A MATZAH MACHINE MOMENT
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A video link to this sermon as delivered is available here

The year was 1859 and a great crisis rippled through the Jewish communities of the world.

It wasn't a pogrom, although there probably were more than one that year somewhere.

It wasn't the rise of Reform Judaism that had already happened 40 years earlier in Germany.

Nor was it the formation of political Zionism, Theodore Hertzl and the World Zionist Congress, those were still 40 years in the future.

The great crisis that befell the Jewish people was… the invention of the Automatic Matzah Making Machine.

This is a true story, it really happened:

In 1859, matzah, which for thousands of years had been carefully and reverently made by human hands following the precise dictates of Jewish law, could now be made with the touch of a button and the turn of a hand crank. This new, previously unimaginable way of making this sacred staple of Jewish Passover observance promised huge savings of time and money.

Town after town, shtetl after shtetl purchased these machines revolutionizing one of the most basic and ancient Jewish practices.

Of course the moment was not without controversy.

The arguments for and against the Automatic Matzah Making Machine of 1859 were many, but all will sound familiar to anyone following the debate currently raging over the good and evil of Artificial Intelligence.

A *g'shrei* could be heard from *shtetl* and tenement like a shofar blast.

Some objected just because it was new technology, ""OY!, I don't need this newfangled thing" they said.

Another was economic, "GEVALT! People are losing their jobs to the Matzah Making Machine. Those that can least afford it, the poorest among us that have no other skills."

Dr. David Zvi Kalman who studied this moment of “Matzah Machine *Mishagas*”, and will be a visiting scholar with our congregation this year writes that, beyond economics [and general rejection of something new], there was concern that the machines just weren’t as reliable as people. The rules around matzah-making in Jewish law are intricate, complex and sacred.

“What if bits of dough got trapped in the gears, quietly leavening for hours and ruining whole batches of matzah in the process? What if the trays warmed the dough too fast? Without proper oversight, how could you trust your own food?”

Perhaps the most emotional argument was a human one, the loss of agency, of a literal human touch in sifting, sprinkling, kneading and baking the ritual bread. Machine Made Matzah was matzah without a *Neshamah*, matzah without a soul.

PAUSE

Of course Jewish food has a soul, the hands that make it are connected to the heart that holds the hopes, dreams and prayers of every generation that came before and G-d willing will come long after you. Homemade Jewish food, matzo ball soup, brisket, challah. Those lovingly prepared family recipes are *l'dor v’dor* on a plate.

The Rabbis and maybe a few bubbies of 1859, came to the same conclusion - and they declared to the whole Jewish world, “matzah made with a machine was no better than a loaf of bread on Passover.”

But the Jewish world was not of one mind on the issue, have we ever been?

That very same year, another group of rabbis and maybe a few tired and arthritic bubbies, “argued that machine matzah was perfectly fine — and possibly even better than the human product.” The person who invented the Matzah Making Machine had a soul and that they reasoned was good enough, stop *kvetching* and pass the *charoset*.

To matzah machine or not to matzah machine? In 1859 that was the question. We know the answer, despite all the arguments about the personal touch, the physical connection to this holy and sacred food, no one makes it by hand anymore, we haven't for more than 150 years. We buy it at the store, it comes in a box, labeled ‘Streits” or “Manischewitz” and sometimes if we are truly blessed we can get it on sale. Matzah Machines rule the world!

(sing) Mah nishtanah halailah hazeh, Why is this night different from all other nights?

It isn’t, we are at the same inflection point when it comes to Artificial Intelligence as our bubbies were in 1859 only the stakes are so much higher than tasteless crumbling matzah.

To be clear a lot of good can come from machine learning. AI can automate repetitive tasks in the workplace. Doctors are reviewing patients’ health records and devising medication regimens

more quickly. Farmers are dabbling with programs that read soil samples and predict how best to cultivate crops.

But on the flip side, too much automation can leave plenty of humans out of work. Generated photos and videos can spread lies and stoke division. And teachers are worried academic cheating will replace real learning. Oh, and that pesky little question about how it might bring about the end of the world.

