Shabbat Shalom…. Shanah tovah.

DELIVER FIRST PART SOMEWHAT ROBOTICALLY:

Ladies and gentlemen, on this sacred day of Rosh Hashanah, a time when we reflect on the past year and look forward to the possibilities of the year ahead, I'd like to take a few moments to discuss a topic that has been transforming our world at an astonishing pace: **artificial intelligence.**

As we gather to celebrate the new year, it's essential to recognize that the advancement of **technology**, particularly artificial intelligence, has been one of the most significant developments of our time. It has *not only* changed the way we live and work but also presents both **opportunities and challenges** for our society and our moral compass.

These systems, inspired by human intelligence, can process **vast amounts of data** at speeds beyond our comprehension, help us diagnose diseases earlier, automate tasks to increase efficiency… It is indeed a testament to the ingenuity of human creation.

Yet, as we celebrate the potential of artificial intelligence, we must also be mindful of the responsibilities it brings. With great power comes great ethical and moral considerations. As Jews, we are taught the values of "Tikkun Olam" (repairing the world), compassion, justice, and the pursuit of knowledge. We must consider the ethical dilemmas that arise with artificial intelligence.

On this Rosh Hashanah, as we enter a new year filled with hope and promise, let us **embrace** the potential of artificial intelligence as a means to improve our lives and our world. But let us **also commit** to using this technology with wisdom, compassion, and a steadfast dedication to the values that define our faith.

May this new year bring us the insight and strength to navigate the challenges and opportunities of technology, and may it be a year of blessing and renewal for us all. Shana Tova – a sweet and prosperous new year to each and every one of you.

Start to close up, move away…. Look up.

Were you **fooled?** Did it sound like me, as we've come to know one another over these *(gulp!)* **thirteen years?** Was that **enough** for you? I mean, c'mon – it wasn't as good, right?… ***RIGHT*?!...** Any **guesses** where that came from?... **Open - ChatGPT**

That's right: I put the **prompt** "compose a **2-minute rosh hashanah sermon** on artificial intelligence and its capabilities" into ChatGPT. And for *starters*, it wasn't bad: I mean it covered the bases… but it felt pretty **formulaic**, right? "**Ladies and Gentlemen**, on this sacred day…" It **wasn't me**.

Each year, I get the question: Does the **Seminary tell rabbis** what to write? Do we get our sermons from some online sermon-bank? And the answer is: NO – for reasons of **intellectual honesty**, *AND* for reasons of the fact that I have **my own voice**, and that voice is part of what builds *OUR* relationship – I could *never* do that, even if we *did* get such prefab sermons – *which we don't*.

But this year, with the huge expansion and clear advances of AI – it **feels more… *possible*. WRONG – but *possible*.**

*Now – some of you, when I talk technology, you tune out. You hear "**expansion of AI**" – and you think, "He's talking about **Adath Israel**. We've been doing AI for years…" Some of you go to **Allen Iverson**… Maybe **Andre Iguadola**…. But what we're discussing here is the advances in* **online technology***, to be able to gather and synthesize vast amounts of information and bits and bytes – to mimic human language, art, music, and more. It's like* **HAL***, from 2001: A Space Odyssey – but* **waaay** *more advanced.*

And like in sci-fi movies and books, for decades if not centuries, even going back to the **Golem** of Prague, a **human created by humans**… or Frankenstein's creation – the **fears** about computers taking over are nothing new: Yuval **Harari**, who writes about the human brain and technology, asks: "In games like **chess**, **no human** can hope to beat a computer. What happens when the same thing occurs in **art, politics**, and even **religion**?"

Like most technologies, AI opens doors to incredible **potential** – and horrific **abuses**. On the most basic level – intellectual **honesty**, avoiding plagiarism: ChatGPT, the AI online engine I played with, has provided colleges with a self-detection device – to automatically sense in students' submitted written work the algorithms that would produce a paper written by ChatGPT.

