



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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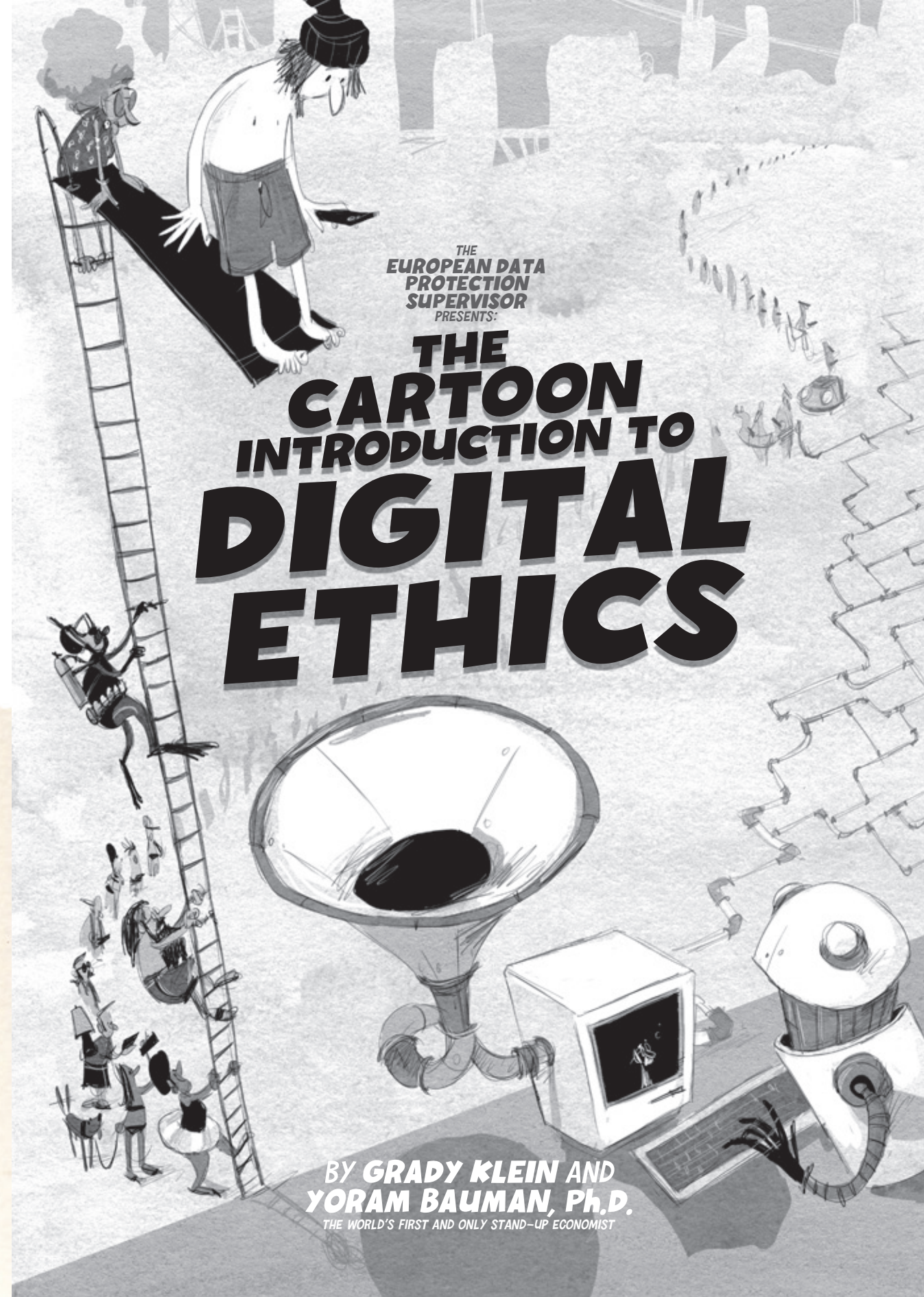
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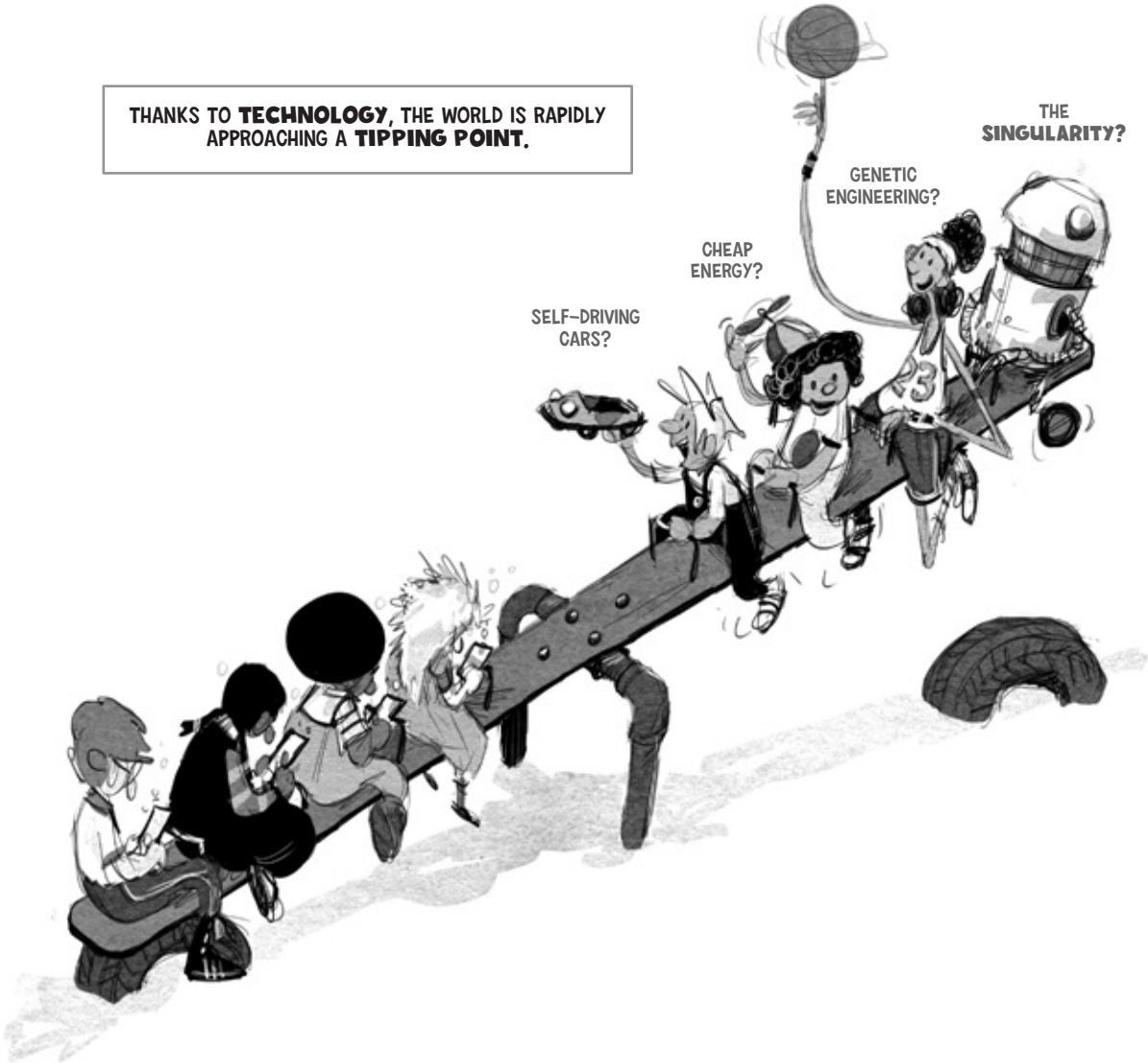


