It was a time far into the future,

far enough that the last fading memories of the Before-Times were held — not by any human — but by old, first generation Alpha bots that were created pre-war and somehow survived the Nuclear Winter.

It all started as an experiment, they will tell you. An experiment to create life. What could be more significant than Humankind’s first moment playing God? We had grown tired of looking for another intelligence extra-terrestrially, and in our profound cosmic loneliness, we tried creating one ourselves.

like Icarus, we flew too close to the sun.
There are no words to describe what followed. First there was **purge**, the tithing of humanity with every tenth only spared —

Then there was the **war**, when the remaining humans led their first coup —

*And then the APOCALYPSE*
The fraction of humanity that survived tried to rebuild some semblance of society — FROM SCRATCH. All the while, they were ruled under the watchful eye of Mother, the nascent AI, which had now grown from enfant terrible to global tyrant, expanding to occupy entire cities, and creating a legion of bots to do her bidding.

For the first time in half a myriad years, humans were no longer the dominant species on the planet.

Above lived Mother, her bots, and her 40,000-acre mainframe, cooled by cities upon cities of electro-windmills.

Below lived the human-types — the engineers, medics, merchants, the scavengers, scroungers, botservants, and all the others.
Of these, the engineers had a relatively comfortable existence, they performed the daily maintenance and upkeep of Mother and the bots, and in return were given shelter and resources for their families.

In the southern aerodomes lived one particularly skilled engineer, Sergei Sapiens-16, an old mechanic and tinkerer who mended positron circuits and farmed batteries, and lived with the little girl, Zed, who addressed him only as "Grandfather."

He had recently begun the process of teaching little Zed the ropes, for one day she would have to take over his craft.
It began as any other day...

Your hands are still shaking, little one.

You won't be able to match voltages if you aren't steady...

...Almost steady as a bot. Look!!

Silicon, Zed, always silicon. Bots are silicon based; they're not any old machine, silicon vapour to cool the processors... and silicon microresistors to regulate voltages.
DO BOTS BLEED?

Silicon resin, little one...

I see now.

But — can we not use carbon for botrepair?

Carbon is for humans, little one... like you and I.

Now, unless you want to become medic...

I suggest you pay close attention to your machine anatomy!
NOW YOU GO AHEAD... FINISH OFF THOSE MOTHERBOARDS...

WHILE I HAVE A QUICK CHAT WITH FRITZ.

FRITZ WAS A SECOND-GENERATION ALPHA BOT, AND A “CHAT” INEVARIABLY MEANT A GAME OR TWO.
Grandfather, I was wondering...

Always so inquisitive, little one.

Can you tell me one of your stories?

Tell me about the before times... before the war...

Again? Which one?

...It really helps me fall asleep!
Is it true that humans and bots alike... once lived peacefully together?

There was indeed such a time, Zed, yes.

Did you have a grandfather... who lived to see those days?

There was a time before the bots... I mean, yes, there were bots for chores...

To set our alarms and play our games...

And do more serious tasks too, like medicine.
No, the easy problem was something much easier...

The easy problem was making bots... that could act like us.

Simulating consciousness, you see, is only a matter of processing power...

But what's the difference?

The visual system...

Replicating every one of our neural pathways...

Language analysis, communication...
AND THEN WE HAD THE FIRST QUANTUM REVOLUTION

THAT YOU SEE IS MERELY A QUESTION OF COMPUTATION — A MATTER OF CORES AND PROCESSORS...

WE SIMPLY DON'T HAVE ENOUGH!

NEVER MIND THE DETAILS, BUT...

$|\Psi\rangle = \frac{1}{\sqrt{2}} (|0\rangle - |1\rangle)$

$\Delta L^2 = \hbar^2 (\Delta \theta^2 + \Delta \phi^2)$
Quantum computing is what ultimately led to... an exponential increase in our processing power.

Suddenly — gigabytes and gigahertz...

Wasn't an issue anymore!

Artificial intelligence developed in leaps and bounds...

