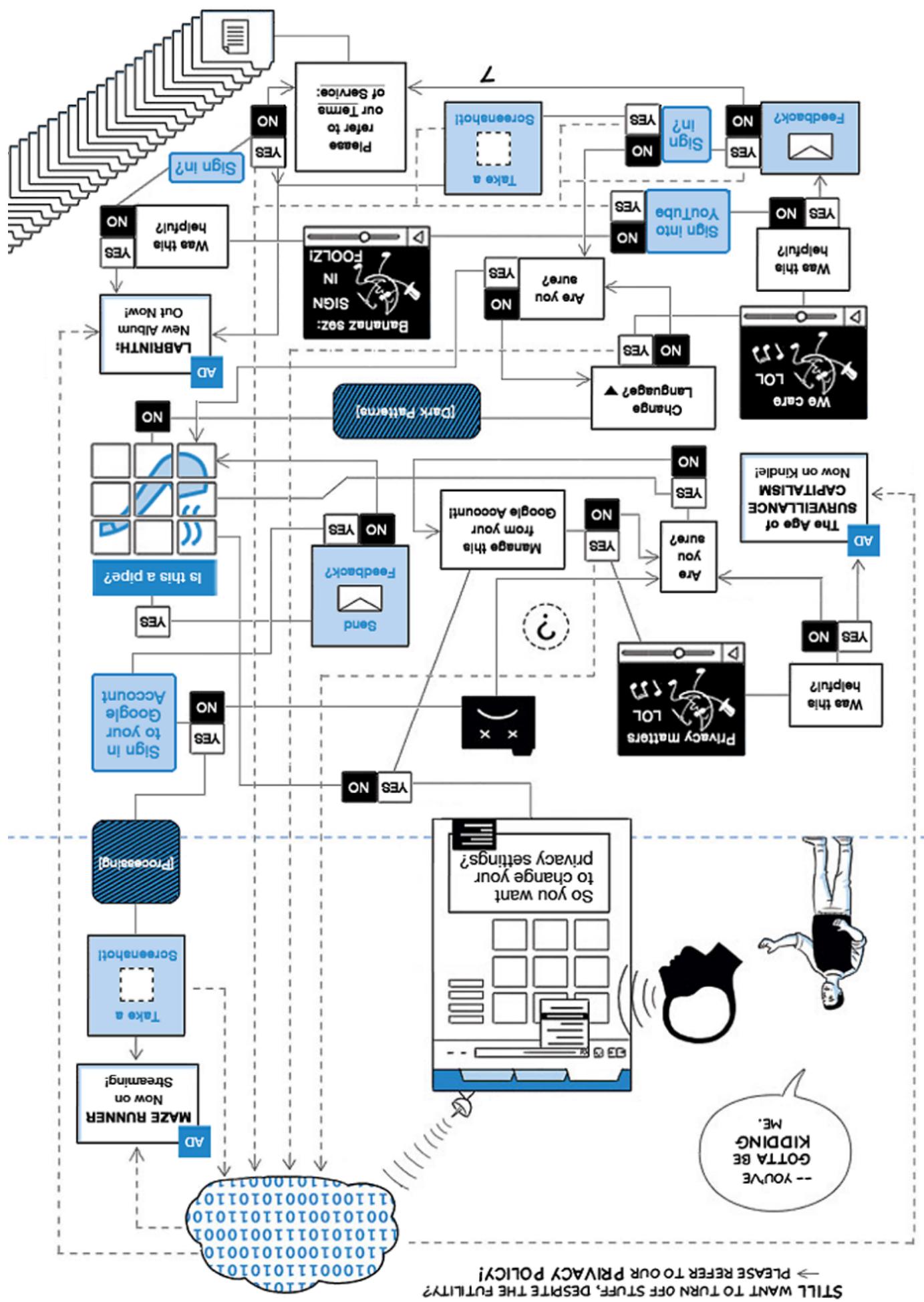




How Google's Browser became a threat to privacy and democracy

# CHROME CONTRA

Leah Elliot



## Part One



Dial O for Omnibox



A CASE IN POINT:  
THE OMNIBOX.

When you enter something in Chrome's search bar, it immediately offers you a detailed record of your past searches, your interests, your politics!

C p  
pattinson  
pegging  
pewdipie  
prostate cancer  
www.pornhub.com/gay/video  
prozac  
pay-off-your-debt-by-losing-weight  
See 8 recent pages in history container

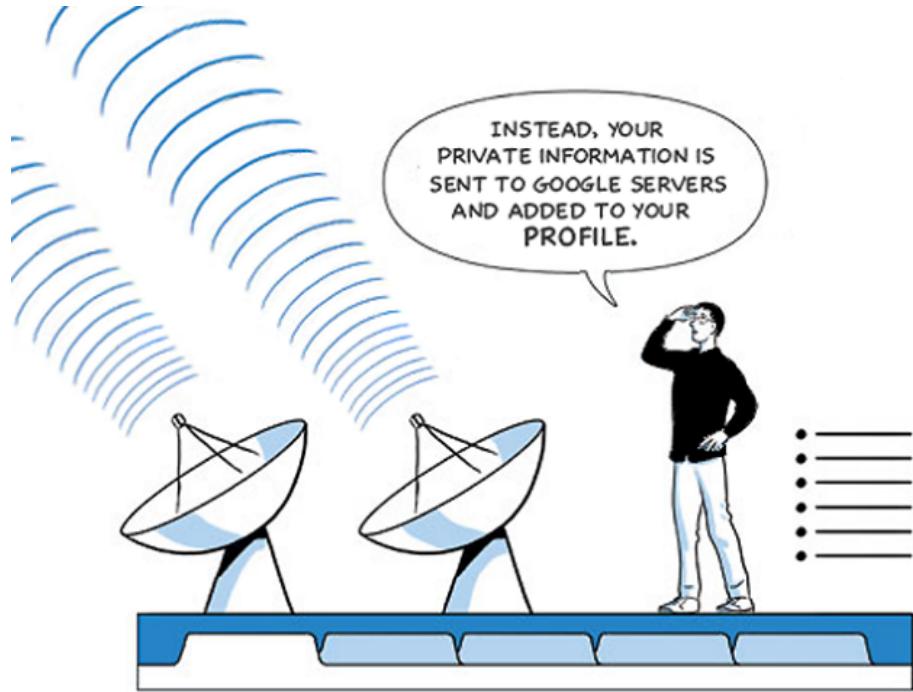
A man standing and pointing at the browser screen.

THE NAME "OMNIBOX" IS DERIVED FROM THE LATIN WORD "OMNIS," MEANING "EVERYTHING." ONCE YOU HIT RETURN, EVERYTHING YOU HAVE TYPED HERE IS PROTOCOLLED AND RETAINED.

AND NOT JUST LOCALLY ON YOUR COMPUTER.

C ☆ is robert pattin  
is robert pattinson married  
is robert pattinson gay  
is robert pattinson single  
is robert pattinson dating  
is robert pattinson batman

A man sitting on a ledge, looking at the browser screen.



IN FACT, YOU DON'T EVEN HAVE TO PUSH RETURN AT ALL. FROM THE MOMENT YOU BEGIN TO TYPE, EVERYTHING IS INSTANTLY SIPHONED OFF.



(WE JOKINGLY CALL THIS CHROME'S 'NO RETURN POLICY.')

LET'S TAKE A MOMENT HERE TO LET THAT SINK IN: ALL THOSE WORDS YOU MIGHT DEEM TOO SENSITIVE TO EVEN TYPE -- YOUR EX'S NAME, AN ABORTION CLINIC, THAT GROUP THERAPY IDEA --

-- BEFORE YOU HAVE EVEN DECIDED WHETHER TO SEND THEM, GOOGLE HAS ALREADY EXTRACTED THEM - YOUR DOUBTS, YOUR HESITATIONS.

OMNI.

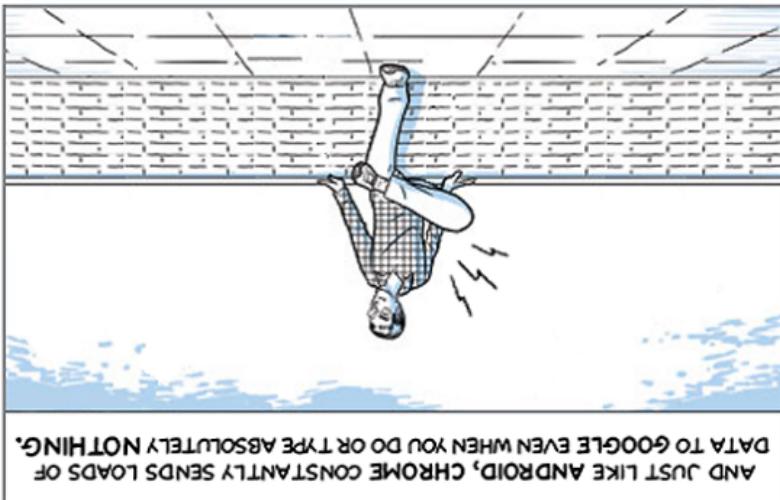
BOX.

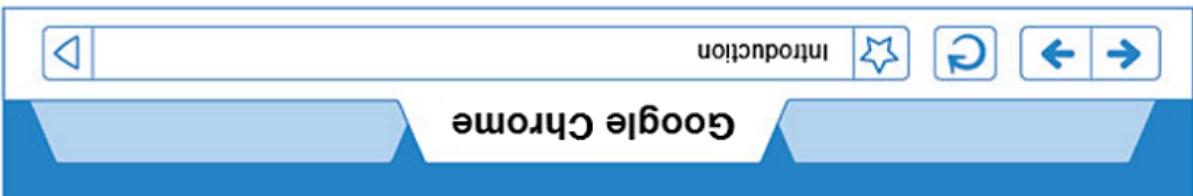
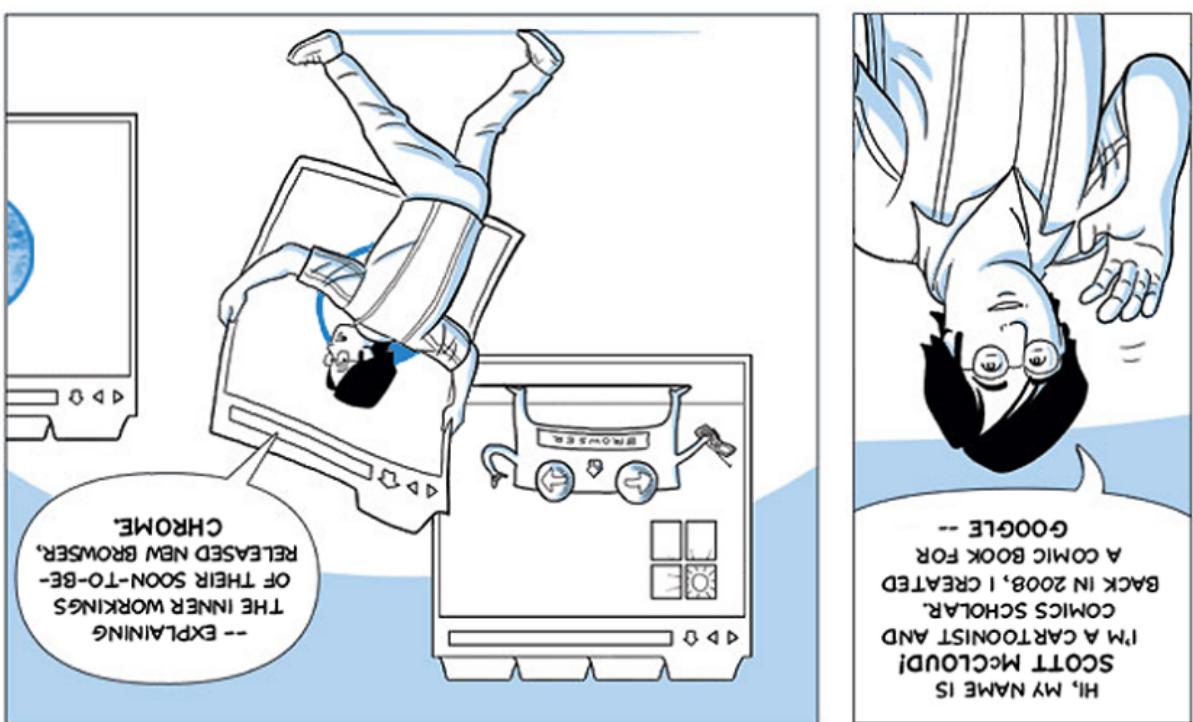
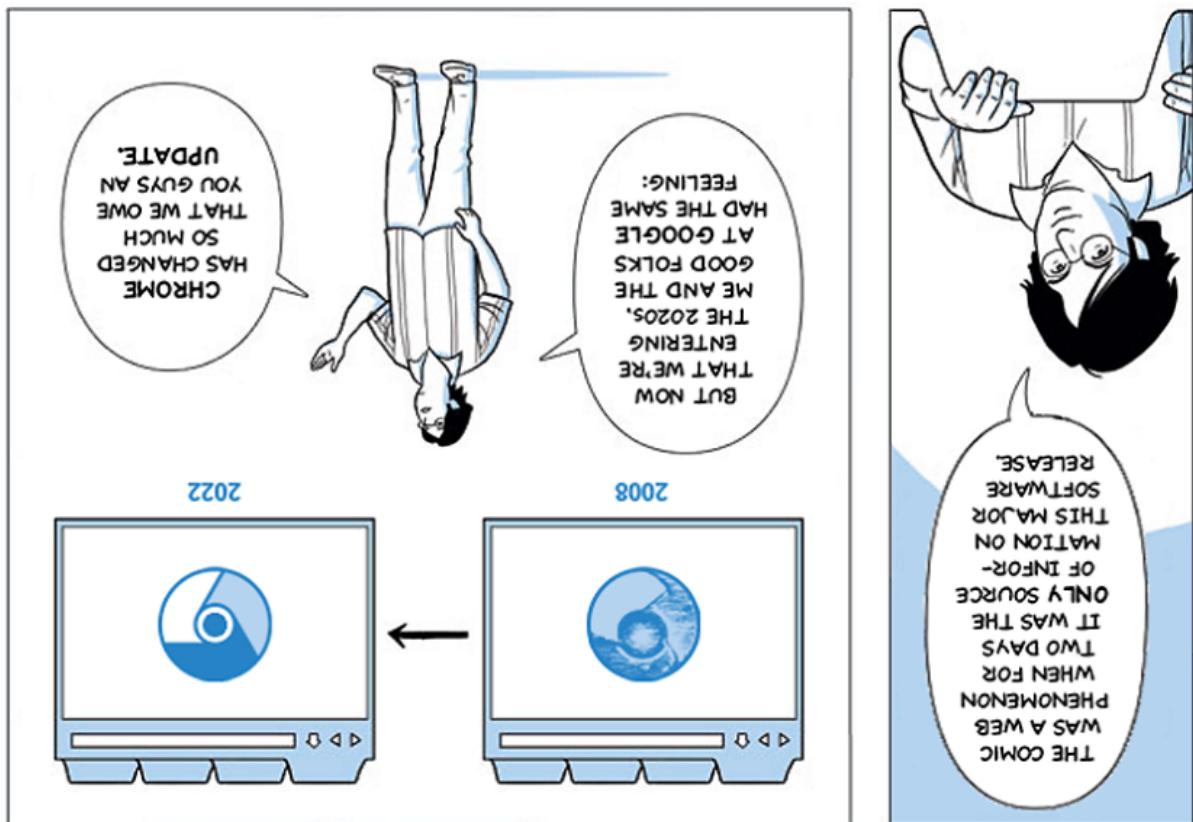