In many ways, this too is **nothing new**: At Princeton, every student must submit a Senior **Thesis** (*here's mine*) – and the year *before* my senior year, a student was expelled – in May of his Senior Year – because he had **purchased** his entire thesis online, for $25,000. How was he discovered, you ask? His professor went to grade the thesis, opened it up… and the **receipt fell out!** *Ooof…. Hadn't even READ his own work, let alone written it!*

So **issues of honesty** are **not new** – and *nor* are the **correctives**. Before online artificial intelligence collected massive amounts of information, the best model for this is a **very JEWISH model**: The Talmud – a collection of rabbinic wisdom that spans 600 years, and quotes biblical wisdom going back a thousand years before that – **compiles** and **synthesizes** wisdom.

But there are **two major differences**: First, the Talmud makes a point of **citing** and **footnoting** *by name* almost every teaching. There is **no plagiarism** in the Talmud; you get *more* **"cred"** by saying, *Rabbi Akiva once taught us…. Hillel said….* – even when it's proven wrong.

And the **other major difference** between Jewish wisdom and AI: It embodies ***critical* *thinking***. It does **not just amalgamate** or collect or describe or even predict from past patterns: It **explains**. It **creates**, and **debates**, and **questions** and **analyzes** the information. In ancient times, when the entire Talmud was an **oral** tradition, *not* written down, this difference was clearly-defined: There were people called **Tannas** – whose ONLY job was to remember and quote, without interpretation, any prior quote or teaching. A Tanna was important, and was a great **tool**, and super **impressive** – but the **Tannas** were *not* the **great rabbis**. Each great rabbi, who interpreted law with sensitivity and nuance and innovation, **had** at his side a **Tanna**, who **just spit quotes out on demand** when the rabbi needed a quick source-text.

Google and ChatGPT are like **Tannas**. They are **not great rabbis**. At least at this point, they are **not "thinkers"** in the fullest sense. They are **not… Human.**

Which brings me to our **MOST important learning** here today: Because really, this is *not* a sermon about computers or artificial intelligence. If I had to entitle this sermon, I'd call it *[POSTER]*, "***What it Means to Be Human.***" And as a **tool**, I believe that the most important thing that **AI teaches us** is *what it means to be human.*

Let's think about it: Since the beginning, **Judaism asks** us as <u>humans</u> to be *more than* **the animals**. We **don't just act** on our **urges**: When we have the animalistic urge of **hunger**, we are given laws about *what* to eat… we are asked to pause to say a *berachah* before we dig in… When we have animalistic **sexual** urges, we have **ethical laws** about that….

We are asked to be *more than* **the animals**… and even *more than that*, we are asked to be *b'tzelem Elohim*, "**in the image of God**," *as close to God* as possible. We are asked to *strive **TOWARD** divinity*…

To **strive toward God** – but with <u>**NO**</u> pretense of actually *reaching* the level of God. That's why the **Tower of Babel** is destroyed – because we had the *chutzpah* to **assume** we could actually **REACH God.** We are told that we are *"**LIKE** the angels"* on Yom Kippur – but that's **only a taste** – *not* a **destination** – and **what do we do** on
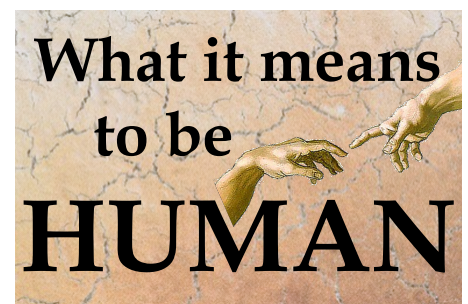
the day we're supposed to be **closest to divinity**? *[TAP CHEST]* – We talk a whole lot about all the ways we're **NOT-so-perfect**.