There is a moment in the Oppenheimer movie, a debate when the physicists realize that what was once theoretical is now probable. And so they ask, “should we?”

Should we proceed to invent the Atom Bomb and later the Hydrogen Bomb? Many brilliant minds argue against inventing them, because while splitting the atom could be a source of boundless energy, it will undoubtedly be used as a weapon of mass destruction. Of course others argue that its force will be so destructive that it could end not only WWII, eliminating the need for a more deadly invasion of Japan, but the fire storm it unleashes would have such a chilling effect it could end all war forever.

A hammer can build a house or it can bludgeon a human head, we don’t outlaw hammers in Judaism - we set rules and articulate values on how it should be used.

The answer from the film and from history is that we cannot, “uninvent things”, hammers will always lead to better hammers. Bombs will lead to bigger bombs. So therefore we have to set ethical rules so that we use new technologies in ways that further human flourishing, not destroy it.

Inventions aren’t inherently bad. Neither is Artificial Intelligence. Judaism is not opposed to new inventions or technologies, Judaism worries about how they will be used.

The questions Judaism asks when new technologies, be they Matzah Machines, hammers or AIs are invented are what will be lost and what will be gained?

(sing) Mah Nishtanah…We must ask the same questions.

Artificial Intelligence will reshape the way we think, it will fundamentally, perhaps irrevocably change the very nature of human existence and activity and it will do so at a speed faster than we ourselves will be able to think about.

Rabbi Danny Schiff in his book Judaism in a Digital Age writes, “The world around us is changing at breakneck speed. We are hurtling toward the future at a velocity sufficient to ensure that the challenges of tomorrow arrive before we have adequately addressed yesterday’s issues.”

This moment, like the Matzah Machine Crisis of 1859 raises so many questions.

- *(sing) Mah Nishtanah…* If, as recently reported, AI radiology is 20% more accurate than human radiologists we could be diagnosed without ever seeing a human doctor. Is that good or bad? What is lost? What is gained?
- *(sing) Mah Nishtanah…* If driverless cars, trucks and planes can remove driver error, reducing the number of fatalities on the road or in the air, should we do away with human drivers and pilots, and with them their jobs?
- *(sing) Mah Nishtanah…* If artificial intelligence, trained on a lifetime of watching and listening to your data from Facebook likes to Netflix choices, knows you better than your therapist, your rabbi, your spouse, whose advice should you trust more?
- *(sing) Mah Nishtanah…* If AI can give parking and speeding tickets, adjudicate simple legal disputes, even determine if you qualify for a loan or college admission, let alone call balls & strikes, goal or no goal, should we hand those generally objective tasks over to a computer?

And consider this, if AI guided technology could prolong life indefinitely so that we never die, should we allow it to do so? And what is the meaning of life if it has no end?

These are big questions with huge, generational, life altering implications.

Who will answer them? Who will decide how AI will be used and as importantly how it will not be used?

The late Rabbi Jonathan Sacks astutely observed that, “never before have humans been faced with more choices, but never before have the great society-shaping institutions offered less guidance on why we should choose this way rather than that.”

If Judaism and Torah cannot speak with wisdom and moral clarity to this moment, then why listen to it anymore?

The core mission of the Jewish people has always been to critically appraise societal directions and through the wisdom of our tradition be an *or l’goyim* a light unto the nations that guides along this precarious path of human existence.

Rabbi Schiff explains, “If Judaism is to have relevance going forward, it will need to emphasize the historic Jewish task of evaluating contemporary civilization critically and offering a Jewish vision for how to live Jewishly alongside it.”

To at once be a part of and apart from this rapidly changing world.

Former Israeli President Shimon Peres’ (z’l) once observed that, “The greatest contribution of the Jewish people to the world is dissatisfaction. We are eternally dissatisfied, never happy with the way the world is but care about how it should be.”

When the world saw human beings as slaves and chattel to be exploited day and night, Judaism responded with the sabbath and the six day work week. A day of rest did not exist till Judaism commanded it and our rabbis insisted on it.