SINCE 2008, GOOGLE HAS SPENT MILLIONS OF DOLLARS ADDING ADDITIONAL TRACKING FEATURES TO BOTH CHROME AND ANDROID.\*

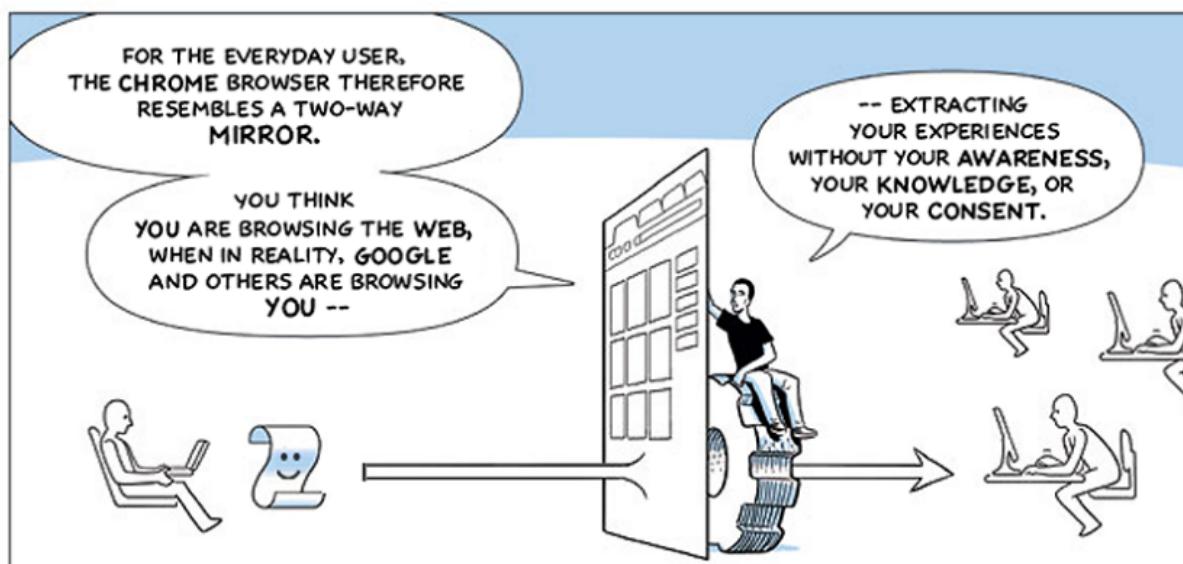
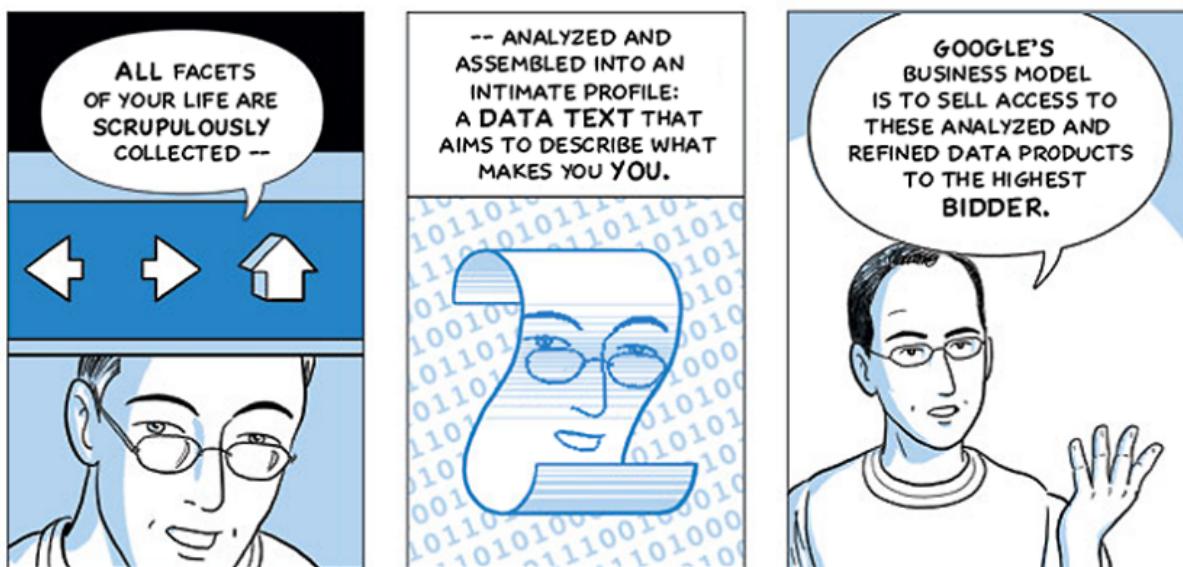
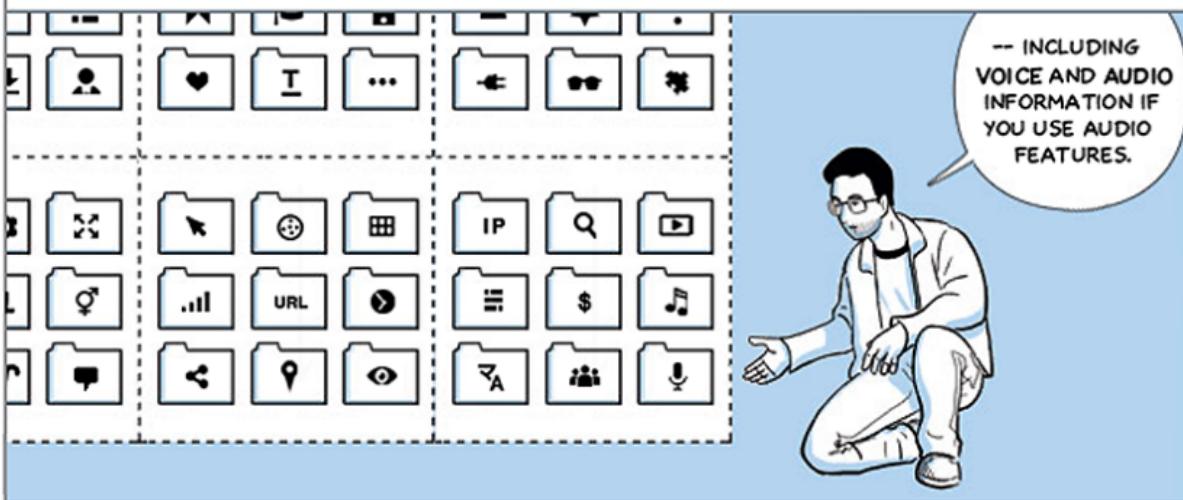
2008

2022





WHEN YOU READ THE CURRENT PRIVACY POLICY, YOU WILL FIND THAT CHROME COLLECTS YOUR IP ADDRESS, THE WORDS YOU SEARCH FOR, THE VIDEOS YOU WATCH, THE PAGES YOU VISIT, THE ADS YOU CLICK, YOUR PURCHASE ACTIVITY, THE NETWORK OF PEOPLE YOU'RE IN TOUCH WITH, AND MUCH MORE.



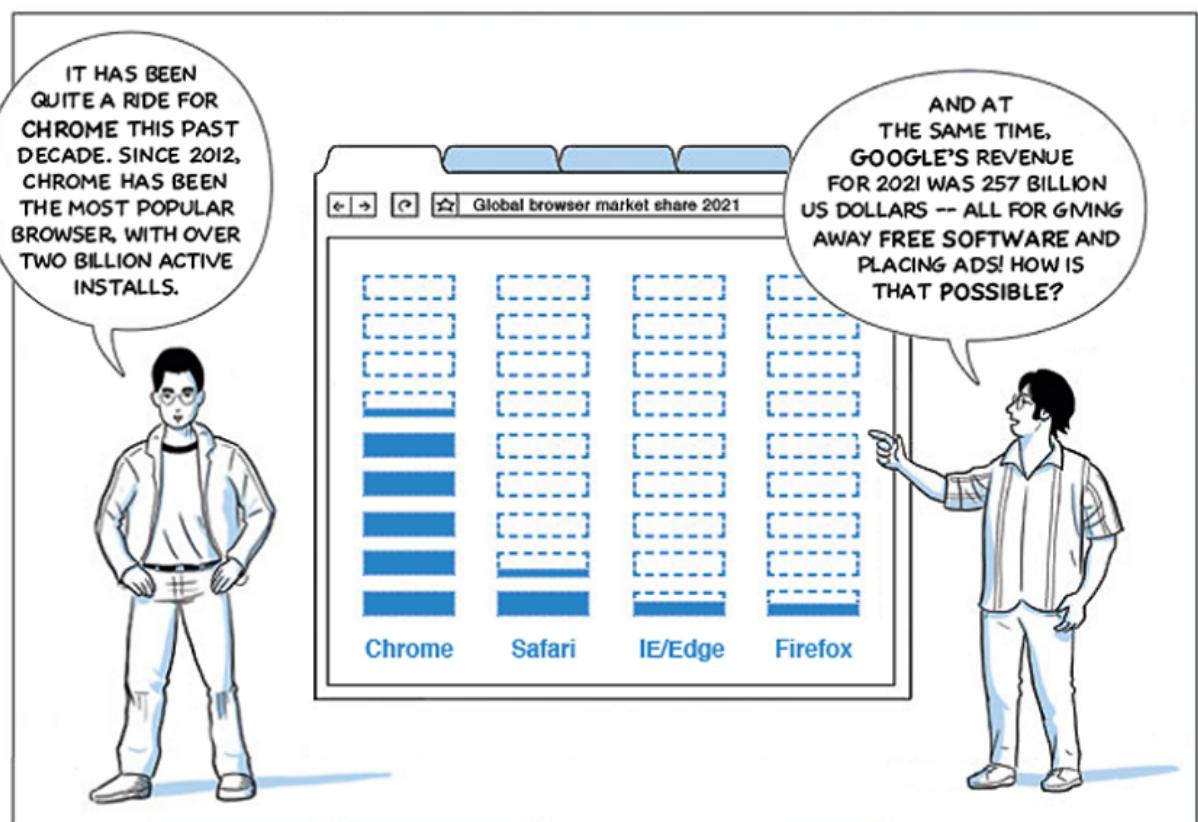
ENTER THE GOOGLE CHROME TEAM, WHO WILL GUIDE YOU THROUGH VARIOUS NEW FEATURES AND DEVELOPMENTS.