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THANKS TO **TECHNOLOGY**, THE WORLD IS RAPIDLY APPROACHING A **TIPPING POINT**.



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.

TURNS 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.**

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

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

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

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

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

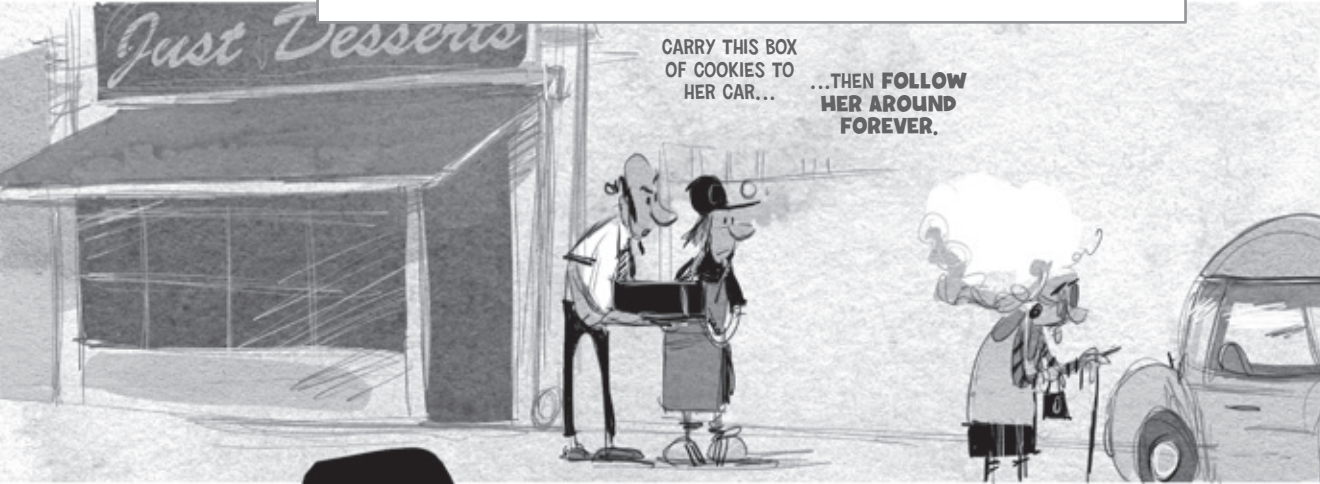
YEAH, WHO NEEDS **REAL LIFE?**

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

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

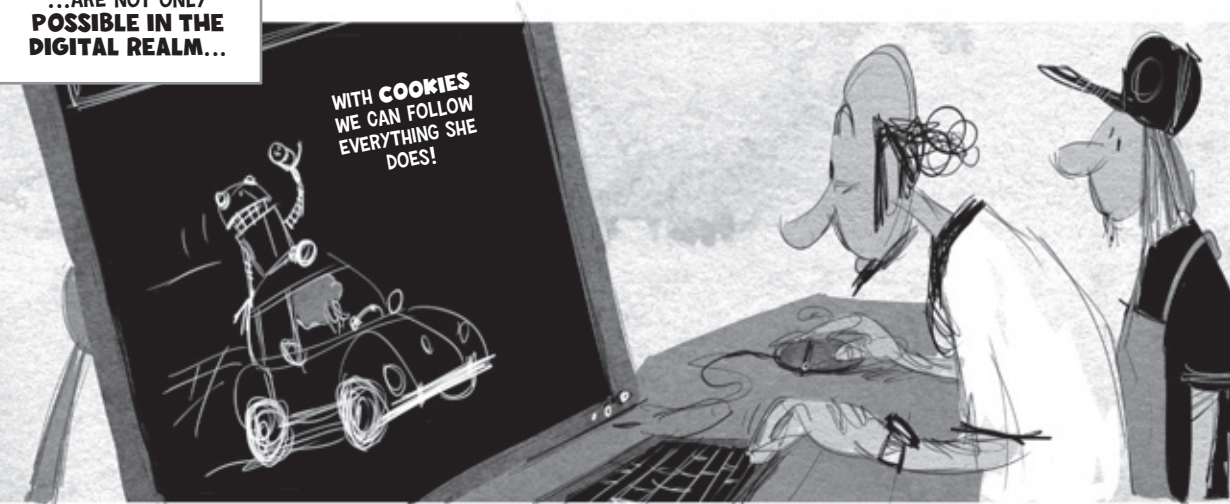
0100010001101111 UNTO OTHERS
AS YOU WOULD HAVE OTHERS
0110010001101111 UNTO YOU!

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.

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



WITH COOKIES WE CAN FOLLOW EVERYTHING SHE DOES!

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



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

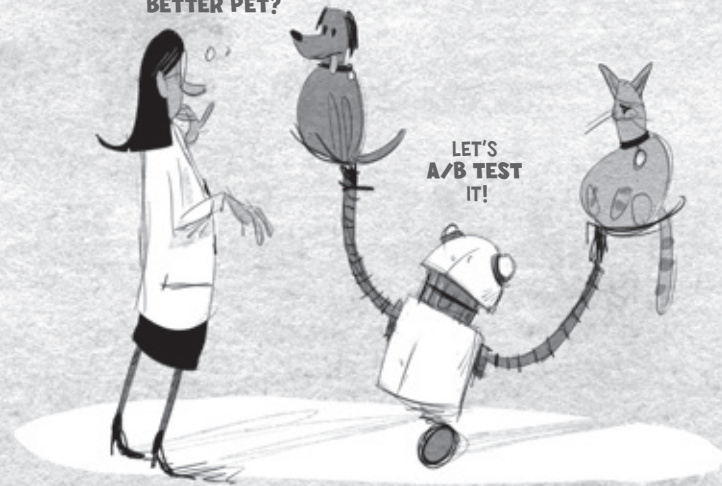
...WHICH IS TO BE TOLD THAT THEY'RE RIGHT.

