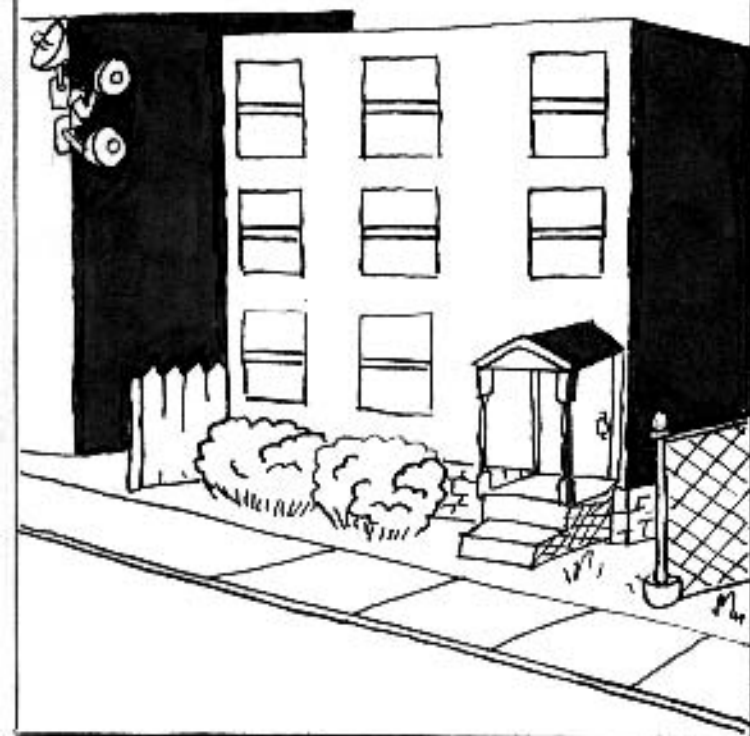
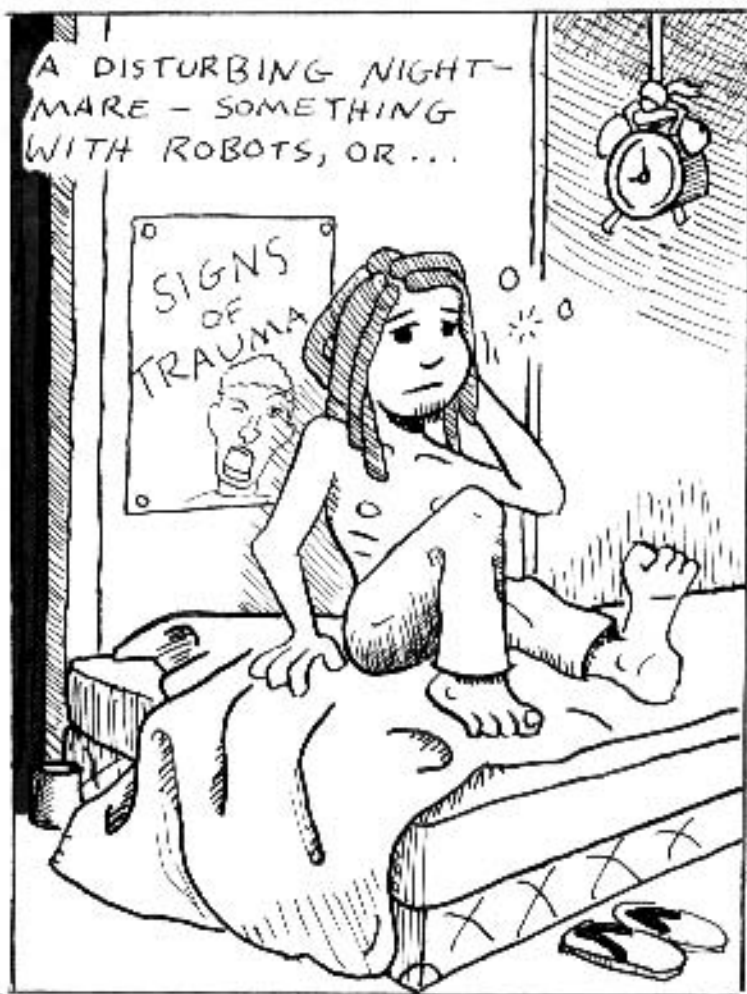