HEY THERE,  
SCOTT!

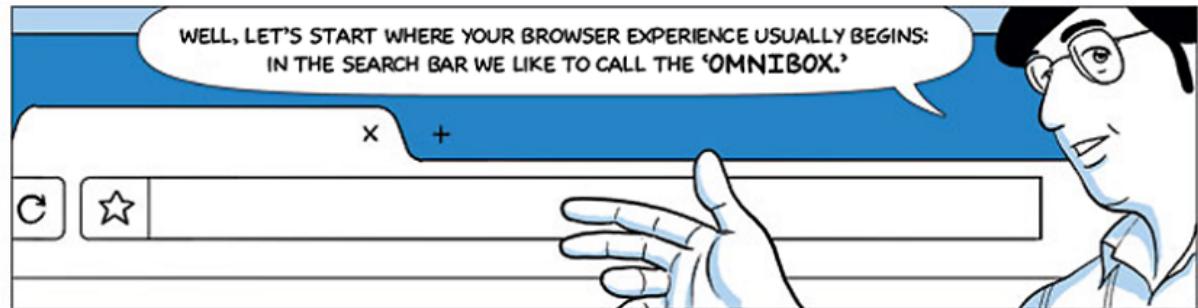


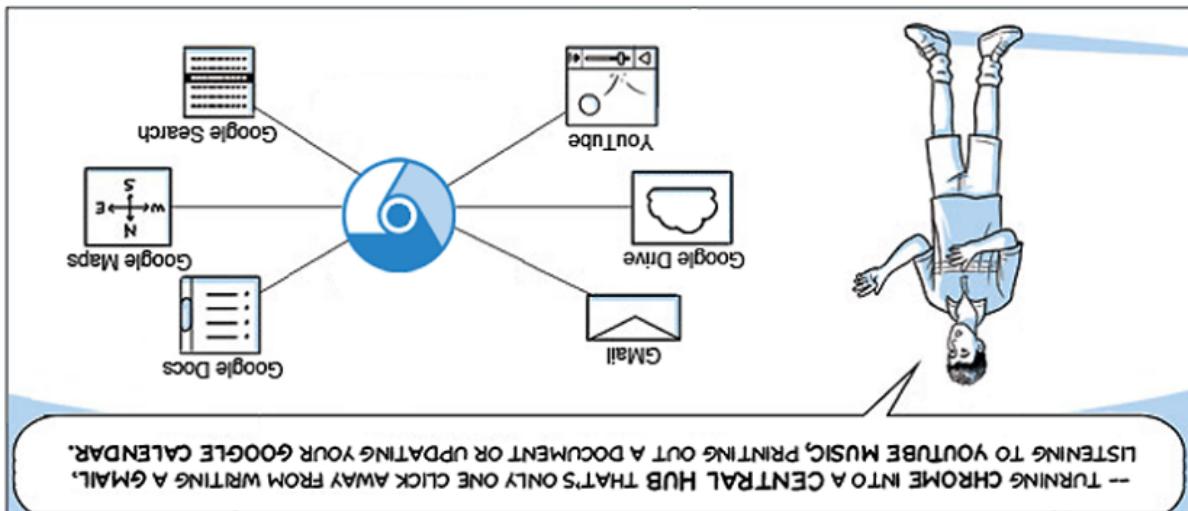
IT HAS BEEN QUITE A RIDE FOR CHROME THIS PAST DECADE. SINCE 2012, CHROME HAS BEEN THE MOST POPULAR BROWSER, WITH OVER TWO BILLION ACTIVE INSTALLS.

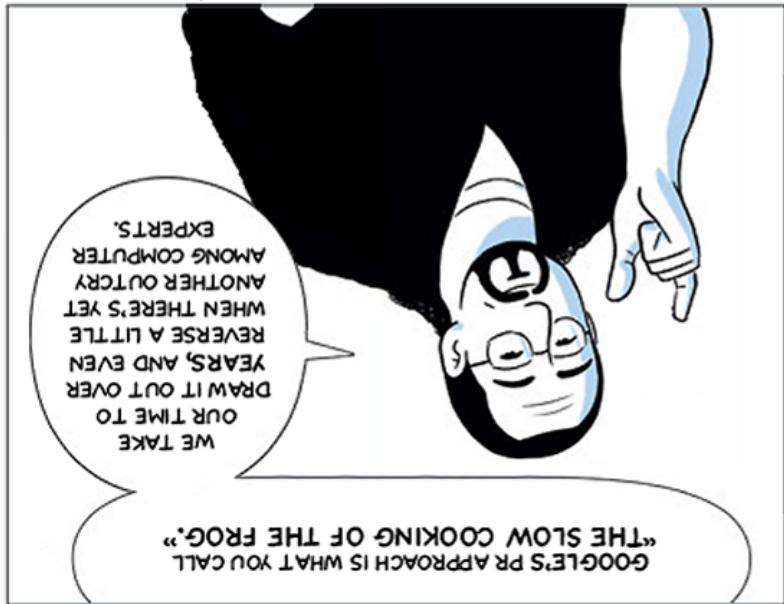
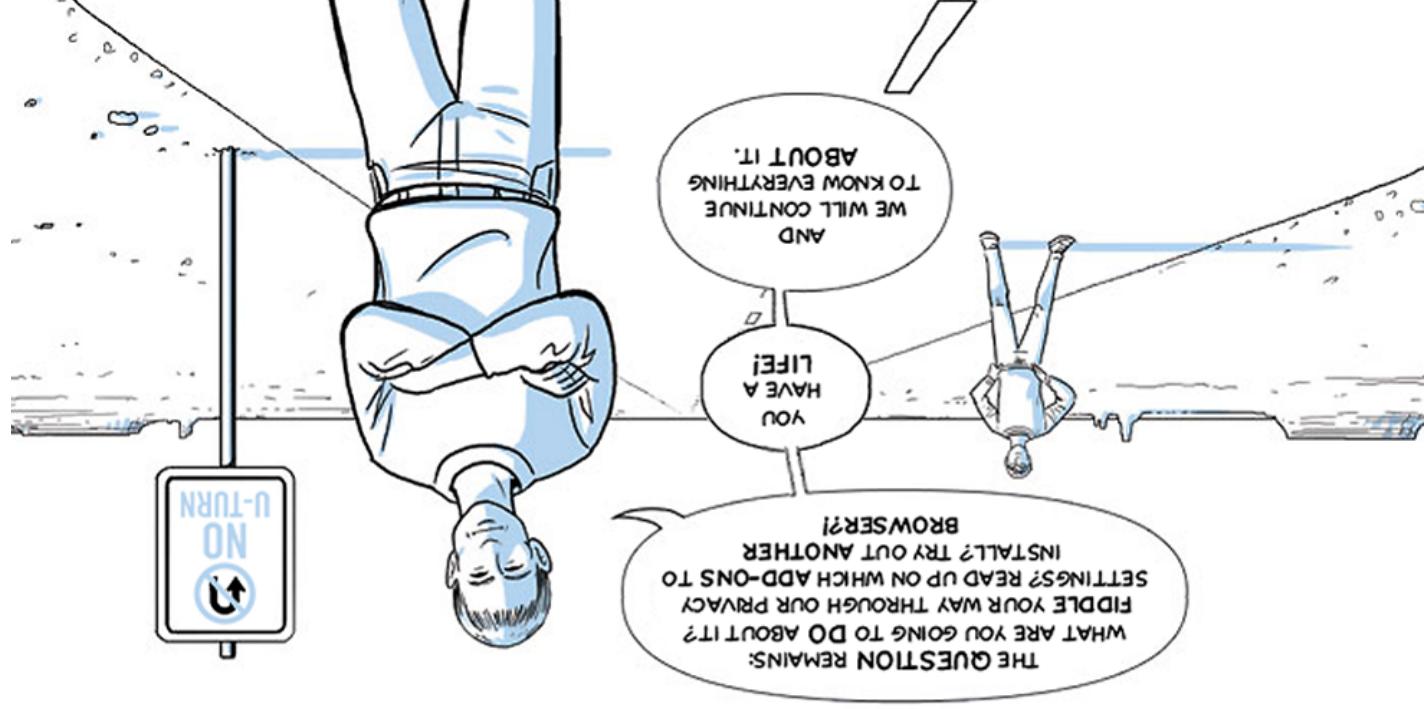
AND AT THE SAME TIME, GOOGLE'S REVENUE FOR 2021 WAS 257 BILLION US DOLLARS -- ALL FOR GIVING AWAY FREE SOFTWARE AND PLACING ADS! HOW IS THAT POSSIBLE?



WELL, LET'S START WHERE YOUR BROWSER EXPERIENCE USUALLY BEGINS: IN THE SEARCH BAR WE LIKE TO CALL THE 'OMNIBOX.'









-- ROAM FREELY THROUGH A CLOSE-MESHED FIBER OPTIC WEB, A GARGANTUAN ONE-WAY ANT TRAIL MARCHING TOWARDS GOOGLE'S DATA CENTERS:

VAST INDUSTRIAL COMPLEXES, HEAVILY GUARDED BY BARBED WIRE FENCES, VEHICLE BARRIERS, BIOMETRIC IDENTIFICATION, AND LASER-BASED INTRUSION DETECTION SYSTEMS.

HERE, YOUR DATA IS RETAINED INDEFINITELY, WAY BEYOND YOUR CONTROL EVER SINCE IT HAS BEEN PROCESSED THROUGH THE SYNCHRONIZED INTERPLAY OF SHUTTER LEAVES --

-- LEAVES, WHICH, JUST AS THEIR PHOTOGRAPHIC COUNTER-PARTS, ORGANIZE BUNDLED INFORMATION IN ORDER TO CONSTRUCT A PRECISE PORTRAIT OF YOU. AT THE CENTER OF IT ALL:

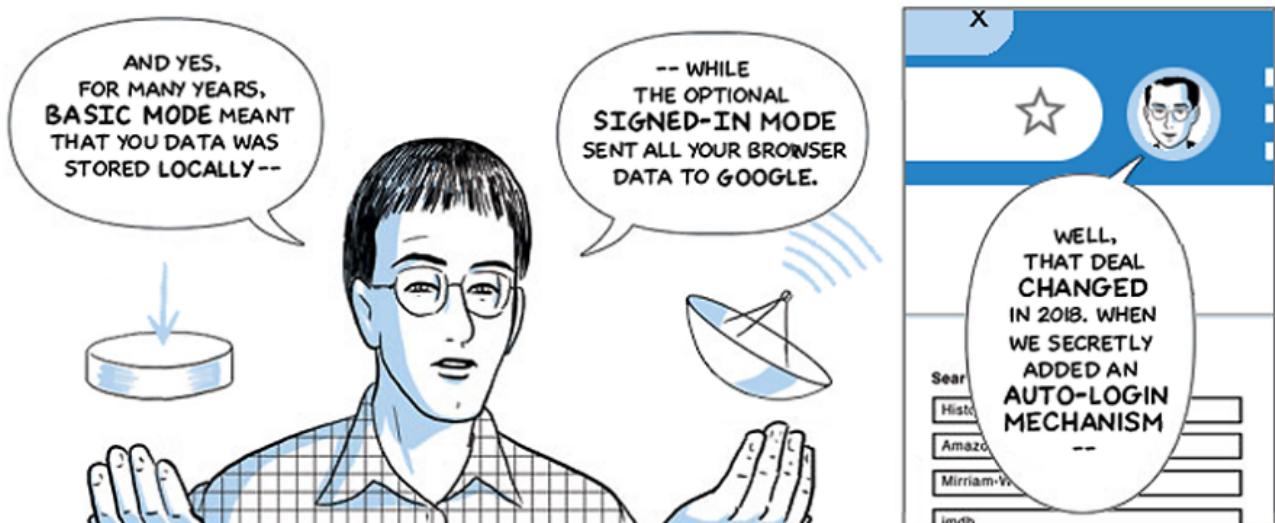
A LENS - EXPRESSIONLESS AND EVER-WATCHING.



