sent physicists on a search for this elusive particle that was given the popular name: the "God particle."

What is the significance of this particle?

"Without the Higgs field, many elementary particles, like electrons, would be massless and would zip around at the speed of light. There would be no atoms and no us."

"For scientists, the discovery of the Higgs (as physicists call it) affirmed the view of a cosmos ruled by laws of almost diamond-like elegance and simplicity, but in which everything interesting - like us - is a result of lapses or flaws in that elegance."

This Higgs field, made up of numerous Higgs Boson particles, has been described as a "cosmic field of molasses." As particles pass through it, they acquire mass.

For years before I learned of Higgs Boson, I used the similar metaphor of neutrinos for God.

They are another subatomic particle discovered a number of years ago.

As you sit here, billions of them just went through you.

Did you feel them?

Probably not. They cannot be sensed directly - they can be detected only by their impact on other particles.

Well similarly, the Divine is hard to sense.

But, sometimes, when we open our eyes, when we concentrate, we can see something new and become aware of God's presence and God's impact on the world.

While physicists did not like the popular name "God particle" for the Higgs Boson, it actually makes sense. God is like the molasses that can stick to us, influencing us, hopefully, to become better - or, in this metaphor, sweeter. (Although molasses, I guess, is not actually that sweet.)

Our parashah also has powerful insights into God and sensing God.

It opens with the words "*Vayeira eilav Adonai* - and God appeared to him, literally "was seen to him," to Abraham by the terebinths of Mamre (the trees in the area of *Hevron*).

Our *Etz <u>Hayim Humash</u>* points out that this encounter with God is different - it is not accompanied by a formal act of worship or building an altar.

This makes sense - while sometimes we feel God's presence in a more formal setting, sometimes it occurs in nature - among the trees.

Some commentators point out that while Abraham encountered God previously in more formal ways, at this point in his life Abraham had cultivated the ability to sense God in less structured settings.

This is logical - becoming aware of the Divine is not easy - it takes practice and discipline to see what is beyond simple sight and sensation. To break out of seeing something in one way is hard and it takes work.

In our tradition, we are asked to have a regular spiritual practice, to pray each day with a structure - the liturgy (our traditional prayers passed down for thousands of years), to don *tallit* and *tefillin* on weekdays, spiritual aids that highlight and focus our experience.

But that daily discipline is not the end, but the means. Once we practice each day, we can occasionally - perhaps not every day - have a true encounter with God's presence.

Like the violinist who practices the basics every day, we use the tradition to have a spiritual "workout" that creates the space, the opportunity for an ever deeper experience.

At times, the violinist will experience a musical creation that is richer and more transformative. Similarly, the prayer practitioner can at times ascend to a higher spiritual plane, experiencing God more intimately.

Apparently, the work of finding the Higgs Boson particle was similar. It involved regular, constant discipline; in this case, it was smashing atoms together over and over again. In fact, "it took 10,000 scientists who built the Large Hadron Collider years as they sifted through 2,000 trillion sub-atomic fireballs for a few dozen traces of the precious godlike particle."

Now, that takes patience and discipline on an unbelievable scale.

The Book of Jubilees, an ancient *midrash*, describes Abraham staring at the stars.

The ancients believed that by studying the stars, one could determine the amount of rain in the coming year, since they believed the stars were gods that controlled human destiny.

But Abraham looks and looks and sees past the actual stars and what he was taught about their connection to the rain.

Breaking out of the way of looking at the world in his time, Abraham was able to look at the world through new eyes. Looking up, he sees something new, sensing something he was not taught.

He becomes aware of God's presence, that there is one God that created the universe and continues to sustain the universe. While Abraham was taught that the stars were gods, he now realizes that is not the case.

This *midrash*, this commentary, is firmly rooted in the text.

Three times in this *parashah*, in this Torah reading, we find this phrase: "*Vayisa* einav va'yar - and Abraham lifted his eyes and saw."

First, the phrase appears when he sees the three visitors to whom he offers hospitality.

It then appears twice at the end of the *parashah* within the narrative of the Binding of Isaac and once when Abraham sees the place where God has sent him and Isaac. That place is Mount Moriah which, according to tradition, becomes the site of the *Beit Hamikdash* - the Holy Temple in Jerusalem.

Finally, Abraham becomes aware that he should not sacrifice his son, and he sees the animal to offer in Isaac's stead.

The Midrash explains that Abraham and Isaac were able to see something that Abraham's servants, who traveled with them until that point, did not. That is why they stay behind and do not proceed with Abraham and Isaac to Mount Moriah.

The key word is *Hamakom* - Abraham lifted his eyes and saw *Hamakom* - the place. But, in the tradition, the word *Hamakom*, the place, refers to the One who is in every place: the Omnipresent, the One Force that is everywhere.

Abraham lifts his eyes and sees/senses God.

Let's think for a moment about this action. Abraham lifts his eyes and sees. Let's try it. Lift your eyes, lift your head and look.

What do you notice?

A change in perspective. A pause. A new vantage point. Seeing something you didn't before.

I don't know about you, but when I look up, when I lift my head up, air comes in through my nose and that breath is a relaxing, meditative-type breath. Feel it fill your nostrils; lift your head, raising your chest.

Try it.

As Abraham approaches this most stressful moment in his life at the Binding of Isaac, he looks up and sees. He pauses and breathes and he is comforted.

This allows him to change his perspective, filling his soul with God's calming, reassuring Presence. Perhaps he becomes aware that somehow, Isaac will survive.

Perhaps we should try this. When we are feeling stressed, afraid, anxious, we should lift our eyes to the heavens, lifting our head, breathing in and then seeing.

It may bring a measure of relaxation, it may bring a new vantage point, a new perspective, it may bring us into God's presence.

It may take us out of an older way of seeing, allowing us to see something new.

Let's reexamine the text – each of these three moments, when Abraham lifts his eyes and sees, leads to something. To a moment of blessing.

First, the three visitors tell Sarah that she will have a child. Second, Abraham arrives at the mountain where he is commanded to serve God. And, finally, Abraham sees the ram he is to offer, which teaches him that he is not supposed to sacrifice his son. This opens his eyes to the true moral behavior that God's Presence teaches him.

That is how we sense God - we need to pause, to lift our eyes, to see, to really see and then we can sense what has always been there, the blessings that are all around us.

Our tradition teaches us that God has always been there, but we cannot always sense the Omni-present - the One who is always there for us.

It's kind of like the Higgs Boson field - that cosmic molasses we find ourselves in. We cannot really see it, but sometimes, we can sense its impact on our lives. It allows us to shift our understanding, creating something new.

Abraham created a new understanding about God and the universe - a major breakthrough.

Similar to the Nobel Prize winners who looked up and saw the universe in a new way, Abraham looked at the world differently.

That ability to look up and see, to truly see, allows us to see anew - that leads to discoveries in science, theology, thought, and in all realms.

Whether it's the Higgs Boson particle and the cosmic molasses that we inhabit or whether it is sensing God in the world, truly seeing and seeing anew are accomplished by looking up and then seeing.

Let us all be privileged to follow in Abraham's footsteps: looking up and seeing and then being blessed to see the Divine and the new insights that it produces, and let us say Amen.

Shabbat Shalom.