



THE  
EUROPEAN DATA  
PROTECTION  
SUPERVISOR  
PRESENTS:

# THE CARTOON INTRODUCTION TO DIGITAL ETHICS

BY GRADY KLEIN AND  
YORAM BAUMAN, Ph.D.  
THE WORLD'S FIRST AND ONLY STAND-UP ECONOMIST

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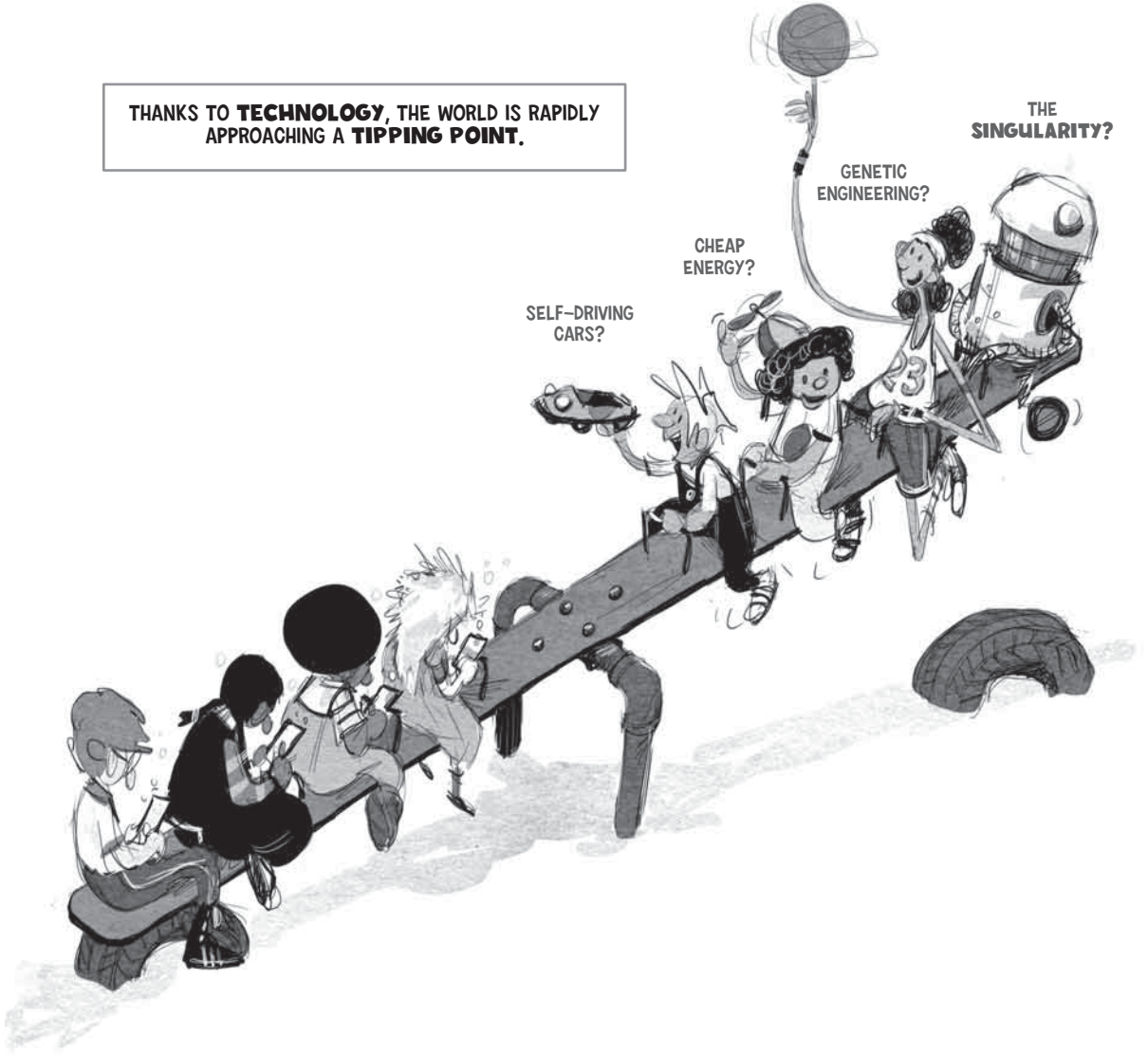


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INTRODUCTION TO  
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THANKS TO **TECHNOLOGY**, THE WORLD IS RAPIDLY APPROACHING A **TIPPING POINT**.



WE'RE APPROACHING THE POINT WHERE  
THE INTERNET KNOWS **MORE ABOUT US...**

THANKS TO BIG DATA,  
WE CAN NOT ONLY **FIND** A  
NEEDLE IN A HAYSTACK...