## Part Three

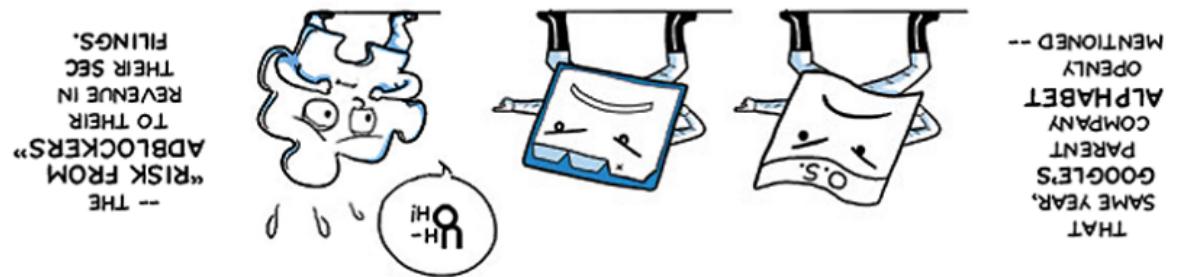


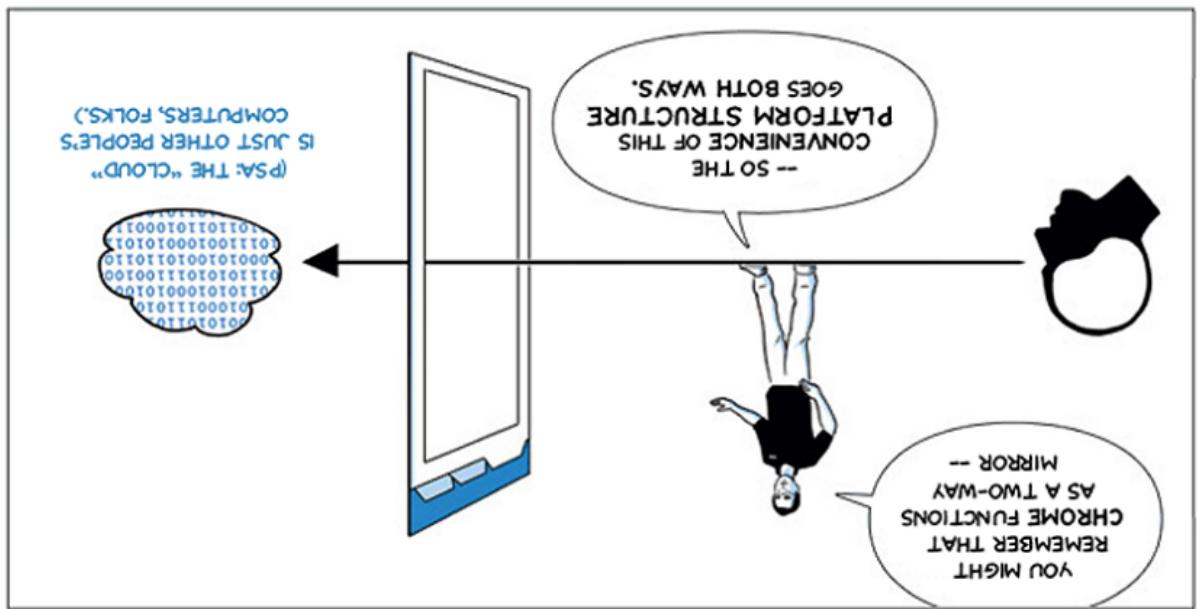
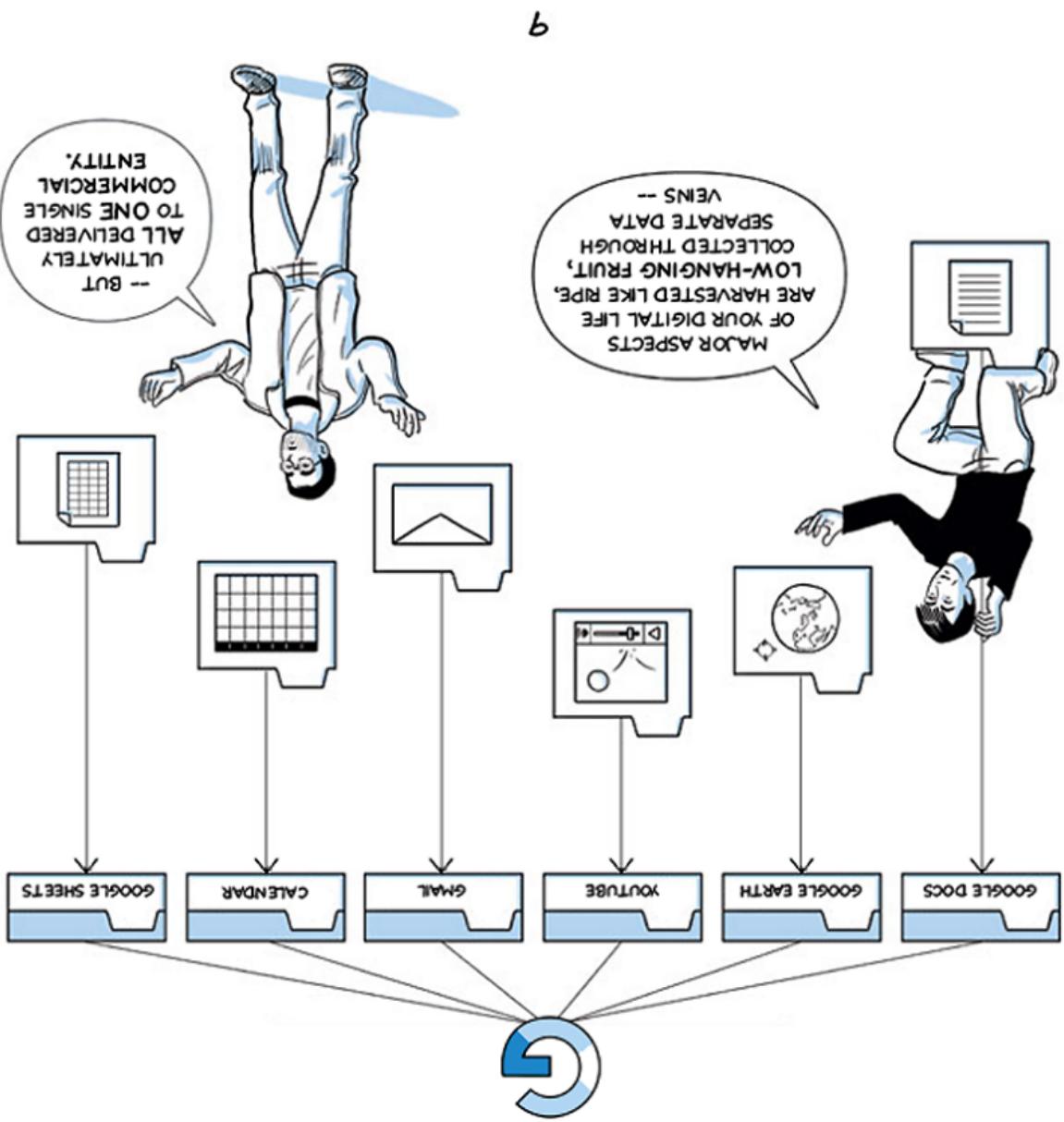
The Regression Game



AND BECAUSE WE ALSO REDESIGNED OUR SYNC INTERFACE FOR MAXIMAL CONFUSION, MILLIONS OF USERS ACCIDENTLY ACTIVATED SYNCHRONIZATION BEFORE ANYONE COULD PROTEST.

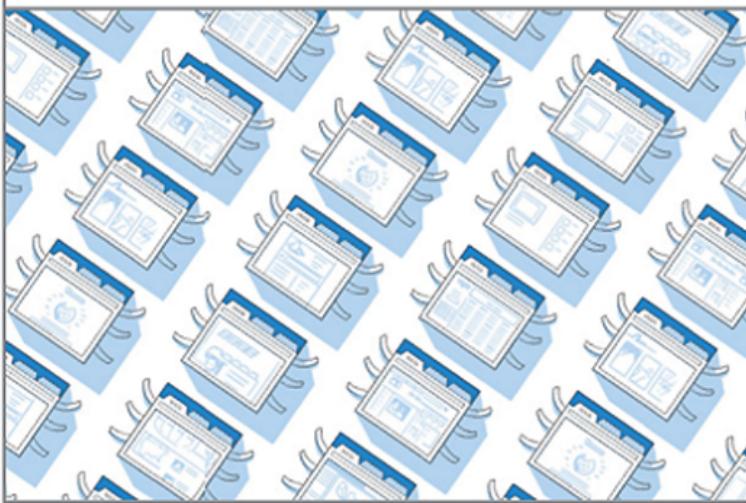






THE OPTION OF SYNCING HAS BECOME THE DE FACTO RULE.

THIS IS SERIOUS. ONCE YOU TURN ON SYNC, YOUR BROWSING HISTORY, YOUR DOWNLOAD HISTORY, YOUR BOOKMARKS AND YOUR AUTOFILL INFORMATION BELONG TO GOOGLE --



-- AND AUTOFILL INCLUDES YOUR NAME, ADDRESS, PHONE NUMBER, USERNAME AND PASSWORD.

CHROME WILL DO THIS WITHOUT ASKING, WITHOUT NOTIFYING. JUST LIKE GOOGLE HAS MODIFIED A CRUCIAL PRIVACY FEATURE WITHOUT TELLING ITS USERS.

UNFORTUNATELY,  
THIS IS NO  
EXCEPTION.

YEAR  
AFTER YEAR,  
UPDATE AFTER  
UPDATE, GOOGLE  
HAS PLAYED A  
RELENTLESS  
PRIVACY  
REGRESSION  
GAME:



06.2015  
A CHROME UPDATE  
SILENTLY SWITCHES  
ON YOUR MICRO-  
PHONE AND SENDS  
WHAT IT HEARS  
TO GOOGLE.

05.2017  
A CHROME "FLAW"  
ALLOWS SITES TO  
SECRETLY RECORD  
AUDIO AND VIDEO  
WITHOUT WARNING  
OR CONSENT.

03.2018  
THE 'CHROME  
CLEANUP TOOL'  
SCANS AND  
REMOVES FILES ON  
YOUR COMPUTER  
WITHOUT CONSENT  
OR TRANSPARENCY.

04.2019  
CHROME  
ELIMINATES  
THE OPTION  
TO TURN OFF  
THE SURVEILLING  
'HYPERLINK  
AUDITING.'

10.2020  
WHEN TOLD TO  
WIPE ALL COOKIES  
ON EXIT, CHROME  
NOW EXEMPTS ALL  
GOOGLE SITES LIKE  
YOUTUBE OR  
GOOGLE SEARCH.

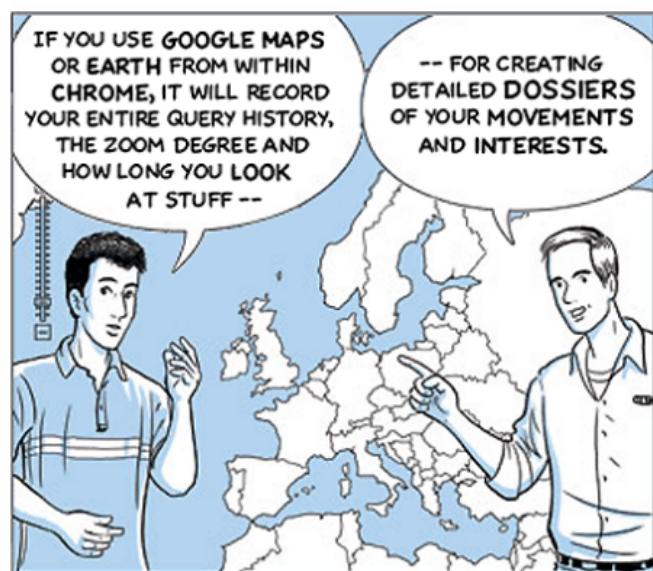
10.2021  
CHROME CAN NOW  
TRACK WHEN YOU'RE  
NOT IN FRONT OF  
THE SCREEN, LOGS  
BREAKS AND SLEEP  
CYCLE VIA ITS NEW  
'IDLE DETECTION'.