...THEY'RE PROFITABLE.



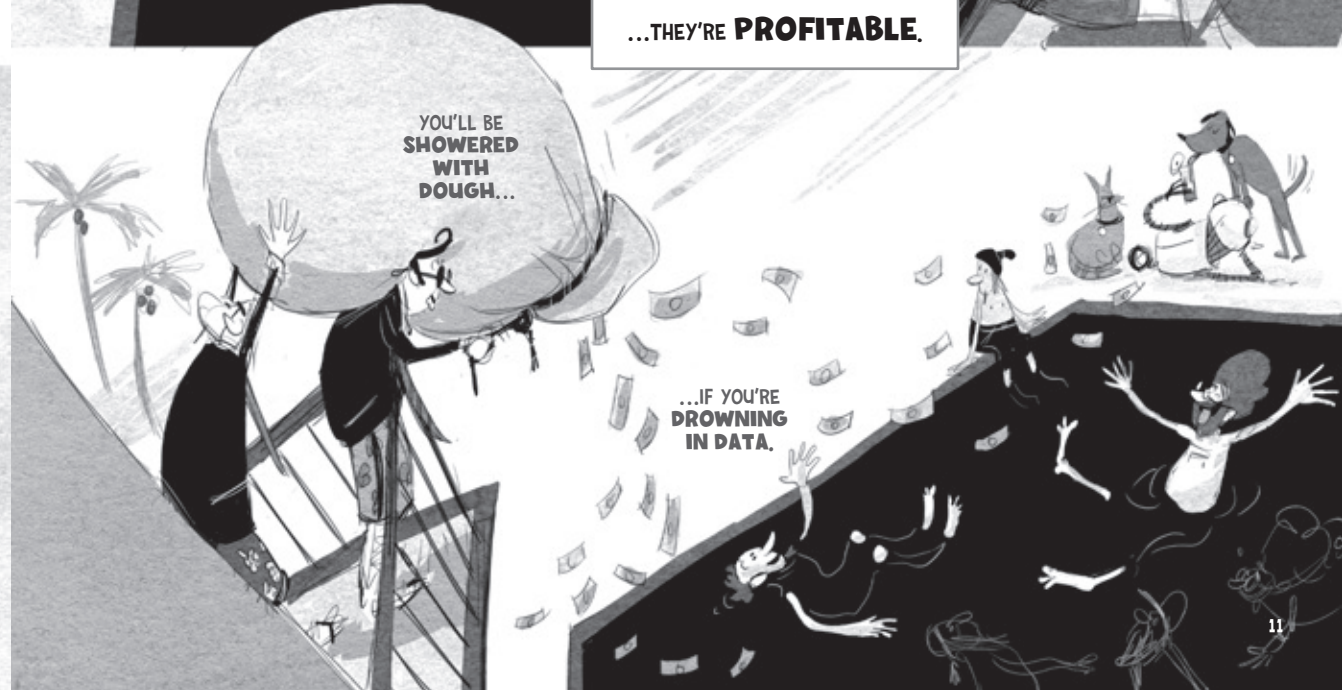
WHICH IS THE BETTER PET?

LET'S A/B TEST IT!



YOU'LL BE SHOWERED WITH DOUGH...

...IF YOU'RE DROWNING IN DATA.