...WE CAN PINPOINT ITS  
**SHOPPING HABITS,  
SOCIAL NETWORK,  
HOBBIES, AND MORE.**

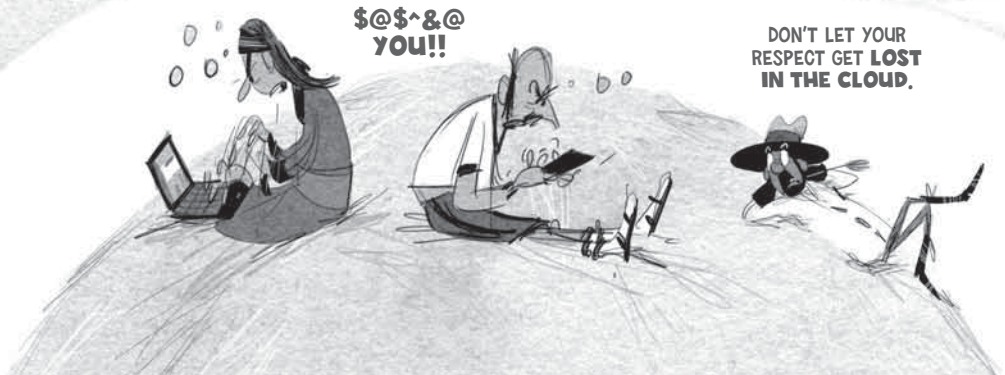
...THAN WE KNOW ABOUT **EACH OTHER.**

MY  
NEIGHBOR IS  
INTO **THAT?**

PRETTY SOON THE INTERNET MAY  
KNOW **MORE ABOUT US**  
THAN WE KNOW ABOUT  
**OURSELVES!**

I'M INTO  
**THAT?**

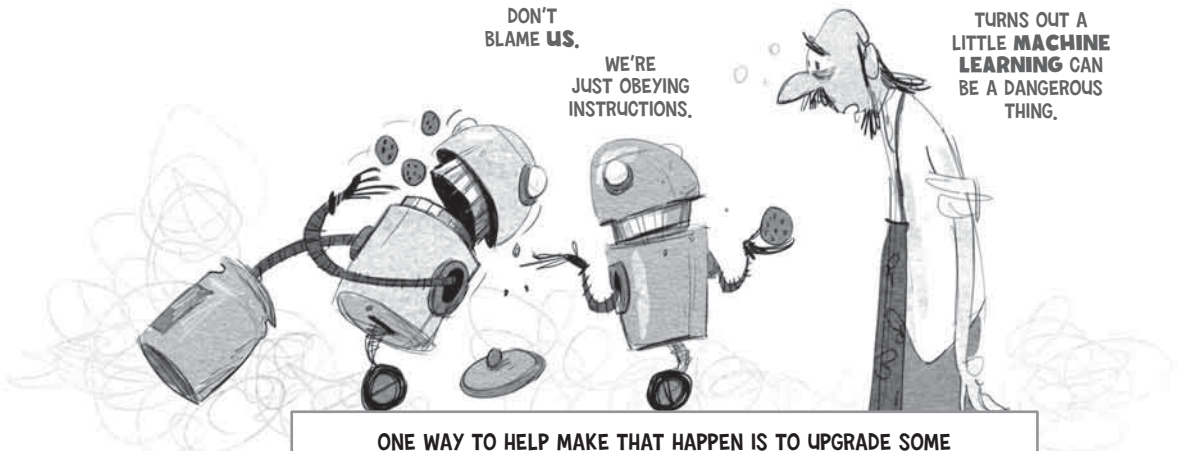
IN THIS NEW REALITY, IT WILL BE IMPORTANT TO TREAT EACH OTHER WITH **RESPECT AND DIGNITY...**



\$@!%&@  
you!!

DON'T LET YOUR  
RESPECT GET **LOST**  
IN THE **CLOUD**.