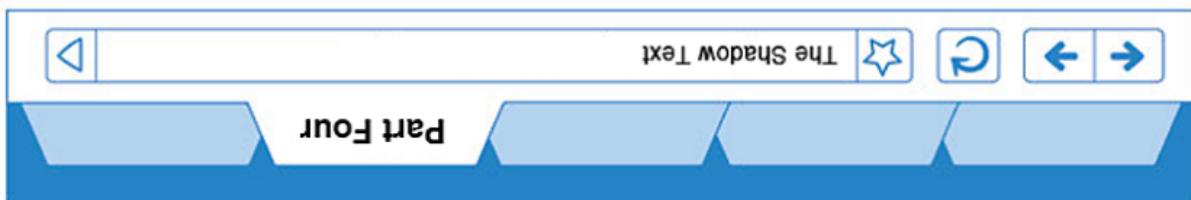
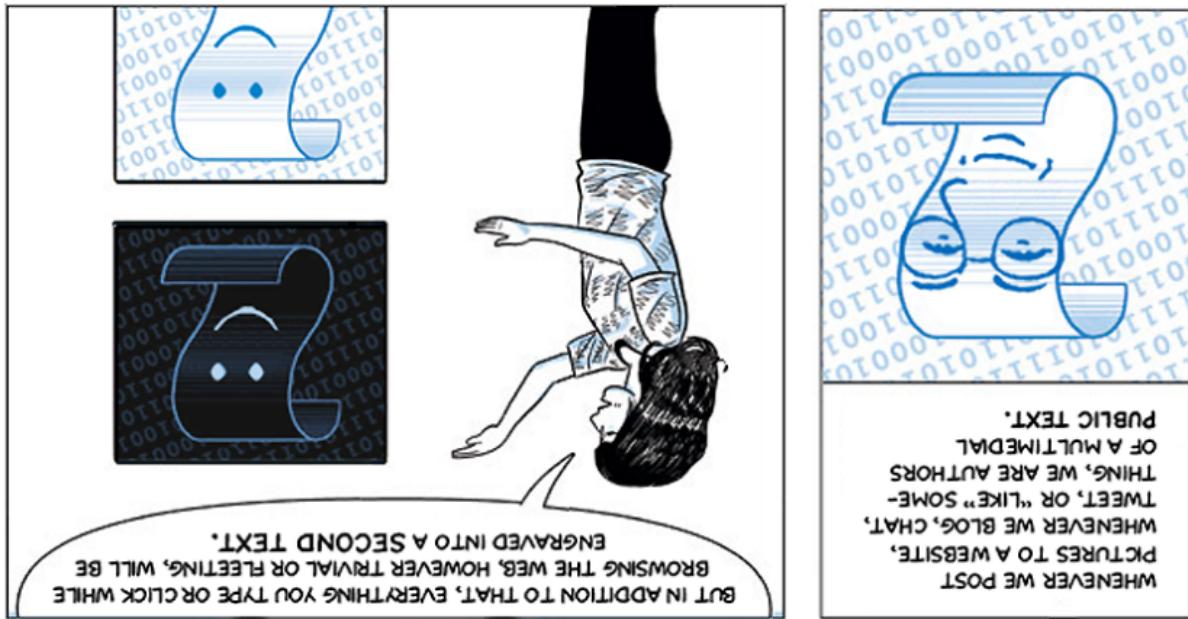


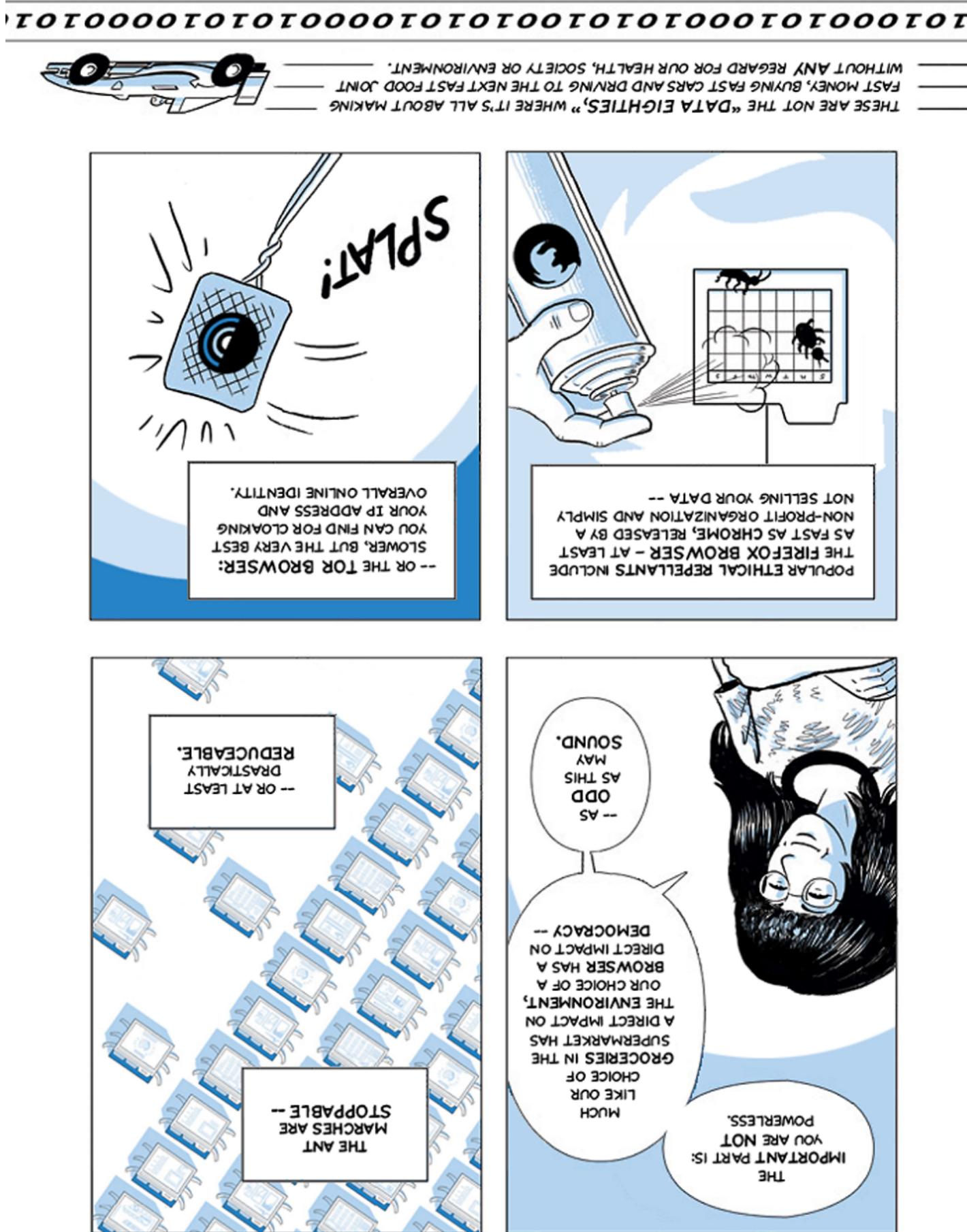
### Web Images

chrome.google.com > privacy-nightmare

e.g. Chrome for Android  
sends Google your location  
every single time you  
conduct a search.







## Part Five



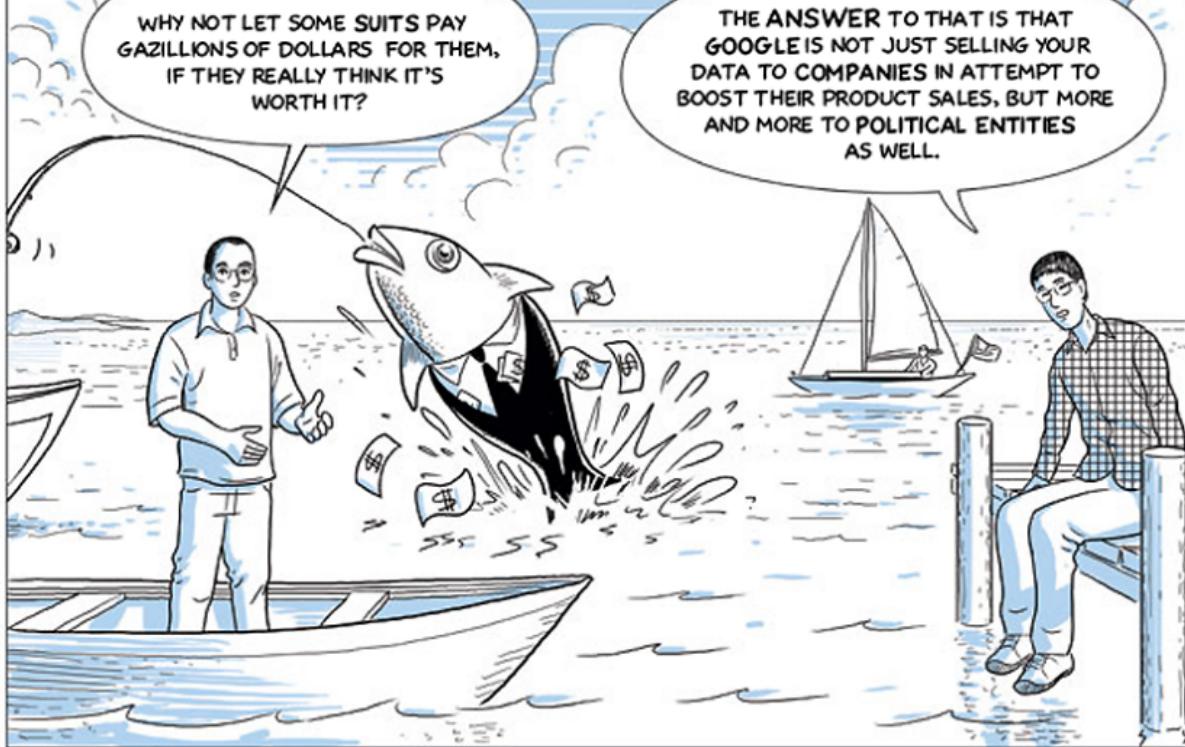
Conclusion



ALL OF THIS MIGHT SOUND OVERTLY MELODRAMATIC WHEN ALL WE'RE TALKING ABOUT IS PERSONALIZED ADS.

WHY NOT LET SOME SUITS PAY GAZILLIONS OF DOLLARS FOR THEM, IF THEY REALLY THINK IT'S WORTH IT?

THE ANSWER TO THAT IS THAT GOOGLE IS NOT JUST SELLING YOUR DATA TO COMPANIES IN ATTEMPT TO BOOST THEIR PRODUCT SALES, BUT MORE AND MORE TO POLITICAL ENTITIES AS WELL.



IF WE AGREE THAT THE AD BUSINESS IS A KIND OF BEHAVIORAL MODIFICATION INDUSTRY --



-- IMAGINE WHAT HAPPENS WHEN THE MOST PRIVATE DETAILS OF MILLIONS OF VOTERS ARE BOUGHT UP BY POLITICAL PLAYERS!



SO THE REAL DRAMA CENTERS ON CONTROL, MANIPULATION, AND EROSION OF THE DEMOCRATIC PROCESS:



REPORTERS AT BUZZFEED DISCOVERED THAT GOOGLE ENABLED ADVERTISERS TO TARGET ADS TO PEOPLE WHO TYPE RACIST AND ANTI-SEMITIC SLURS INTO THE OMNIBAR.