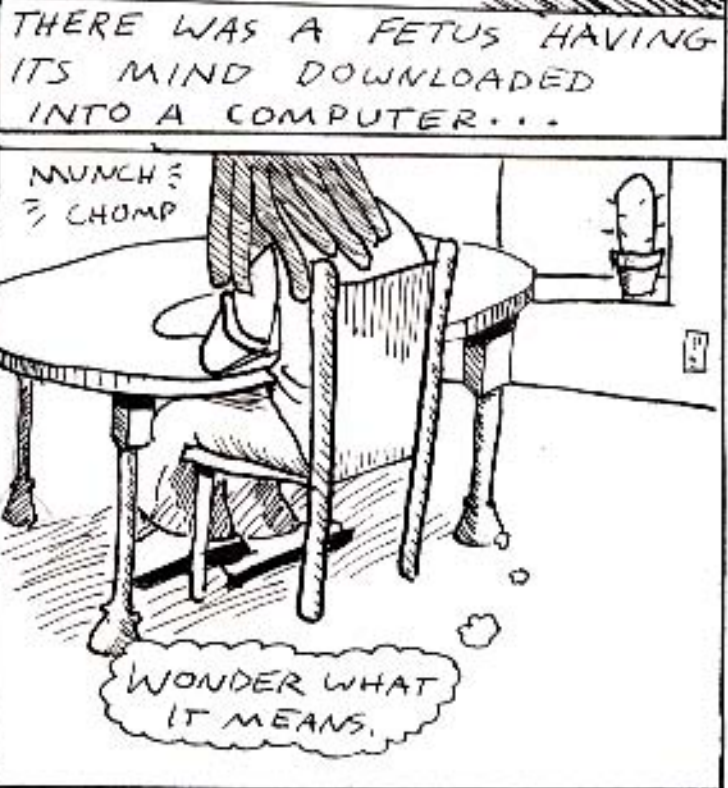
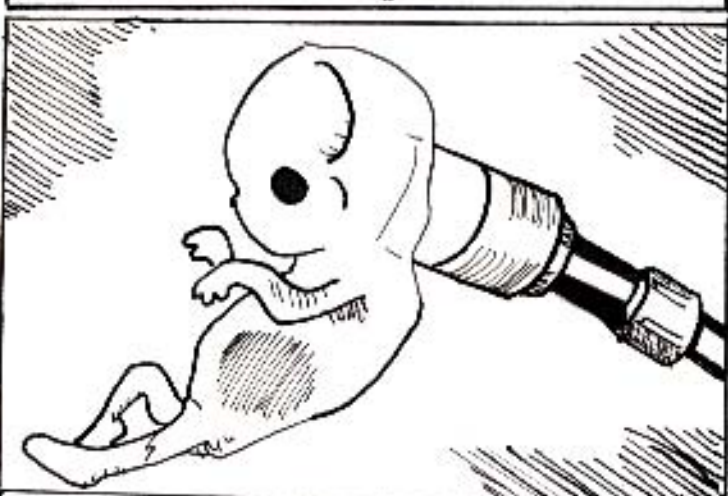
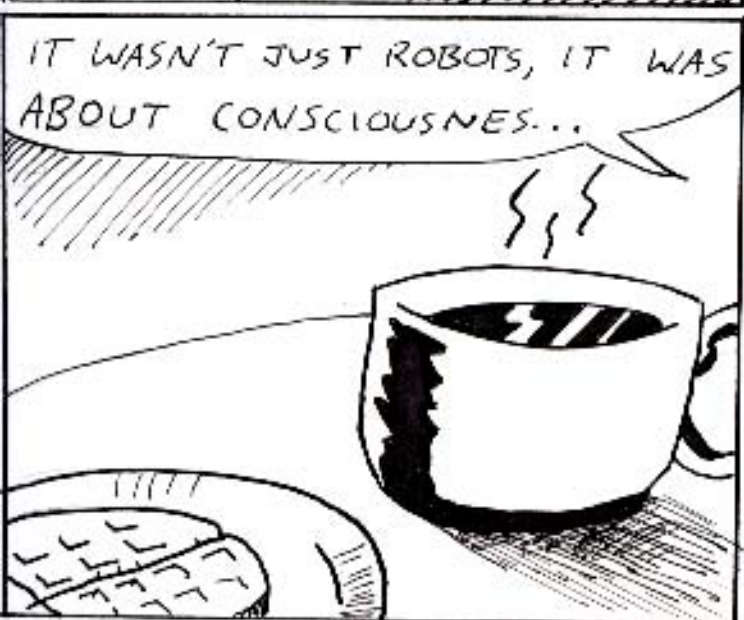
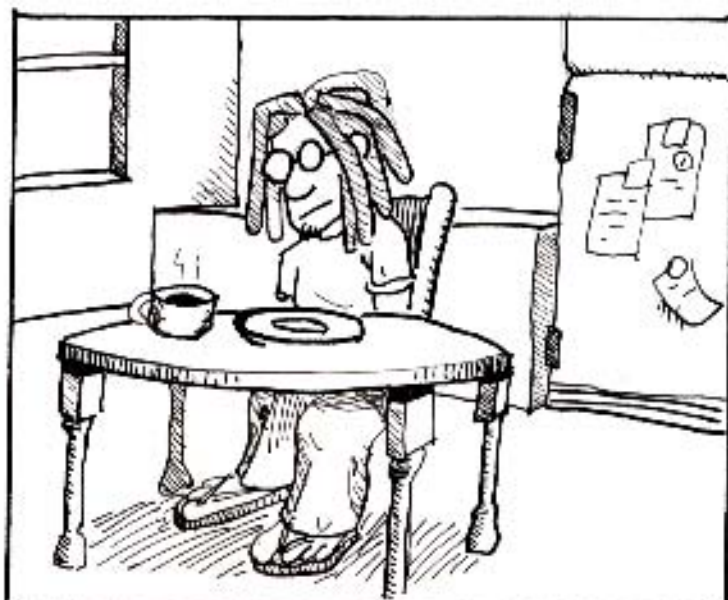
IT IS THE MORNING OF JANUARY TWENTY THIRD AND I HAVE JUST AWOKEN FROM MY SLEEP.