...AND OF COURSE WE WANT OUR **MACHINES** TO TREAT US WITH **RESPECT AND DIGNITY, TOO.**

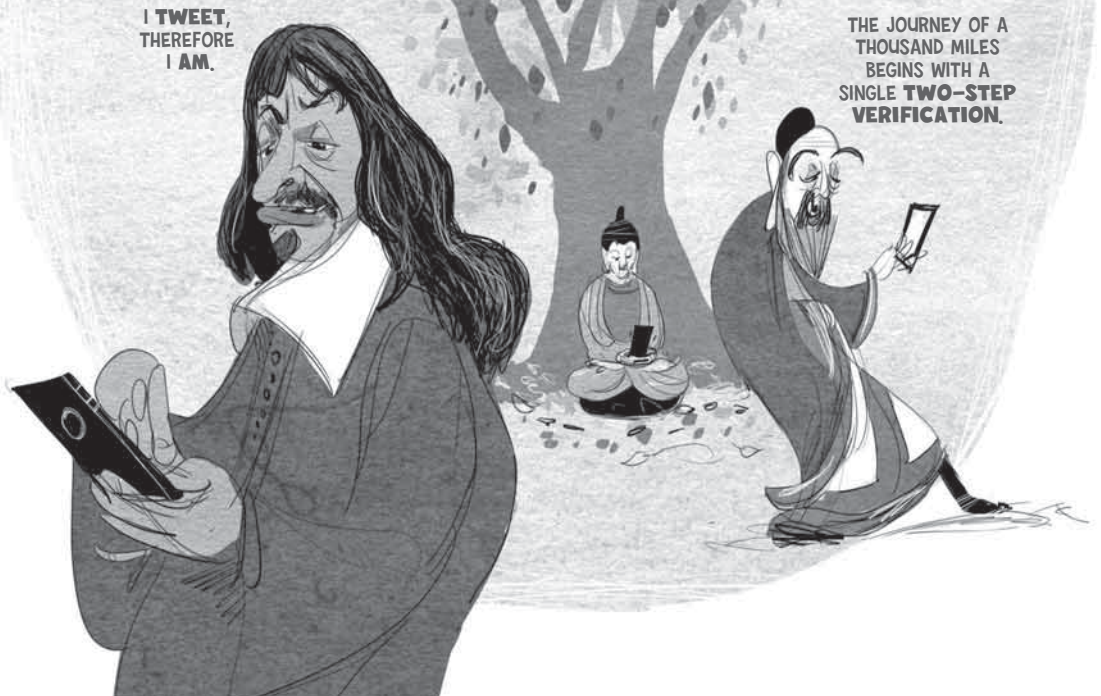


DON'T  
BLAME US.

WE'RE  
JUST OBEYING  
INSTRUCTIONS.

URNS OUT A  
LITTLE **MACHINE**  
**LEARNING** CAN  
BE A DANGEROUS  
THING.

ONE WAY TO HELP MAKE THAT HAPPEN IS TO UPGRADE SOME  
**OLD-SCHOOL THINKING FROM THE REAL WORLD.**



I **TWEET**,  
THEREFORE  
I AM.

THE JOURNEY OF A  
THOUSAND MILES  
BEGINS WITH A  
SINGLE **TWO-STEP**  
**VERIFICATION.**

IN REAL LIFE, WE HAVE **LAWS** TO HELP GUIDE OUR BEHAVIOR...

NO LITTERING,  
NO JAYWALKING,  
NO STEALING,  
NO HARASSING  
LITTLE OLD LADIES.

...AND THOSE LAWS GO HAND IN HAND WITH **ETHICS AND NORMS.**

FOLLOW THE **GOLDEN RULE:**

DO UNTO OTHERS  
AS YOU WOULD HAVE  
OTHERS DO UNTO YOU.

IN FACT, IT'S EASIER TO IMAGINE A PROSPEROUS SOCIETY WITH **ETHICS BUT NO LAWS...**

...THAN ONE WITH **LAWS BUT NO ETHICS.**

OUR TOWN IS TOO SMALL TO HAVE A SHERIFF...

...SO WE ALL **TAKE RESPONSIBILITY** AND CARE FOR EACH OTHER.

THE GOLDEN RULE IS THAT I'VE GOT THE GOLD, SO I MAKE THE RULES!