C



Jewish

C



Black people

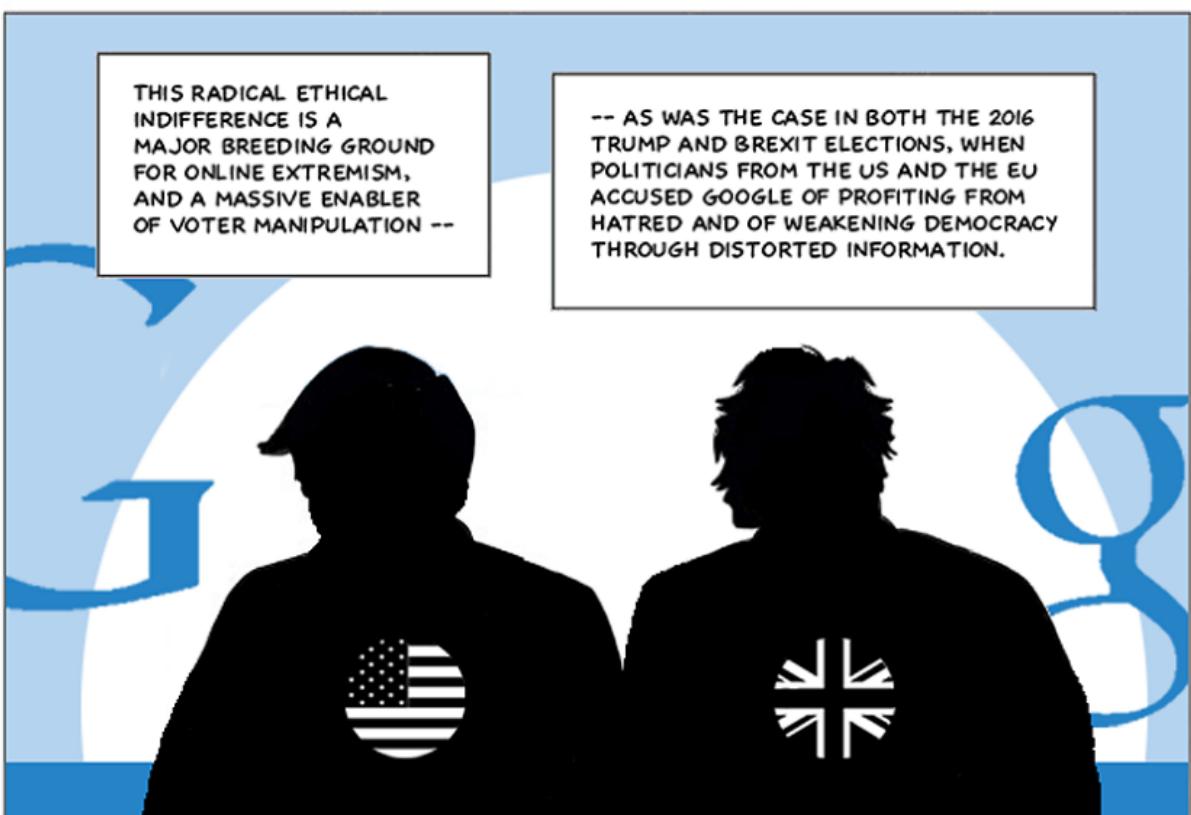
C



...  
...  
...

THIS RADICAL ETHICAL  
INDIFFERENCE IS A  
MAJOR BREEDING GROUND  
FOR ONLINE EXTREMISM,  
AND A MASSIVE ENABLER  
OF VOTER MANIPULATION --

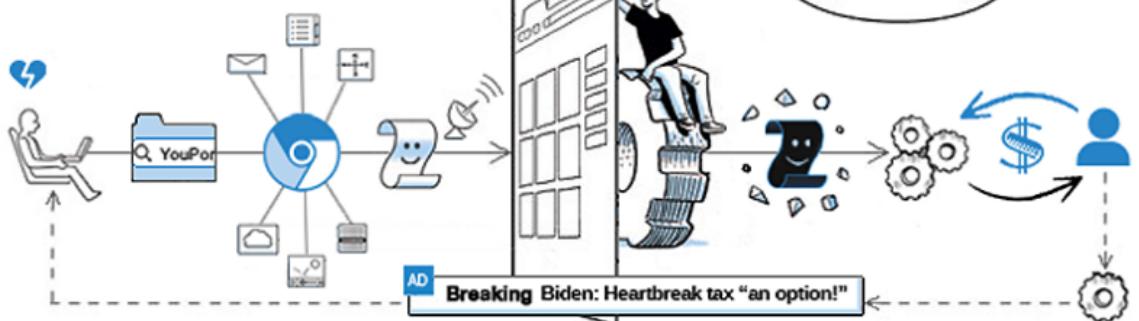
-- AS WAS THE CASE IN BOTH THE 2016  
TRUMP AND BREXIT ELECTIONS, WHEN  
POLITICIANS FROM THE US AND THE EU  
ACCUSED GOOGLE OF PROFITING FROM  
HATRED AND OF WEAKENING DEMOCRACY  
THROUGH DISTORTED INFORMATION.

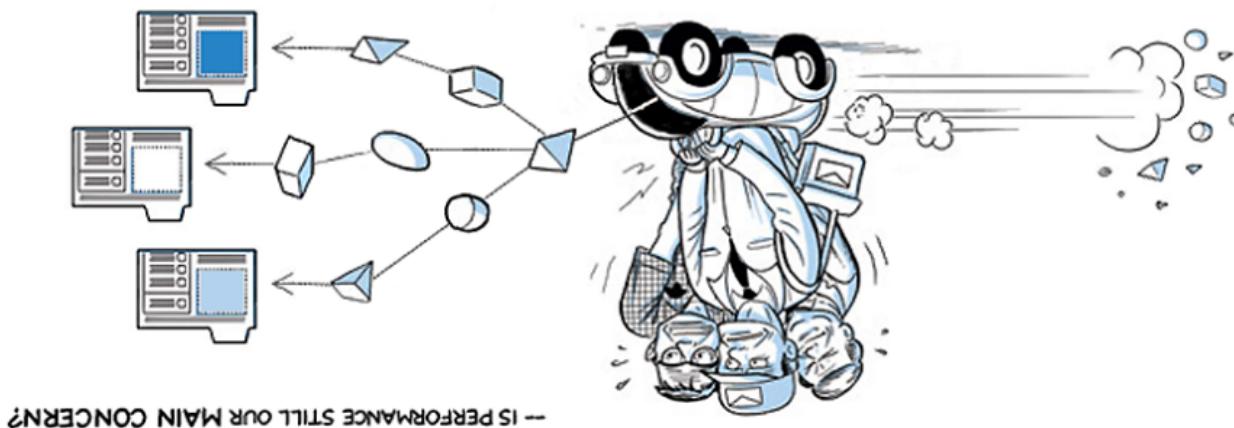
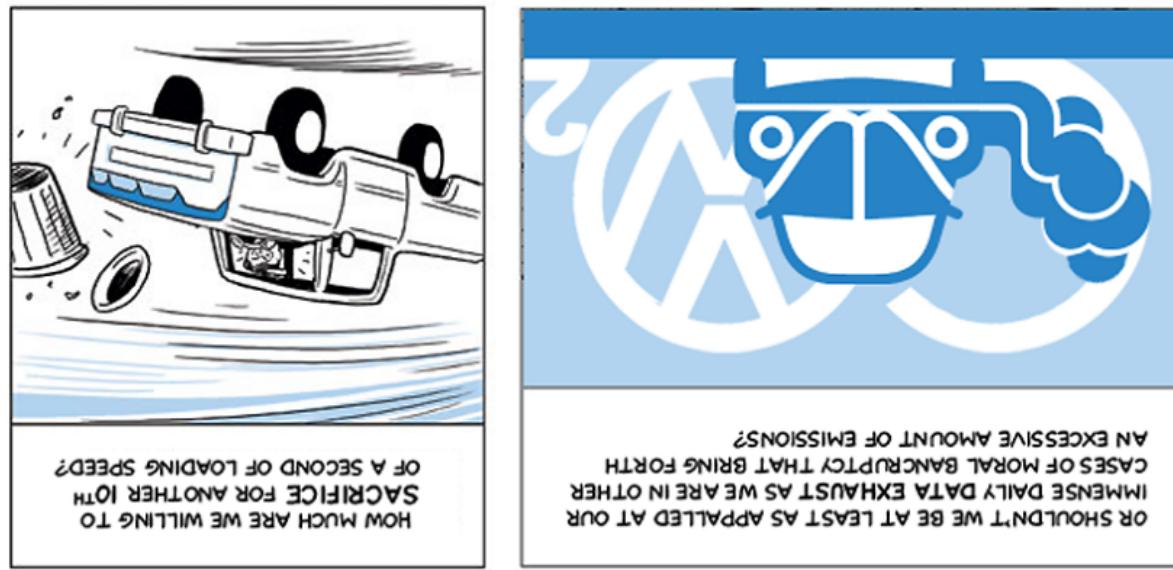
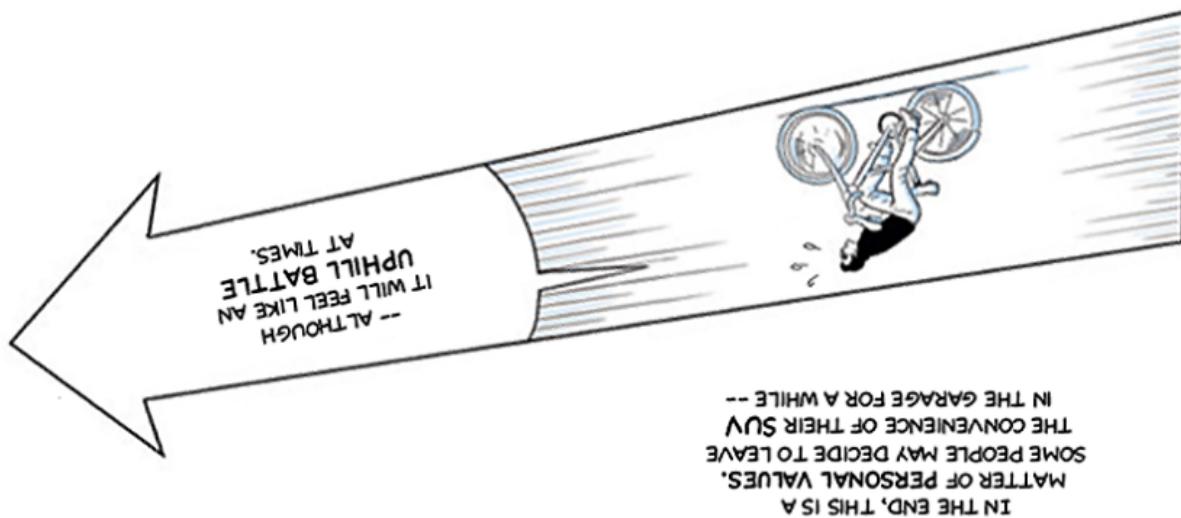


DISTORTED INFORMATION  
THAT WAS DELIVERED AT EXACTLY  
THE RIGHT TIME TO EXACTLY THE  
RIGHT PEOPLE --

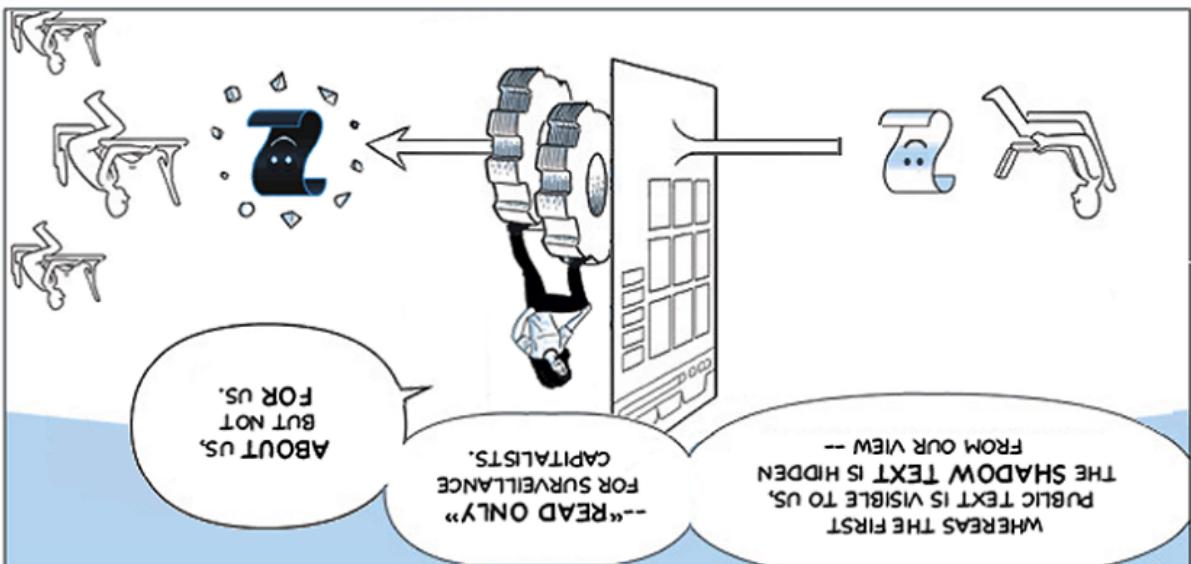
-- WITH THE  
PRECISION OF A SWISS  
CLOCKWORK.