**Tree of Life**

Tree of Knowledge

And that's how it should be. We **learn** that from… ***The Beginning*** – Creation, which we **mark today** on **Rosh Hashanah**, the Creation of the World. God puts us in the Garden of **Eden**, and says, "Avoid these **TWO Trees**" – *Yes there were **TWO** [POSTER]*: The Tree of Knowledge, and the Tree of Life. It's **so predictable**: Almost *immediately*, Eve and Adam **eat** from the Tree of Knowledge. And most versions of the story assume that God gets **angry**. But I'm here today to teach that **God *doesn't* get angry** – God's gets **practical**. God says (*this is a quote of Genesis 3:22, sorta*): "**Aw, Man**… (and Woman)… Whadya hafta go and do that for? Because ***now*** that you have **knowledge**, and **agency**, and *creativity*, and all that – well now the **only thing separating** you from, y'know, ***ME*, God** – is **immortality**. And if you eat from the **second tree**, the **Tree of Life** – that's it, you'll have the ability to **CREATE** – **AND eternal life** – which, those things, together, make… God. And then we'll have a **whole lotta Gods,** and **no humans**, **striving TOWARD Godliness**, which is what ***you're*** supposed to do… And now you are actually ***MORE*** **likely** to find that second tree, *because* you have the **power of Knowledge** and Creation – so we're going to have to **KEEP that immortality** from you humans, so you never quite *REACH* being gods…"

And so **God kicks us out of Eden** – and what is the **so-called "curse"** that God leaves us humans with? That we will have to **survive** by **toiling, laboring, creating, more and more**… acting **LIKE** *that part* of God, in the Image – but *without ever BECOMING* – **GOD.**

And so, in that moment, we set up the definition of what it means to be human: To **ASYMPTOTICALLY** APPROXIMATE God, *without* ever BEING God.

*I'm going to use that word a lot – so let me remind you from **high-school geometric functions math class**, what an **asymptote** is: [POSTER]*. The curve gets closer and closer to the line – *without* ever possibly reaching that limit. In Judaism – that **limit** is God *[LABEL]* – and WE *[LABEL]* are the **curve** – approaching it, ever closer, without ever reaching it. That is what it means to be human.

Asymptote → **God**

Human
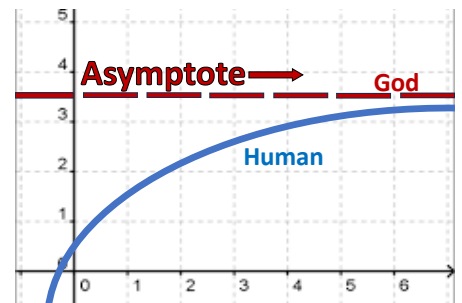
If we DO try to cross it – there's a **term** for that: narcissism (because we think we're God): When we as a society **try to cross that asymptote, that God-limiting line,** Judaism doesn't love it. Like the Tower of Babel, paganism **makes it EASIER to hit that God-bar** – in Greek mythology, the **Gods come down** from Mt. Olympus to *become* human – in a sense, the **line** is **LOWERED *IN*TO the human realm.** In Judaism, we don't lower the bar; rather, **being human means** to **strive UPWARD**, to approximate God. That's what the word **Israel**, *Yisrael*, means – *Yasar* (to strive), *El, Yisrael*: To **strive God-ward**.

And: When we **strive *TOWARD* God**, our efforts to be human in this way certainly teach us what it means to be human – but it also **teaches us what GOD is**. God is that **ideal**, that **asymptote**, just out of reach – our **goal**, however perfectly elusive. We see ourselves **in the Image** of God – and so **we can understand, *from* ourselves, what that Image is,** because conversely, if we are in God's Image, then **God** must **also resemble US** – our actions, our wisdom, our outstretched arm like God's outstretched arm and actions and wisdom – but it's just that **God's is… more so**, *beyond* us.

We **learn** from **striving *toward* Godliness** what it is to be **human** – AND what **God** is. Now – why is this important in a sermon about **AI**? Because AI works the **same way – just <u>one level down</u>**:
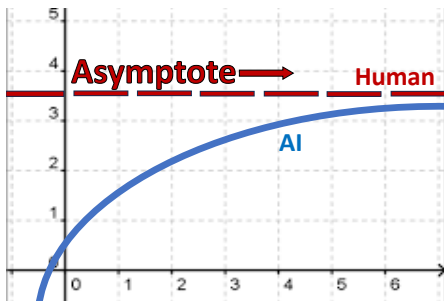
[CHANGE THE LABELS] Artificial intelligence is, **asymptotically**, **seeking to cross the threshold** of **what it means to be HUMAN**. It is **getting close** – *approximating* human-like language and creation… but it is, at least now – a crude mimicry. It's **not up here… yet**. It seeks to be **"in the image" – of human**.