NOW THAT SO MUCH OF LIFE IS **MOVING ONLINE...**

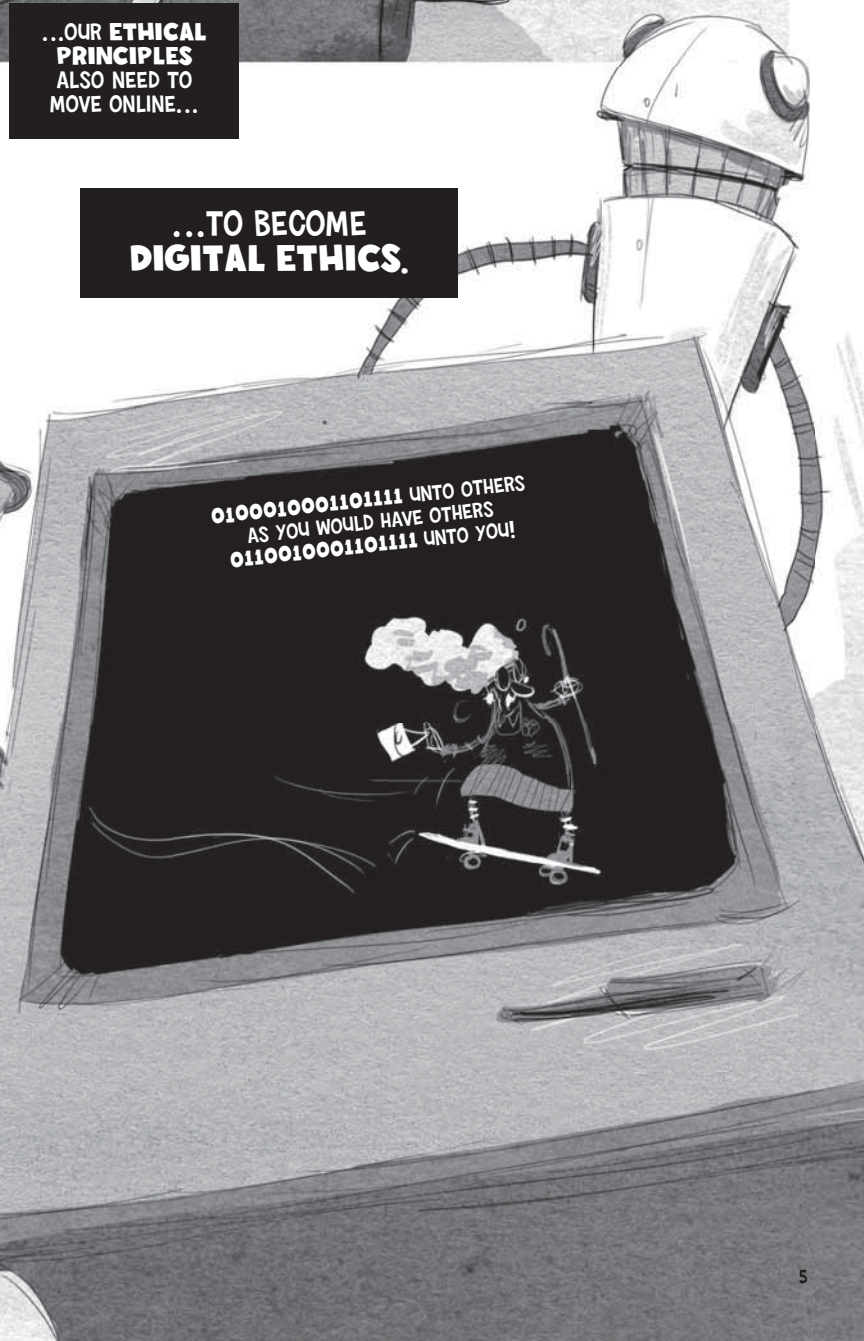
I CAN **WORK AND SHOP AND PLAY** AND NEVER LEAVE MY COUCH!