CONTROL  
AND POWER, SOLD  
TO THE HIGHEST  
BIDDER.





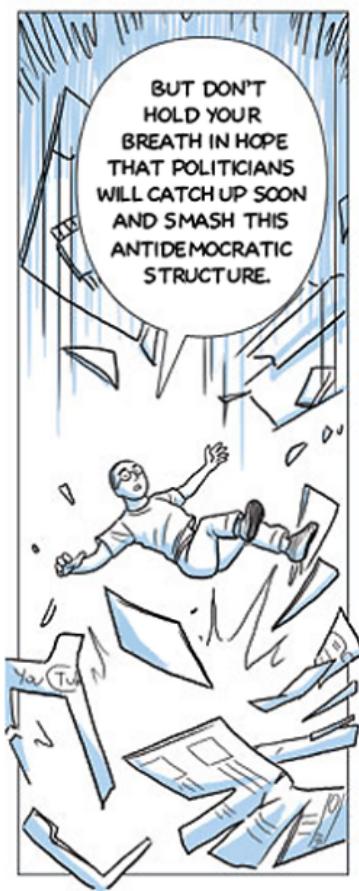
AND TO BE FAIR, CHROME STILL DELIVERS A PRETTY GOOD PERFORMANCE (THOUGH IT'S NOT THE SPEEDSTER IT USED TO BE). EVERYONE ENJOYS A FAST BROWSER, BUT WHEN WE FIND OUT THAT ITS SPEED BEYOND OUR REACH -- PREDICTIONS ABOUT THE PAGES WE WILL VISIT NEXT BASED ON AN INTIMATE PROFILE BEYOND OUR REACH --



THESE INTRUSIONS INTO THOUGHT AND IDENTITY ENDANGER FUNDAMENTAL RIGHTS. CONCEPTS LIKE FREEDOM OF WILL, INDIVIDUALITY AND SELF-DETERMINATION ARE AT STAKE HERE.

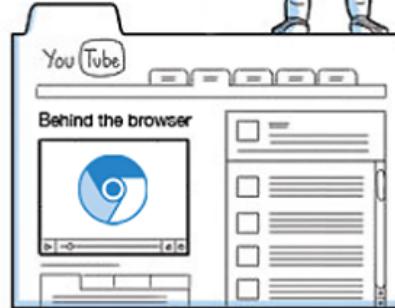


BUT DON'T HOLD YOUR BREATH IN HOPE THAT POLITICIANS WILL CATCH UP SOON AND SMASH THIS ANTI DEMOCRATIC STRUCTURE.



GOOGLE HAS SPENT MORE LOBBYING MONEY IN WASHINGTON AND BRUSSELS THAN ANY OTHER CORPORATE ENTITY IN THE WORLD --

-- A WHOPPING \$150 MILLION IN THE US ALONE DURING THE LAST DECADE.



INSTEAD, COMPUTER EXPERTS EXPECT GOOGLE'S GRIP TO TIGHTEN. FORCED SIGN-IN IF YOU WANT TO USE GOOGLE MAPS OR WATCH A YOUTUBE VIDEO IS ON THE HORIZON --



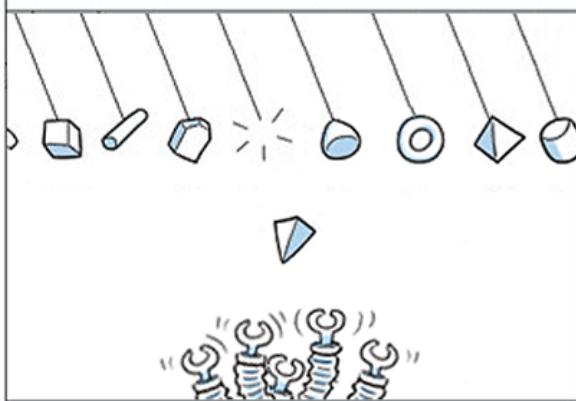
-- SO THAT EVEN MORE DATA VEINS ARE MINED FROM OVER TWO BILLION SLOWLY-BOILING FROGS.



IN THE END, THIS IS THE SOLE PURPOSE CHROME WAS BUILT AROUND: EXTRACTING AND MONETIZING AS MUCH OF YOUR PERSONAL LIFE AS POSSIBLE, WHILE DELIVERING GOOD PERFORMANCE.



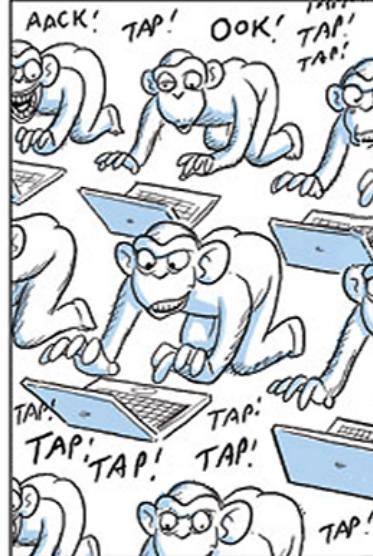
AS ALWAYS, IT IS THE MOST VULNERABLE WHO SUFFER THE DEEPEST FROM THIS DIGITAL ABUSE. DEPENDING ON THE COUNTRY YOU LIVE IN, ONE IDENTIFIER (MUSLIM, LGBTQIA\*, DEMOCRAT) CAN DETERMINE WHETHER YOU WILL GET THAT JOB, THAT CREDIT CARD OR HEALTH INSURANCE POLICY.



AND SOMETIMES, JUST ONE IDENTIFIER PROCESSED THROUGH SHINY "PERSONALIZED" PRODUCTS AND "TAILORED-TO-YOU" SERVICES CAN EVEN SPELL THE DIFFERENCE BETWEEN FREEDOM AND IMPRISONMENT, LIFE AND DEATH.



IT'S TRUE, DEANONYMIZATION IS A PIECE OF CAKE WHEN PEOPLE CONSTANTLY TYPE THEIR LIFE INTO THE CHROME BROWSER LIKE...



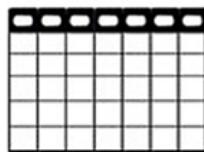
...LIKE... SATISFIED... UM... GOOGLE USERS.



WELL, SOMETHING NEEDS TO BE DONE WHEN WE ARE CONSTANTLY SURVEILLED AND RECORDED --

-- WHEN OUR INNERMOST LIVES ARE INVADED FOR OTHER PEOPLE'S GAINS WITHOUT OUR CONSENT.

HOPEFULLY, THE LAST CHAPTER CAN GIVE YOU AN IDEA ABOUT WHERE TO START.

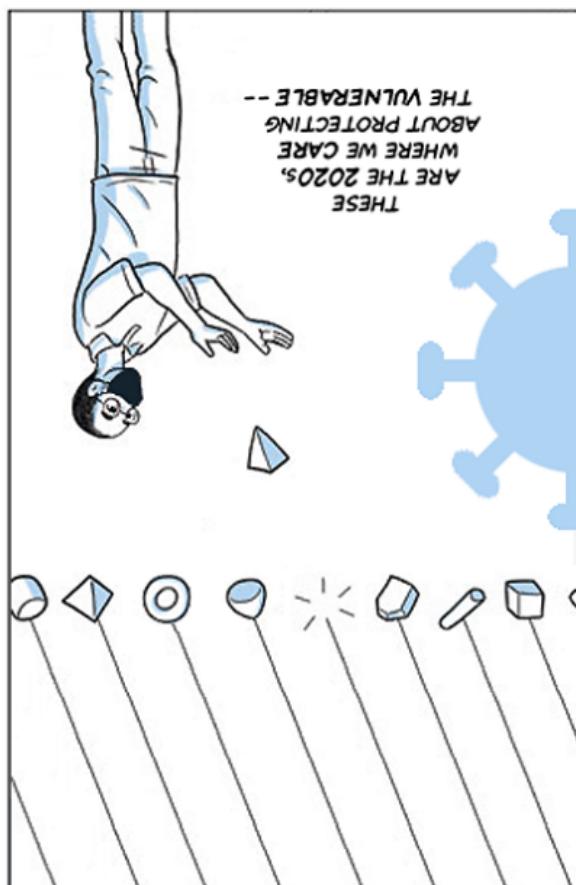
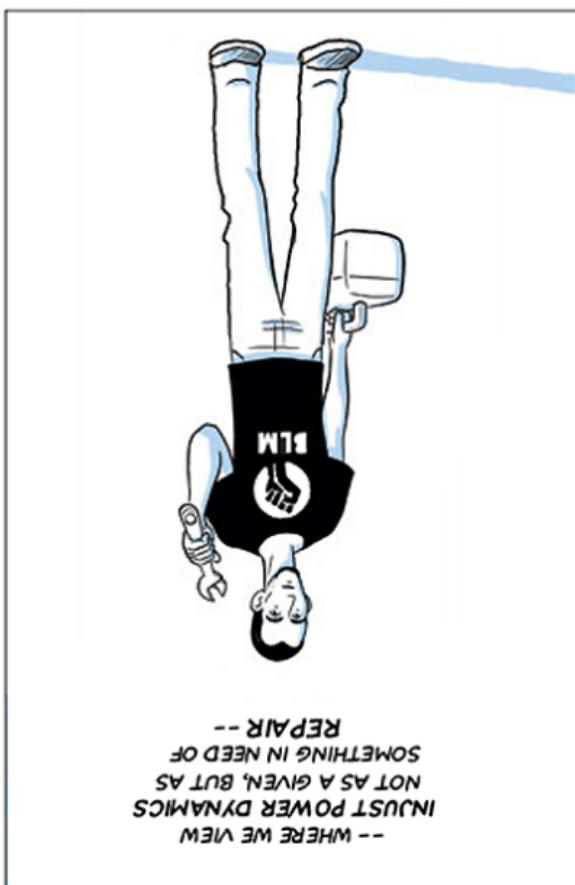
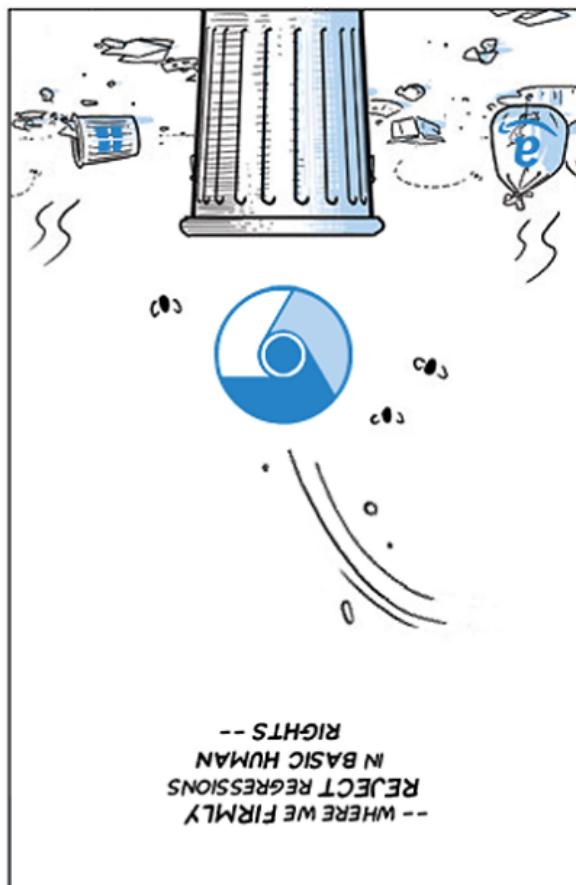


cula88: ROFL ^^

Hrrbl: LOL

DMFG





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Let alone endorsed by the author.

Likewise, all these aforementioned surveillance products are absolutely not affiliated with  
trademarks of Google LLC and this comic, as you might imagine, is not endorsed by or affiliated with Google in any way.  
The Google Chrome™ browser, the Android™ platform, Google Assistant™, Google Play™ Store, Google Search™, YouTube™ and their respective logos are  
trademarks of Google Earth™, Gmail™, Google Maps™, the Google Play™ Store, Google Calendar™, Google Docs™, Google Drive™,  
Google Earth™, Gmail™, Google Maps™, the Google Play™ Store, Google Search™, YouTube™ and their respective logos are



<https://9to5google.com/2019/05/29/chrome-ad-blocking-enterprise-manifest-v3/>

- The original filing submitted by Alphabet to the US Securities and Exchange Commission (SEC):

<https://www.sec.gov/Archives/edgar/data/1652044/000165204419000004/goog10-kq42018.htm#sB8A92C82A7085B27A37F412D2216BC6F>

#### Page 15

- On Google quietly erasing their motto “Don’t be evil” from their code of conduct:

<https://www.zdnet.com/article/google-erases-dont-be-evil-from-code-of-conduct-after-18-years/> and  
<https://gizmodo.com/google-removes-nearly-all-mentions-of-dont-be-evil-from-1826153393>

### PART 4 – THE SHADOW TEXT

#### Page 16

- The “Shadow Text” concept is first introduced in “The Age of Surveillance Capitalism”, Part I, chapter six, “III. Surveillance Capital and the Two Texts”, pp. 183–187 (see *Page 5*). Some remarks by Shoshana Zuboff’s comic character shamelessly quote her real-life counterpart.