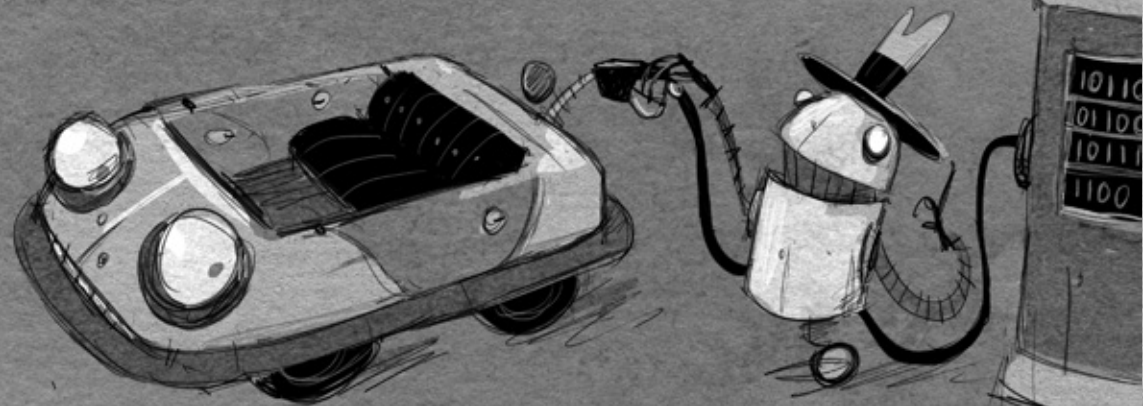


**THE BIG IDEA IN THE
ONLINE WORLD IS THAT
INFORMATION
RULES.**

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!

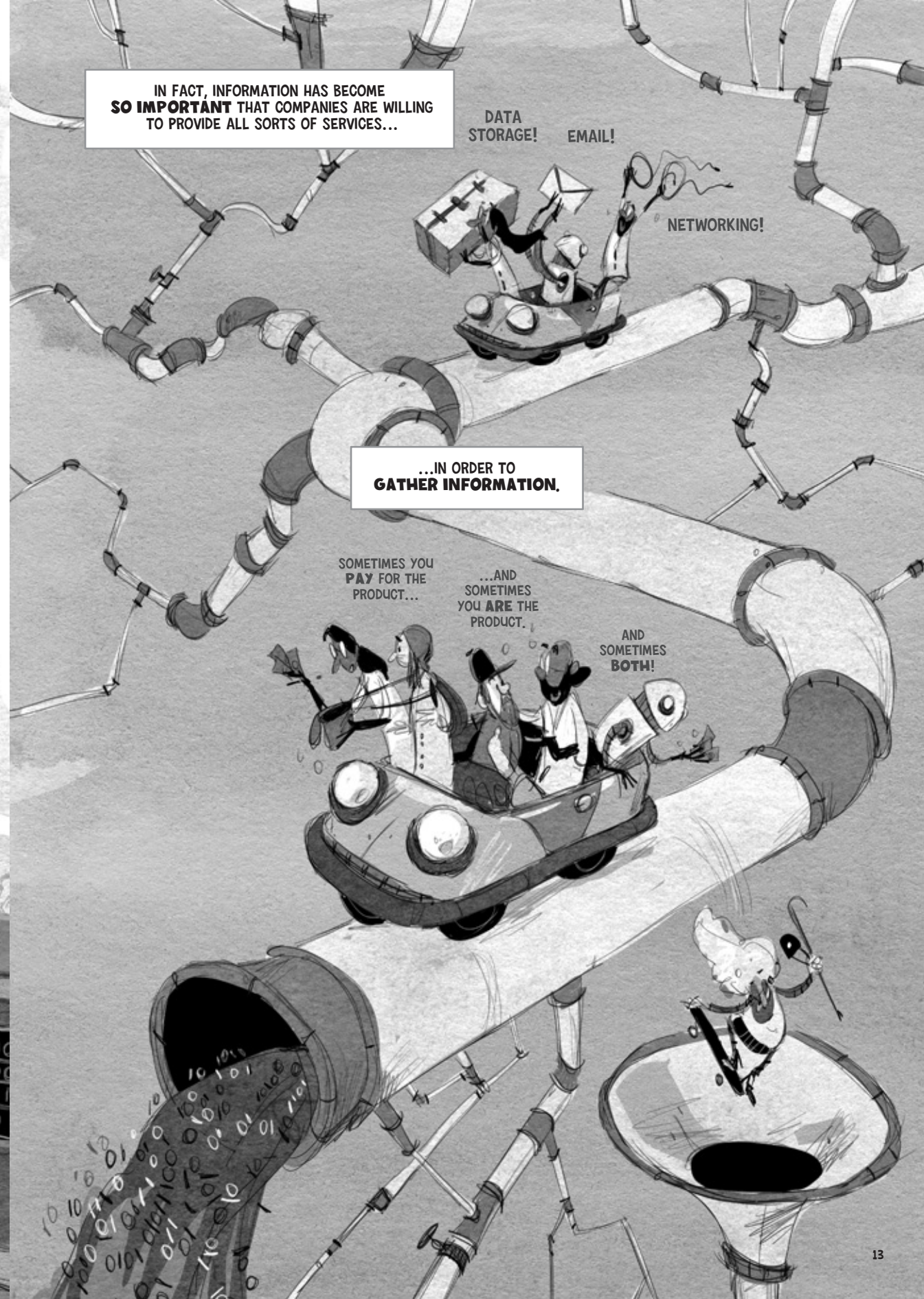
NETWORKING!