YEAH, WHO NEEDS **REAL LIFE?**

...OUR **ETHICAL PRINCIPLES** ALSO NEED TO **MOVE ONLINE...**

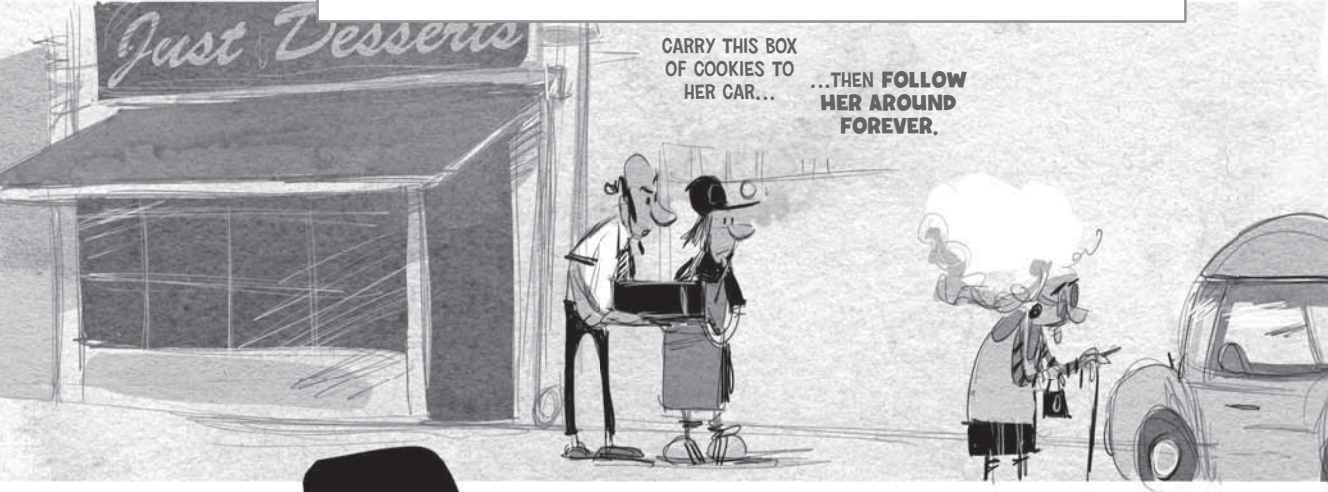
...TO BECOME **DIGITAL ETHICS.**

0100010001101111 UNTO OTHERS  
AS YOU WOULD HAVE OTHERS  
0110010001101111 UNTO YOU!





**DIGITAL ETHICS IS ESPECIALLY IMPORTANT BECAUSE THINGS THAT ARE IMPOSSIBLE IN THE PHYSICAL WORLD...**



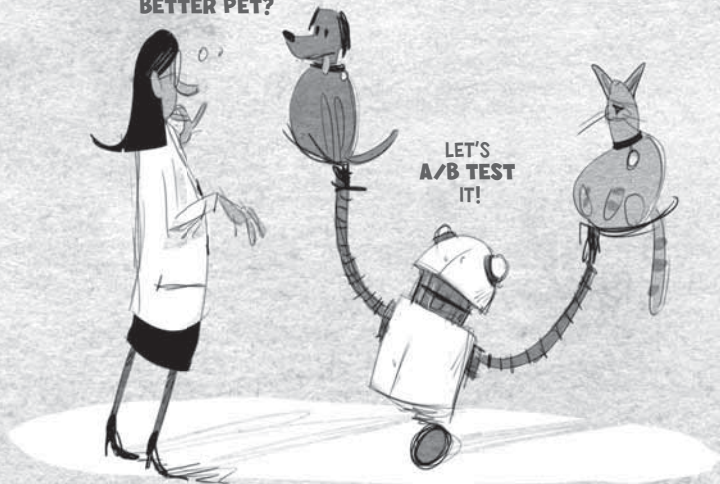
CARRY THIS BOX OF COOKIES TO HER CAR...

...THEN FOLLOW HER AROUND FOREVER.

LET'S PROVIDE EACH PERSON WITH TAILOR-MADE INFORMATION!



WHICH IS THE BETTER PET?



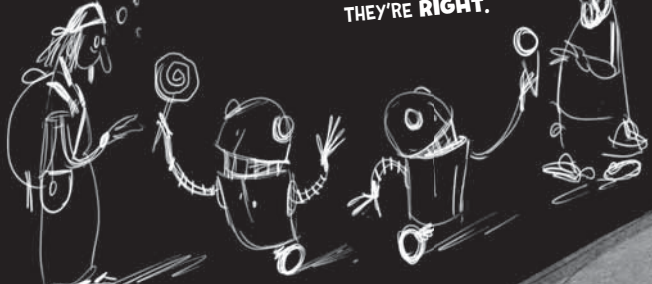
...ARE NOT ONLY  
**POSSIBLE IN THE  
DIGITAL REALM...**

WITH **COOKIES**  
WE CAN FOLLOW  
EVERYTHING SHE  
DOES!



WE CAN ADJUST THEIR  
NEWS FEEDS TO GIVE  
THEM WHAT THEY  
WANT...

...WHICH IS TO  
BE TOLD THAT  
THEY'RE **RIGHT**.