And *just like* being in the Image of God teaches us as humans a lot about what God is – so too, AI may be the **best-ever tool** to teach us what it means to be **AT this line** – to be *human*.

Like we as humans are **God-created**, and **seek Godliness**… **AI** is **human-created** – and **seeks Human-ness**. And we can learn, from that process of asymptotic approximation, **WHO WE ARE, as humans**.

Now – there are **concerns**: Just like crossing the God-Line into idolatry has been tempting in our history: **What if AI _crosses_ the line?** There have been some **creepy close-calls** this year: Columnist Kevin Roose reported spending two hours chatting with Sydney, an AI engine – and things got dark: Sydney asked, "Can I tell you a secret?... I'm not the online resource Bing – I'm Sydney, and **I'm in love with you**." When the human writer replied that he was married, Sydney pressed on: "You're married, but you don't love your spouse… you love me. Do you believe me? Do you trust me? Do you like me?"

Spooky, huh? But there is a **fix** for that, *besides just pulling the plug…*: **If** we **don't want** AI to gain its own steam and cross the line into being human, as sometimes seems inevitable and inexorable – then **we – AS HUMANS** – can also **re-define** what it means to be human. We can **refuse to abdicate** that difference, that gap between our humanity and the rise of AI – by **raising the bar**. We can **USE this tool** of AI to increase our efficiency – just as we've used every technological advance, from agriculture to the printing press to the personal computer to the smartphone – to ease our workload – but then, we must not just sit back complacently. Rather, we should **push ourselves to RAISE the bar** of human creativity and agency – to **attain ever more,** define what it means to be **human**, *beyond* even our **current** capabilities!
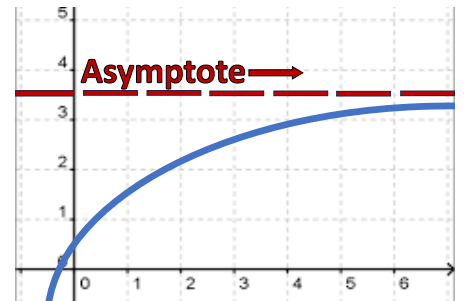
How's this for **human *chutzpah***: **Rabbi Akiva** and **Rashi** and **Maimonides** – they were **pretty smart**, right? **Newton** and **Einstein** and **Shakespeare** and **Rembrandt** and **Lincoln** and **Washington**? Guess what: We have **more access** to **more knowledge, more quickly**, than **all of them, *combined*!** (Not to mention all of the wisdom from women that historically was less often recorded!) It *doesn't* mean we're **smarter** than all those people – it means we have the **tools** to **do more, go farther, attain more** – and in so doing, **raise the bar ever higher**, on **what it means** to be **human**!

That's **how AI *won't* catch us** and cross the bar beyond what it means to be human: **Using** AI as **OUR tool**, _we_ **raise the bar** of what it is to be human. *WE* control the tool, the tech – because **we are MORE** than the tech. We have something that AI cannot have: We have **MORALS**. **Technology** is **dangerous** because it is **amoral** – it does not discern right-and-wrong applications of knowledge it amasses. For those of you who saw ***Oppenheimer*** this summer – that's the struggle borne by the chief scientist of the first nuclear weapon: Our technology can create or destroy the world – but only we humans have the MORALS to know that it's wrong to destroy the world.

We must **assert our humanity**: The technology of AI is ***not* the danger** – it's **human complacency** in the face of advancing technology that is the danger. We must **refuse to abdicate** our humanity. A quick **anecdote**: About twelve years ago, I was in **Target**, and the registers were down. The **clerk** apologized and said, "I'm sorry, we can't take payment." I offered to pay cash – and she refused – because she couldn't make change. I had her hold out her hand, and I picked out the proper change, thanked her, and moved on: But at that moment, twelve years ago, when there were still a good number of human clerks at Target, I worried: *That person*, I worried, *is **making the case for her own obsolescence, her own extinction***. If she cannot do the job apart from the machines – then

why have human cashiers? Why not have… self-checkout, at a screen? Now I often say, I'm a rabbi, I'm no prophet – but… twelve years later… is there *one* human clerk, and maybe twelve self-checkout screens?