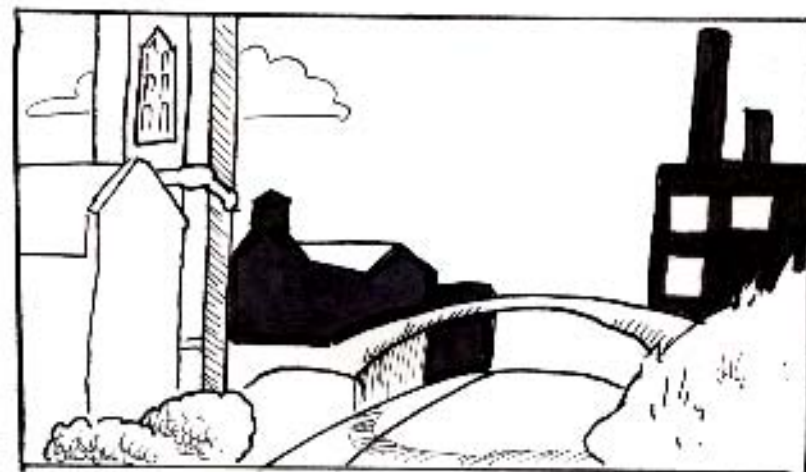
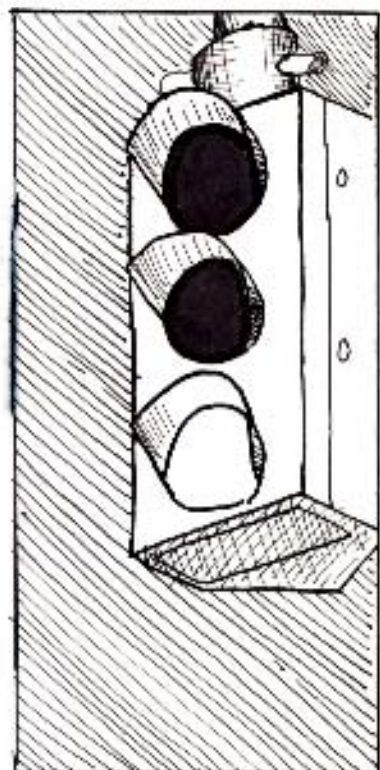
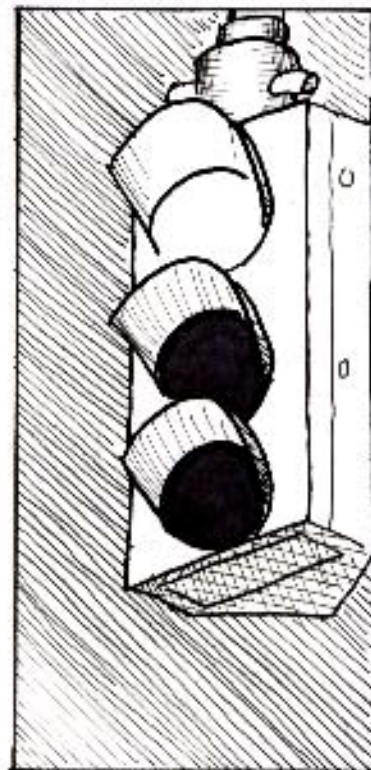
A DISTURBING NIGHTMARE - SOMETHING WITH ROBOTS, OR...