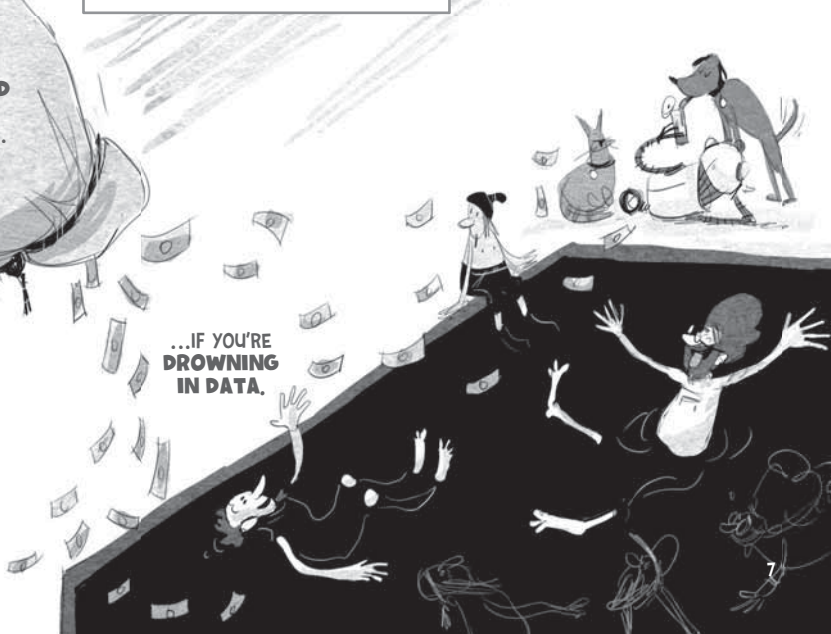


...THEY'RE **PROFITABLE**.

YOU'LL BE  
**SHOWERED  
WITH  
DOUGH...**



...IF YOU'RE  
**DROWNING  
IN DATA.**

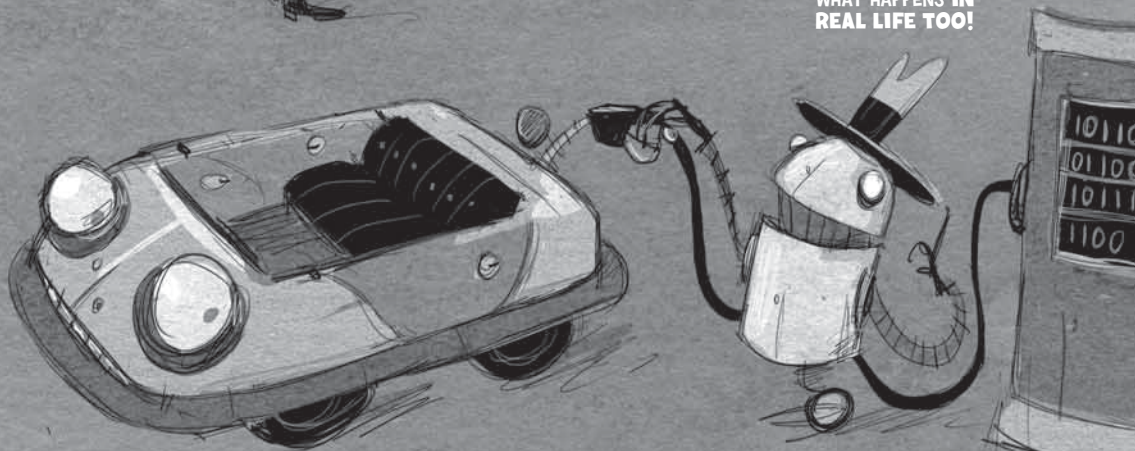


**THE BIG IDEA IN THE  
ONLINE WORLD IS THAT  
INFORMATION  
RULES.**

**IT'S THE  
NEW OIL.**

**IT POWERS  
EVERYTHING  
THAT HAPPENS  
ONLINE...**

**...AND LOTS OF  
WHAT HAPPENS IN  
REAL LIFE TOO!**



IN FACT, INFORMATION HAS BECOME  
**SO IMPORTANT** THAT COMPANIES ARE WILLING  
TO PROVIDE ALL SORTS OF SERVICES...

DATA  
STORAGE! EMAIL!