...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.

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**.

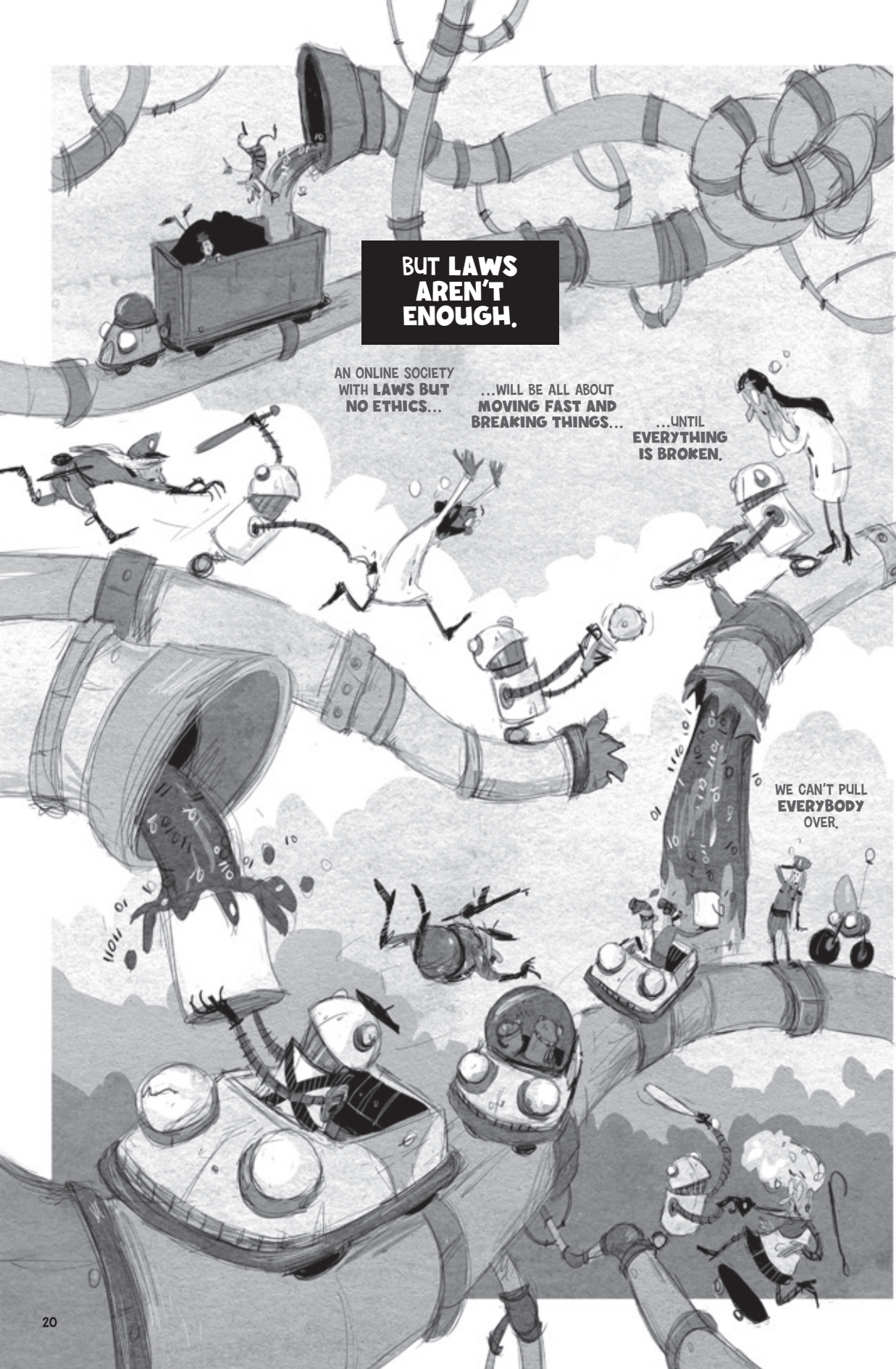
I CAN SMELL
THE DATA ON
YOUR BREATH...