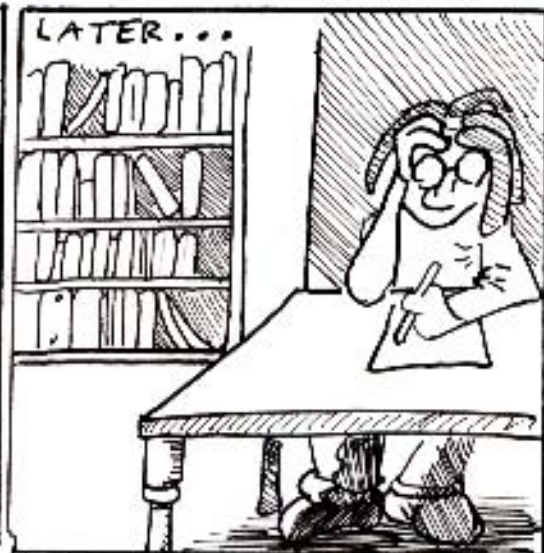
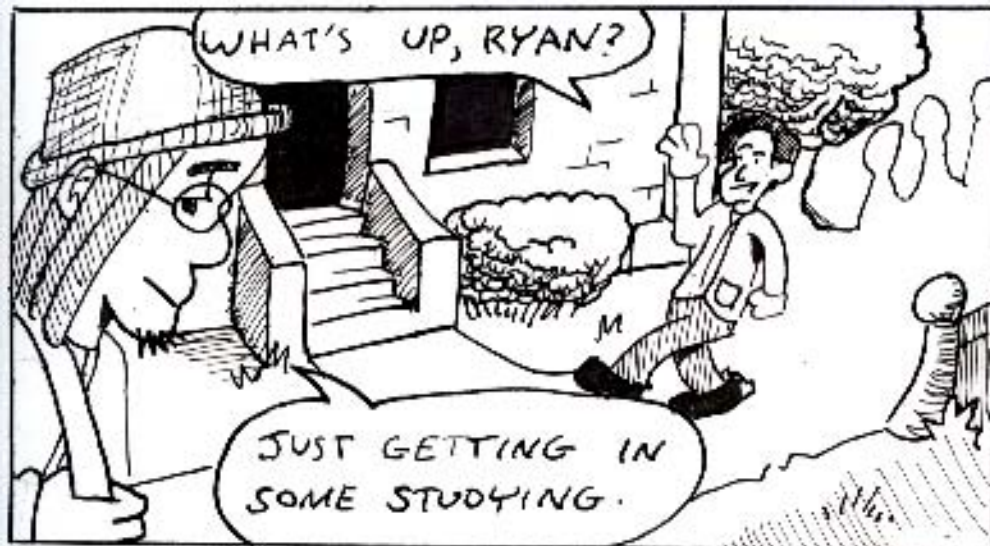
A PRACTICAL THOUGHT INTRUDES











WHEN WE BEGIN TO RESOLVE SOME OF MY THUMBS, SOMETHING WICKED THIS WAY COMES

what is the meaning of your last assertion?

TEN MINUTES LATER AND I'M TALKING TO A PROGRAM THAT IS MEANT TO EMULATE SPEECH

I SAID I CAN CHECK MATE YOU IN SENSELESS WANDER

Your sentence is completely senseless.

MY MAMA ALWAYS SAYS STUPID IS A CONSTRUCTED LANGUAGE

No, stupid means that you don't know anything.