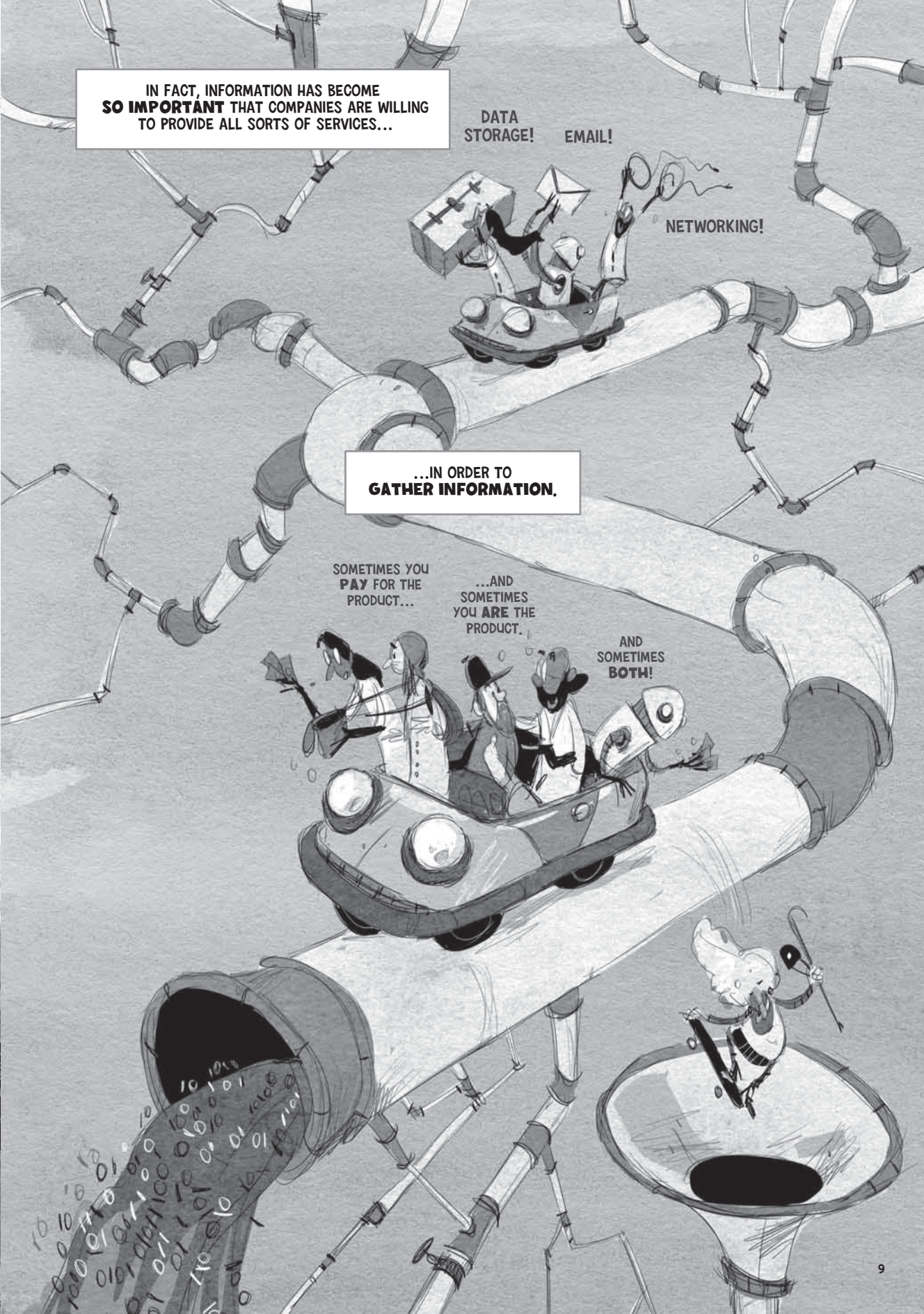
NETWORKING!

...IN ORDER TO  
**GATHER INFORMATION.**

SOMETIMES YOU  
**PAY** FOR THE  
PRODUCT...

...AND  
SOMETIMES  
YOU **ARE** THE  
PRODUCT.

AND  
SOMETIMES  
**BOTH!**



**THIS NEW ECONOMY HOLDS LOTS OF  
PROMISE FOR THE FUTURE.**

**SOCIAL CONNECTIONS:**

I CAN VIDEO  
CHAT WITH MY  
GRANDMA!

**INNOVATION:**

I CAN CONNECT WITH MY  
PATIENTS **ANYWHERE,**  
**ANYTIME...**

...AND **ARTIFICIAL  
INTELLIGENCE** HELPS  
EVALUATE DIFFERENT  
TREATMENT OPTIONS.

**COMPETITION:**

THE INTERNET ALLOWS  
ME TO SELL MY DESIGNS  
**EVERYWHERE**  
AND COMPETE WITH  
**EVERYONE.**

IT'S LIKE THE  
**WILD WEST!**



**PROBLEM-SOLVING:**

DON'T KNOW  
THE ANSWER?  
TRY **CROWD-  
SOURCING!**

DON'T HAVE  
THE MONEY?  
TRY **CROWD-  
FUNDING!**

**MORE RESPONSIVE  
GOVERNMENT:**

**FIXING POTHOLES  
IS EASY BUT FINDING  
THEM WAS HARD...**

...UNTIL **SMARTPHONE  
DATA** CAME ALONG.

I'M GOING TO CONNECT  
WITH MY LEGISLATORS  
TO SAY **THANKS!**

**BUT THERE ARE  
RISKS TOO.**

SOME OF THOSE RISKS ARE FOR **INDIVIDUALS...**

**LOSS OF PRIVACY:**

GIANT CORPORATIONS CAN ACCESS ALL MY **EMAILS?**

AND ALL MY **PHOTOS?**

AND EVERYTHING **KIDS** TELL THEIR INTERNET-CONNECTED **TOYS?**

**DISCRIMINATION:**

OUR CRIMINAL JUSTICE SYSTEM USES **ARTIFICIAL INTELLIGENCE.**

BUT IF THERE'S BIAS BUILT IN, IT BECOMES A **WEAPON OF MATH DESTRUCTION.**

**CONCENTRATION OF ECONOMIC POWER:**

SORRY, THE **WILD WEST** HAS BECOME A **WALLED GARDEN...**

...AND WE'RE THE **GATEKEEPERS.**

...AND SOME ARE FOR **SOCIETY**.