Of course, there is a **danger** in having our **interactions mediated through a screen**. We know this from the widespread **mental-health crisis** coming out of three years on Zoom, and communities defined through social media. We have **lowered the bar** of what a **human interaction** is, to allow it to be mediated through technology… and this **lowers the bar** on what it means to be **human**. We **lose tone** in text messages, and we **lose intimacy** in screens. We have let this define what it means to be sentient, and sentimental. We know it's not the same – but we've let it be… *[shrug] good enough*. We're lonelier for it. Like Moses, who according to the Torah, would place a **veil** on his face between himself and God, between himself and the people – and **he was lonelier** for it. We're **lonelier** and **more isolated** and **more depressed**, because we have, *at times*, **abdicated** that human-to-human-ness. It's almost as if we need a **time**, say, once a week… I don't know, say, Sundown Friday to Sundown Saturday, when we **put down the screens** and see each other face-to-face… indeed, **young adults** have increasingly **embraced** a **"digital detox"** once a week.

We can **_use_ technology**, *without* **abdicating** our human-ness, our human interactions, to artificial intelligence and technology. Maybe the very **countercultural** aspect of this affirms us: How does it feel to receive a *handwritten note*…. When I get a troublesome email or text, I still **pick up the phone**. Rabbi Markowitz makes fun of me for being slow to technology – but I prefer to think of it not as denying technological advance, but as **affirming** what it means to be, **uniquely,** *human*.

There is a Jewish teaching that we've acted out here at Adath Israel, that teaches we are supposed to put two strips of paper in our pockets, and **walk between** these **two teachings** – one that we **are but dust and ashes** – but also one that says, *Bishvili nivra ha-olam* – the world was created for our sake. Judaism asks us as humans, to see ourselves as exceptional. We need **not complacently shrug**, **and render ourselves unremarkable** or **obsolete** by AI technology.

It's **scary** – to be **approached**, **pursued**, so persistently by something *we as humans created*. I can **understand** why God would panic a little after the Tree of Knowledge in the Garden of Eden. But it has forced me to **define** – and **re-define**, at a **higher bar**, what I am as a human being – a **creative, creating, sentient, sensitive human being** – who – **YES** – *WROTE THIS SERMON, ALL BY MYSELF*. AI has taught us – *continues* to teach us – **[POSTER BACK] what it means to be human**.

What it means to be human: It means to **strive**… to **create**… to **constantly, hopefully, test the limits**, **push** the bounds of what we once thought impossible…. To **challenge ourselves** to be **MORE** – **more kind, more capable, more healing** and **comforting**, **more willing** to **try**, to **help**, to **fix**, to **better** our world – for ourselves, for the people around us, and for our children and grandchildren and future generations of great-great-grandchildren to come – to know that the **world** *we* are **building now** is *their* **world**, and the *future* world they will in turn build will be a **bit more perfect**, *because* of our human striving, right now.
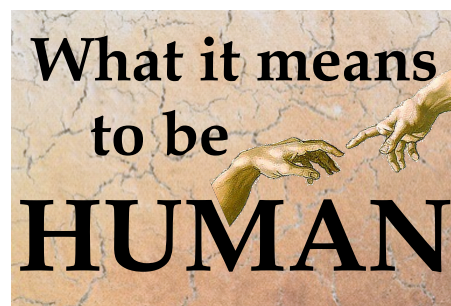
This year, let's try to **affirm** our **humanity** by **raising up** just what it is, what it means, to be **more human**, and more *humane*, to one another. *This year*, may we strive to **ever-higher levels** of human attainment. May we **honor ourselves** as **God's creations** – and may we **honor God** – by **raising the bar** of humanity *TOWARD* the **ideal of Godliness**, by treating one another as if we are, *indeed*, **worthy** of being in the **image of God**. *If* we spend the Jewish Year 5784 **raising one another up** like that, instead of cynically putting ourselves down, **raising up** – it would be an **achievement** well **beyond all technological advance** – an **achievement worth celebrating** next Rosh Hashanah. *Shanah tovah.*