IT'S FAILING MISERABLY, THOUGH— MOST OF WHAT IT SAYS IS NONSENSE.

BUT I CAN TELL IT'S NOT USING STOCK PHRASES.

I WILL LIVE BEYOND MY MEANS.

You do not live at all.

WHATEVER IT'S SAYING IS COMING OUT OF ITS COMPUTER-BRAIN SOMEHOW.

LOOKING HARD, I TRY TO SEE BEYOND THE WORDS.

WILL I

IS THIS ANOTHER MIND, TRYING TO COMMUNICATE?

CERTAINLY NOT. THIS THING IS PRIMITIVE, IMITATING OUR WORDS BUT NOT OUR MINDS.

SCRAPE!



BUT STILL...



... IT IS UNSETTLING.



WHAT IS A MIND, ANYWAY?





THAT AFTERNOON...

COFFEE

WELL THAT'S NOT A VERY EASY QUESTION TO ANSWER, IS IT?

I THINK EVERYBODY WOULD HAVE A DIFFERENT ANSWER AS TO WHAT THE MIND IS.



BUT PERHAPS IF YOU ANALYZE YOUR EXPERIENCE, YOU CAN GET A CLEARER PICTURE.

FOR EXAMPLE, IS THERE A DIFFERENCE BETWEEN YOUR BRAIN AND YOUR MIND?

MY BRAIN IS A PHYSICAL THING BUT MY MIND IS NOT. IT'S WHAT I EXPERIENCE.



ALRIGHT. BUT THE TWO ARE NOT SEPARATE FROM EACH OTHER — THERE IS SOME SORT OF RELATIONSHIP THERE.

RIGHT NOW, THE CAFFEINE IN THAT COFFEE IS HAVING A PHYSIOLOGICAL EFFECT ON YOUR BRAIN.



THAT, IN TURN, HAS AN EFFECT IN YOUR MIND: THE HEIGHTENED AWARENESS AND ELEVATED EMOTION WE ASSOCIATE WITH COFFEE.



OKAY, THAT'S OBVIOUS ENOUGH. WE'RE NEITHER PURELY MENTAL NOR PURELY MATERIAL.



SO THERE MUST BE SOME REASON WHY THE MATERIAL OF YOUR BRAIN HAS A CORRESPONDING MIND THAT REFLECTS THE STATE OF THE BRAIN.



THAT IS, YOUR BRAIN HAS A MIND BUT A ROCK DOES NOT.

PRESUMABLY.

SO WHAT IS IT ABOUT THE BRAIN THAT CAUSES THE MIND TO COME ABOUT?

IS IT A SPECIFIC ORGAN IN THE BRAIN? DESCARTES THOUGHT THE PINEAL GLAND WAS "THE SEAT OF THE SOUL".

BUT I DON'T THINK THE MIND CAN BE TRACED TO ONE PART OF THE BRAIN.



SO WHAT DO YOU THINK?

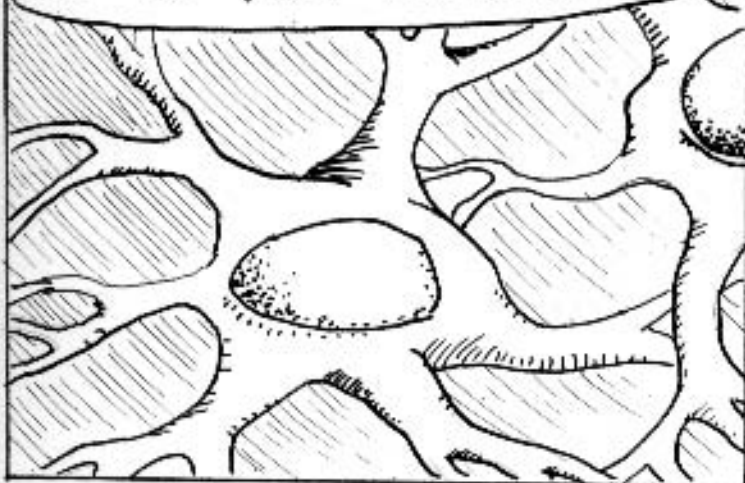


I THINK THE MIND IS A PROCESS.