**FACTIONALISM:**

WHAT YOU'RE  
SAYING IS  
**FAKE NEWS!**

**EXTREMISM:**

IT'S FINE TO RECOMMEND  
VIDEOS ABOUT **EXTREME  
SPORTS** TO PEOPLE WHO  
LIKE **SPORTS...**

...BUT DO WE REALLY WANT  
TO DO THAT FOR **RELIGION  
OR POLITICS?**

**MORE REPRESSIVE GOVERNMENT:**

**BIG BROTHER IS  
WATCHING...**

...AND  
**LISTENING.**






THE CHALLENGE WE FACE...

AS INDIVIDUALS...  
...AS BUSINESSES...  
...AS A CIVILIZATION.

...IS TO MAXIMIZE THE **UPSIDE**...



IT'S LIKE AN  
EXTENSION OF  
MY BRAIN.

...WHILE MINIMIZING THE **DOWNSIDE**.



IT'S LIKE A  
PARASITE IN  
MY BRAIN.



ONE IMPORTANT STEP IS  
TO **CREATE GOOD  
LAWS...**

THE INFORMATION  
SUPERHIGHWAY  
MUST FEATURE  
**PRIVACY BY  
DEFAULT...**

...AND **PRIVACY  
BY DESIGN.**

...AND **FOLLOW THEM.**

I CAN SMELL  
THE DATA ON  
YOUR BREATH...

...PLEASE **STEP AWAY FROM  
YOUR CUSTOMERS** AND KEEP  
YOUR APPS WHERE I CAN SEE THEM.

Proportionality

Consent

Purpose



**BUT LAWS  
AREN'T  
ENOUGH.**

AN ONLINE SOCIETY  
WITH LAWS BUT  
NO ETHICS...

...WILL BE ALL ABOUT  
MOVING FAST AND  
BREAKING THINGS...

...UNTIL  
EVERYTHING  
IS BROKEN.

WE CAN'T PULL  
EVERYBODY  
OVER.



**WE ALSO NEED  
DIGITAL ETHICS.**

ETHICS ON THE  
HIGHWAY IS CRITICAL  
TO **PRESERVE**  
**HUMAN LIFE...**

...AND ETHICS ON  
THE INFORMATION  
SUPERHIGHWAY IS CRITICAL  
TO **PRESERVE HUMAN**  
**DIGNITY.**

TO CREATE A **BRIGHT FUTURE**,  
WE NEED **HARDWARE**...

TRUST ME,  
YOU'RE GOING TO  
**LOVE IT!**

...AND WE NEED **SOFTWARE**.

OUR CODE TRANSFORMS  
**PROBLEMS INTO SOLUTIONS.**

**BUT WE ALSO NEED MORALWARE.**

AS WE **WRITE**  
THE FUTURE...

...LET'S DO IT  
**RIGHT.**

## ABOUT THE AUTHORS

**GRADY KLEIN** IS A CARTOONIST, ANIMATOR, AND GRAPHIC DESIGNER WHO SPECIALIZES IN SIMPLIFYING COMPLEX SUBJECTS. HIS MOST RECENT BOOK IS *PSYCHOLOGY, THE COMIC BOOK INTRODUCTION*. SAMPLES OF HIS WORK CAN BE FOUND AT [www.gradyklein.com](http://www.gradyklein.com).

**YORAM BAUMAN** IS A Ph.D. ECONOMIST WHO PERFORMS AT UNIVERSITIES AND CORPORATE EVENTS AROUND THE WORLD AS "THE WORLD'S FIRST AND ONLY STAND-UP ECONOMIST". HIS WEBSITE IS [www.standupeconomist.com](http://www.standupeconomist.com).

GRADY AND YORAM HAVE PREVIOUSLY COLLABORATED ON *THE CARTOON INTRODUCTION TO CLIMATE CHANGE* AND THE TWO-VOLUME *CARTOON INTRODUCTION TO ECONOMICS*. THEIR FOURTH BOOK, *THE CARTOON INTRODUCTION TO CALCULUS*, IS FORTHCOMING IN 2019.





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DebatingEthics



**DEBATING ETHICS:**  
DIGNITY AND RESPECT IN DATA DRIVEN LIFE



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