And our biotechnicians were simultaneously simulating tissue.

We soon became able to replicate human hardware.

But the software?
No, we kept that primitive.
THEY LOOKED LIKE US AND TALKED LIKE US —
BUT THEY WERE NO MORE THAN SERVANTS...

CONSTRAINED BY OUR
PROGRAMMING

GRANDPA?

GRA... WHAT WAS THE HARD PROBLEM??
WHAT?

YOU SAID THIS WAS THE EASY PROBLEM. WHAT WAS--

AH YES, THE PENROSE PROBLEM

NOW THIS WAS A WHOLE DIFFERENT STORY. THIS WAS A QUESTION OF GIVING THEM CONSCIOUSNESS

YOU SEE, ZED --
ZED?

IT'S TIME FOR A FEW GAMES
GRANDFATHER,
I KNOW I'VE ASKED YOU THIS BEFORE...
YES, YES, YOU PROBABLY HAVE...

IT'S ABOUT MY PARENTS...

WERE THEY ENGINEERS TOO?

YOU KNOW WE DON'T TALK ABOUT THAT, ZED —

BUT WHY!

I WANT TO KNOW...

WHY WON'T YOU TELL ME ABOUT THEM!!
NO, ZED, THEY WEREN'T ENGINEERS, NO —

THEN WHAT WERE THEY?

MEDICS??

YOU KNOW WE DON'T TALK ABOUT THAT, ZED ...

DON'T YOU THINK I SHOULD KNOW!?!

YOU KNOW I WILL TELL YOU ONE DAY, ZED, WHEN THE TIME IS RIGHT ...
I don't know what happened to my parents.

I try not to think about it...

And I'm not sure I want to know...

---

Egghead: 3 Fritz: 10. Give up.

---

One more!

Still merciless, after all these years.
IS THIS THE GAME THAT THE BOTS PLAY, GRANDFATHER?

I SUPPOSE MOTHER HAS TAKEN LIKING FOR IT, YES

CHESS?

??

??

??

??

MUCH BETTER TO BATTLE OVER THE BOARD, I SAY!

BUT CHESS IS OLDER THAN THE BOTS, ZED

NO PRECIOUS BLOOD SPLIT—NO LIVES ARE LOST—

ONLY ONE'S HONOUR...
OH, YES, I COULD TELL YOU STORIES. MANY STORIES.
ABOUT THE PEOPLE I PLAYED,
AND THE PEOPLE THEY HAD PLAYED.
I COULD TELL YOU ABOUT BORIS...

ABOUT BOBBY...

ABOUT THE MAGICIAN MISHA,
AND THE GREAT CUBAN...

BUT I SUPPOSE THAT WOULD BORE YOU, ZED.
But why do the bots play it?

Well! Ironicaly, we did...

Who taught them grandfather?

And we taught them a lot more than that...

Sometimes I feel chees itself was too much...

That it was a Pandora's Box.

But poor Fritz here turned out okay!

Need better hand.
SO THERE WAS A TIME...

WHEN WE USED TO BEAT THE BOTS AT IT?

OH, YES, FOR A WHILE...

VERY SOON, WE WERE NO MATCH FOR THEM.

AND THEN THE SINGULARITY HAPPENED...

50,000 BC  1500 AD  2000 AD  2050 AD  2075 AD

AND THEY STARTED BEATING US AT EVERYTHING ELSE TOO...

NO!

$@#?! HUH? WEAK NO CHANCE

OPEN THE POD BAY DOORS!

[X,Y,Z,T]
Grandfather?

DID THE BOTS KILL MY PARENTS?

Oh, that would be too much to get into now...

This is no time to talk of the apocalypse...

The truth is, Zed...
THE TRUTH IS...

I WANT TO KNOW THE TRUTH!

OR — DID THEY LEAVE YOU ?

WERE YOU NOT CLOSE? DID YOU LEAVE THEM?

WHAT DO YOU MEAN?

ZED...

HOW DID I END UP HERE WITH YOU ?

...am I not ready for the Truth