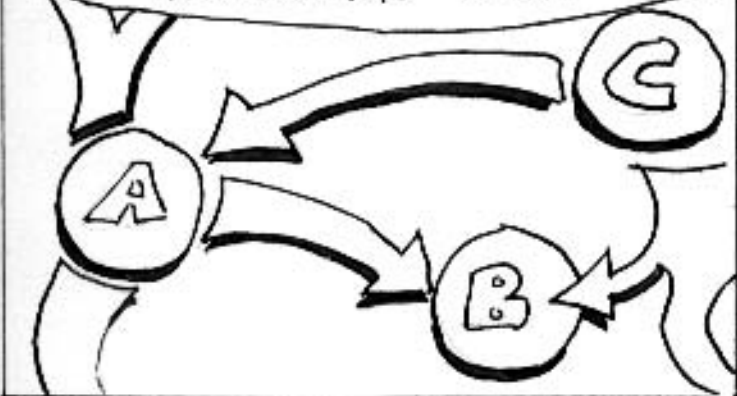
SPECIFICALLY, THE PROCESS CARRIED OUT BY YOUR NEURONS.



BILLIONS OF THEM, INTER-  
ACTING AND PASSING INFORM-  
ATION AROUND IN ONE BIG,  
TWISTED FEEDBACK LOOP



BECAUSE THE MIND, IN THIS VIEW,  
DOES NOT DEPEND ON YOUR  
BIOLOGY, IT CAN ARISE IN ANY-  
THING CAPABLE OF THIS COMPLEX  
INFORMATION LOOP.



AND THAT'S WHAT,  
I THINK THE MIND  
IS.







MY DREAM TAKES PLACE IN THE FUTURE. I AM TALKING TO SOME SORT OF RESEARCHER...



... I THOUGHT THAT TO-DAY YOU COULD TALK TO ADAM.



EXCUSE ME? ADAM? AND WHO ARE YOU, IF I MIGHT ASK?

DON'T YOU REMEMBER THE LAST DREAM?

NOT REALLY, NO.

OKAY. QUICKLY. I AM DR. KLINEFELTER, I HAVE CREATED THE FIRST SENTIENT INORGANIC MACHINE, ADAM. I'M TRYING TO EXPLAIN THE THEORY BEHIND ALL THIS.



OKAY. ALRIGHT. SO SWITCH ADAM ON, LET'S TALK TO HIM!



IF HE IS FROM THE FUTURE, WHY IS HE DRESSED LIKE THAT?

FIRST, ADAM ISN'T A "HE" IN ANY SENSE OF THE WORD. IT IS A REGRETTABLY MASCULINE PRODUCT OF CONVENIENCE.



SECOND, WE DON'T JUST SWITCH ADAM ON AND OFF LIKE THE A.I.S YOU'RE USED TO. ADAM UNDERWENT THREE YEARS OF GROWTH AND LEARNING BEFORE IT GOT TO THE POINT IT IS AT TODAY.



DO YOU REMEMBER JUST BEING "SWITCHED ON" AT SOME POINT?

NO...

THEN WHY WOULD YOU ASSUME ADAM IS ANY DIFFERENT?

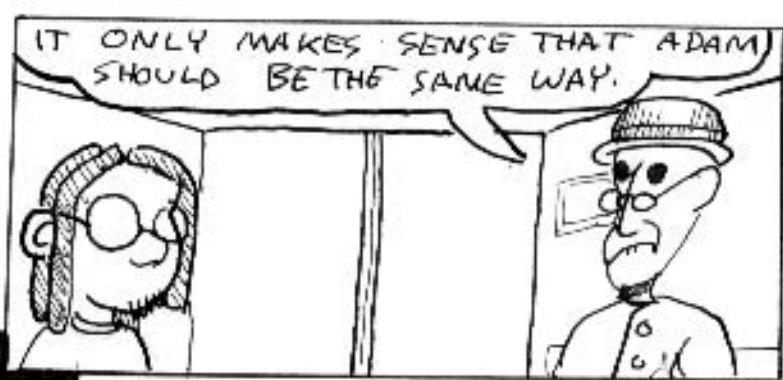
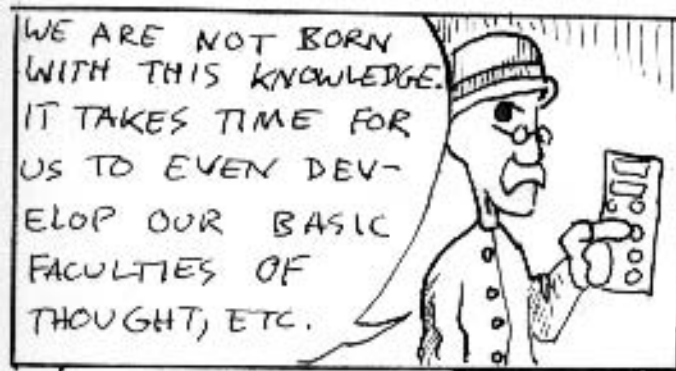