When humanity found pleasure and nourishment in animal products, Judaism responded with the laws of kashrut, setting limits and bounds for what is proper to eat and how to eat it. Not everything that we can do, should we do.

When G-d commanded *v'shinantam l'vanecha*, "and you shall teach your children" the rabbis of the Talmud, more than 2,000 years ago, set up public schools and required every parent to enroll their children by age six. They added that students should not be beaten with a stick or cane, that older students should help younger ones, and that children should not be kept from their lessons by other duties.

All contrarian and radical ideas. Judaism said then as we must say now, "Wait, consider the implication of these practices, there is a better way."

Perhaps the best example of the contrarian, or prophetic voice of Judaism through the ages comes from the portion of Torah we read this morning, the Akedah, the near human sacrifice of Abraham's son Issac.

Had Abraham consulted an AI as he stood upon the top of Mt. Moriah, his son bound to wood, a knife raised in his hand the AI of his day which like the AI of today would have contained all available knowledge on the subject at the time.

Had Abraham said, "Hey Siri?" Instead of "Hineni". That pre-Torah AI would have answered, "sacrifice your son." Why? Because that's what everyone was doing back then, that was the prevailing way of practice amongst the pagans and idol worshipers that Abraham lived amongst. AI is a large language model, it only knows what is already known.

But Abraham said "NO!". It was Abraham's humanity, his "human intelligence" that held back the knife. He was contrarian, he didn't follow the program or the algorithm. His humanity was a feature, not a bug in the system.

Do you remember what Abraham was called when we are first introduced to him in the Torah? He is known in the tradition as "*Ha ivri*," which comes from the word, "*eyver*," which means 'side.' The Midrash asks, "Why was he called, '*Ha ivri*?' "Because all the world was on one side, and he was willing to take his stand on the other side. That was the test, that was what God was counting on, Abraham the non-conformist and so G-d gave Abraham and us, his descendants, a Torah and not an algorithm.

Our humanity is a feature not a bug, like with Matzah Machines, when you remove humans from the equation you may lose too much.

Will our ethical responses emerge from sacred texts, from the power of reason, or will they simply be fashioned around the practical realities of what is possible, profitable, popular and currently not illegal?

Will the most important decisions of life and society be decided by mortal humans or immortal algorithms?

The Jewish response and responsibility, and here I want to say particularly of Reform Judaism, is to think about these things as they happen and when possible before they happen so that we can live alongside new technologies while not being absorbed by them, and losing our humanity in the process.

From its 'revolutionary' perspective Reform Judaism has recognized that we live in an ever changing world amongst an ever growing and diverse peoples and cultures. New technologies will always come, the response of Reform Judaism is to challenge us to find the right balance between tradition and modernity. To look to our tradition of wisdom, scholarship, reason and debate to find the right way to live morally, ethically, responsibly as a Jew, as a human being in THIS world right now; with all of its challenges, distractions and enticements to the contrary.

Judaism is often slow on purpose. The result has been that Judaism often responds too slowly and we are behind the curve. We need to think of developing ethical ideas at the same pace as those inventing the next Matzah Machine. Who gets to decide these matters? Those who can react at the right speed.

So I invite you to join me throughout the year as we study and grapple with these questions here at Temple Sholom in what I'm audaciously calling the **Temple Sholom Human Intelligence Project**. Sign up for a session with Dr Kalman who I quoted earlier, host a self led conversation in your living room. Read a suggested book and join with the author in a zoom session. And if you're a member who is working in a field impacted by AI or a scholar studying its development please reach out to me so we can explore how to further our learning as a congregation and navigate these issues.

Judaism needs to break type. It's ok to look behind to gain perspective, but the moment, the speed of technological and scientific advancement, now requires that we also look ahead.

Perhaps none other than the Great One Himself, no not Adonai, but the other Great One, Wayne Gretzky said it most succinctly, "Skate to where the puck is going, not where it has been."

This is the way the world is going, if Jewish values and the Jewish people don't get out ahead of it we'll be run over by the AI version of a Matzah Making Machine: a driverless Zamboni.