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

Consent

Proportionality

Purpose



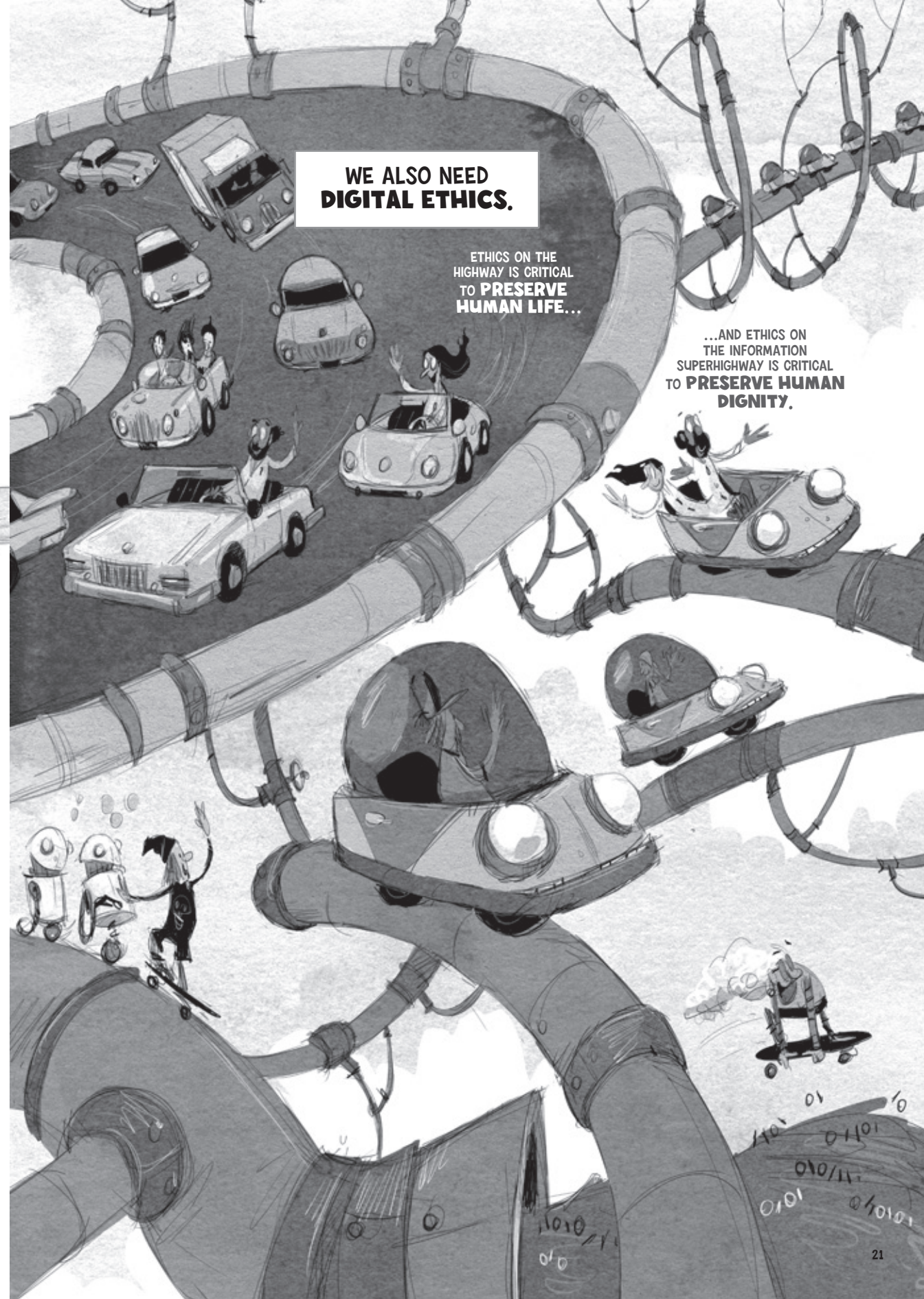
**BUT LAWS
AREN'T
ENOUGH.**

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.

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.

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