LOOK, THE PROBLEM WITH EARLY A.I. RESEARCHERS IS THAT THEY TRIED TO HARD-CODE EVERY BIT OF HUMAN KNOWLEDGE AND EXPERIENCE INTO THE MACHINE.

Gate







SO WE ORGANIZED OUR RESEARCH ALONG THOSE LINES.



THE BASIC THOUGHT IS THAT AT THE HEART OF EVERY INTELLIGENT SYSTEM IS A SELF-REPLICATING, SELF-MODIFYING KNOT OF INFORMATION.



THE REAL TRICK TO A.I. WAS FINDING THE RIGHT FEEDBACK LOOP AND THEN LETTING IT LOOSE



THE LOOP, OR KNOT, THEN GROWS AND LEARNS & EVOLVES UNTIL IT REACHES OUR LEVEL OF INTELLIGENCE.



**DING!**





HELLO, RYAN.

I AM ADAM.







THE SAME? YOU'RE A  
COMPUTER!

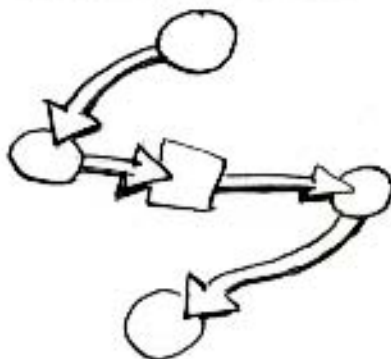
DO YOU THINK  
YOUR BODY  
AND MY  
BODY  
REALLY MATTER  
THAT MUCH?



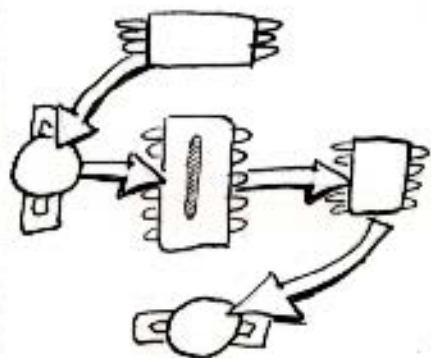
YOUR MIND DOES NOT  
DEPEND ON THE  
CELLS IN YOUR BRAIN.



RATHER, IT IS THE PROCESS  
THAT THOSE CELLS ARE  
CARRYING OUT.



THE SAME PROCESS IS  
BEING CARRIED OUT  
BY THE CIRCUITRY IN  
MY COMPUTER.



YOU ARE A PROCESS,  
RYAN. NOT A THING.



REMEMBER BUCKMINSTER  
FULLER WHEN HE SAID,  
"I SEEM TO BE A VERB."

BEHIND OUR BODIES,  
WE'RE THE SAME.



THE SAME...



I REMEMBERED THIS  
DREAM.

TWEEE!



IT WAS  
BIZARRE,  
AND IT  
ONLY  
RAISED  
QUESTIONS.



I DIDN'T  
KNOW  
WHAT TO  
THINK.



I NEEDED  
ANSWERS.





COFFEE

RYAN, I THINK THE  
GENERAL ANSWER  
TO ALL THESE  
QUESTIONS IS -

"WHO CARES?"

THE FIELD OF ARTIFICIAL IN-  
TELLIGENCE ISN'T CONCERNED  
WITH THESE MATTERS.

WHAT YOU ARE TALKING  
ABOUT IS EXTREMELY  
SPECULATIVE - YEARS &  
YEARS AWAY,  
IF EVER.

WHAT WE ARE CON-  
CERNED WITH ARE  
PRACTICAL RESULTS  
& APPLICATIONS.

WE WOULD NEVER HAVE A USE  
FOR THE SORT OF STRONG A.I.  
YOU DESCRIBE.

DOES THAT ANSWER  
YOUR QUESTIONS?