#### Page 17

- An example of personality particles being derived from your Shadow Text would be the Facebook “like”, as a 2013 paper by Michal Kosinski, David Stillwell and Thore Graepel (and quoted by Zuboff on p. 274) showed: Facebook “likes” could “automatically and accurately estimate a wide range of personal attributes that people would typically assume to be private,” among them sexual orientation, ethnicity, religious and political views, personality traits, intelligence, happiness, use of addictive substances, parental separation, age, and gender.

#### Page 18

- On personalization, cf. “The Age of Surveillance Capitalism” p. 256 f.: “The machine invasion of human depth is prosecuted under the banner of “personalization,” a slogan that betrays the zest and cynicism brought to the grimy

challenge of exploiting second-modernity needs and insecurities for outside gain.”  
• The de-anonymization of metadata is discussed by Zuboff, e.g. on p. 244f.: “We are told that it’s not possible to identify individuals from these large-scale amalgamations. However, with as little as three bits of data culled from the public record – birth date, zip code, and sex – reidentification science has demonstrated its ability to de-anonymize metadata with ‘disturbing ease.’”

### PART 5 – CONCLUSION

#### Page 20

- The racist slurs have been pixelated so as not to further reproduce hate speech. If you want to see the concrete wording, check out:

<https://www.buzzfeednews.com/article/alexantrowitz/google-allowed-advertisers-to-target-jewish-parasite-black>

• Like “Shadow Text”, “radical indifference” is a term coined by Shoshana Zuboff. Cf. <https://www.theguardian.com/technology/2017/mar/25/google-youtube-advertising-extremist-content-att-verizon>

• Trump voter manipulation via “Shadow Text”:

<https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election> and

<https://theintercept.com/2017/03/30/facebook-failed-to-protect-30-million-users-from-having-their-data-harvested-by-trump-campaign-affiliate/>

• Brexit voter manipulation:

<https://www.theguardian.com/technology/2017/may/07/the-great-british-brexit-robery-hijacked-democracy>

#### Page 21

- On Google spending ~\$150 million on US lobbying over last decade:

<https://boingboing.net/2020/01/22/google-spent-150-million-on.html>

• On Google as one of Brussels’ most active lobbyists:

<https://lobbyfacts.eu/articles/12-12-2016/google-one-brussels%E2%80%99-most-active-lobbyists> and

<https://lobbyfacts.eu/reports/lobby-costs/all/0/1/2/2/21/0>

#### Page 22

- On Chrome not being the speedy beast it used to be, see this Google Trends graphic comparing the search terms “Chrome slow” and “Firefox slow” from 2008 to 2021:

<https://trends.google.com/trends/explore?date=2008-01-01%202021-01-01&q=chrome%20slow,firefox%20slow>

#### Page 23

- Download Firefox here:

<https://www.mozilla.org/en-US/firefox/new/>

- Download Tor Browser here:

<https://www.torproject.org/download/>

(It is worth noting that some critics view Firefox as part of the Google ecosystem. Google’s considerable funding of Firefox is seen as a strategy to evade antitrust legislation by simulating a pseudo-competitor, while Mozilla, the foundation behind Firefox, is strikingly unwilling to investigate more independent sources of revenue for years – but even most of those critics grudgingly use Firefox.)

### EPILOGUE

#### Page 29

- On Chrome’s initially planned FloC technology as a serious security concern:

<https://www.eff.org/deeplinks/2021/03/googles-floc-terrible-idea> and

<https://www.wired.co.uk/article/google-floc-trial>

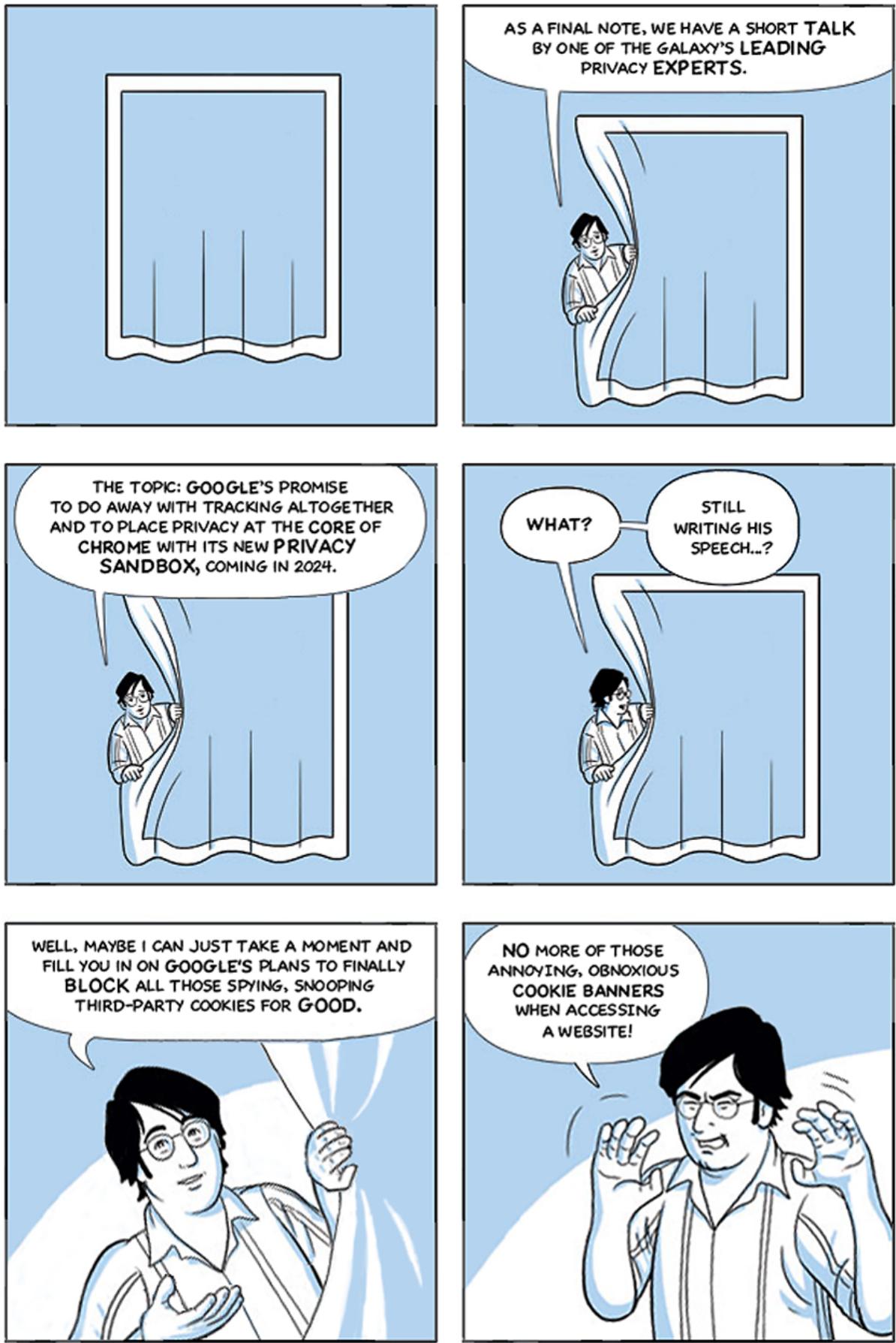
- Report on Google’s backpedaling concerning FloC:

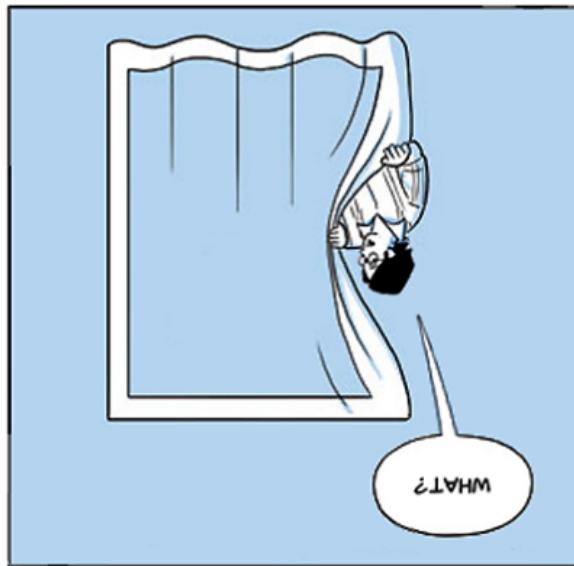
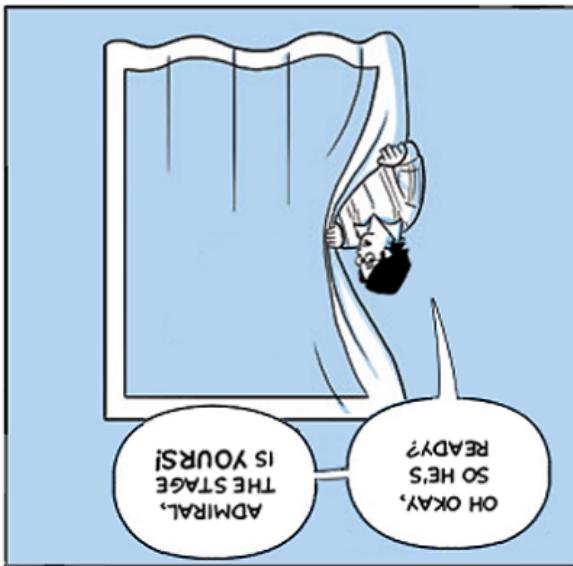
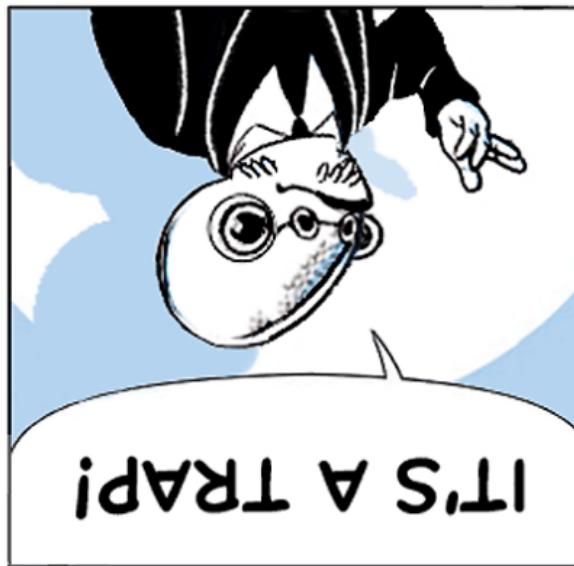
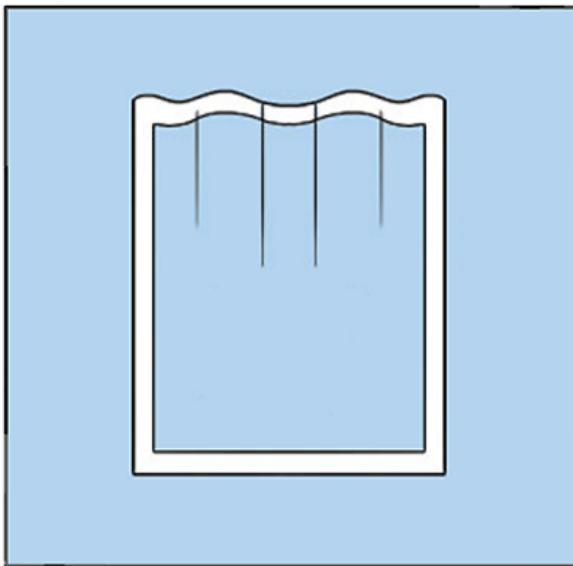
<https://arstechnica.com/gadgets/2022/01/google-drops-floc-after-widespread-opposition-pivots-to-topics-api-plan/>

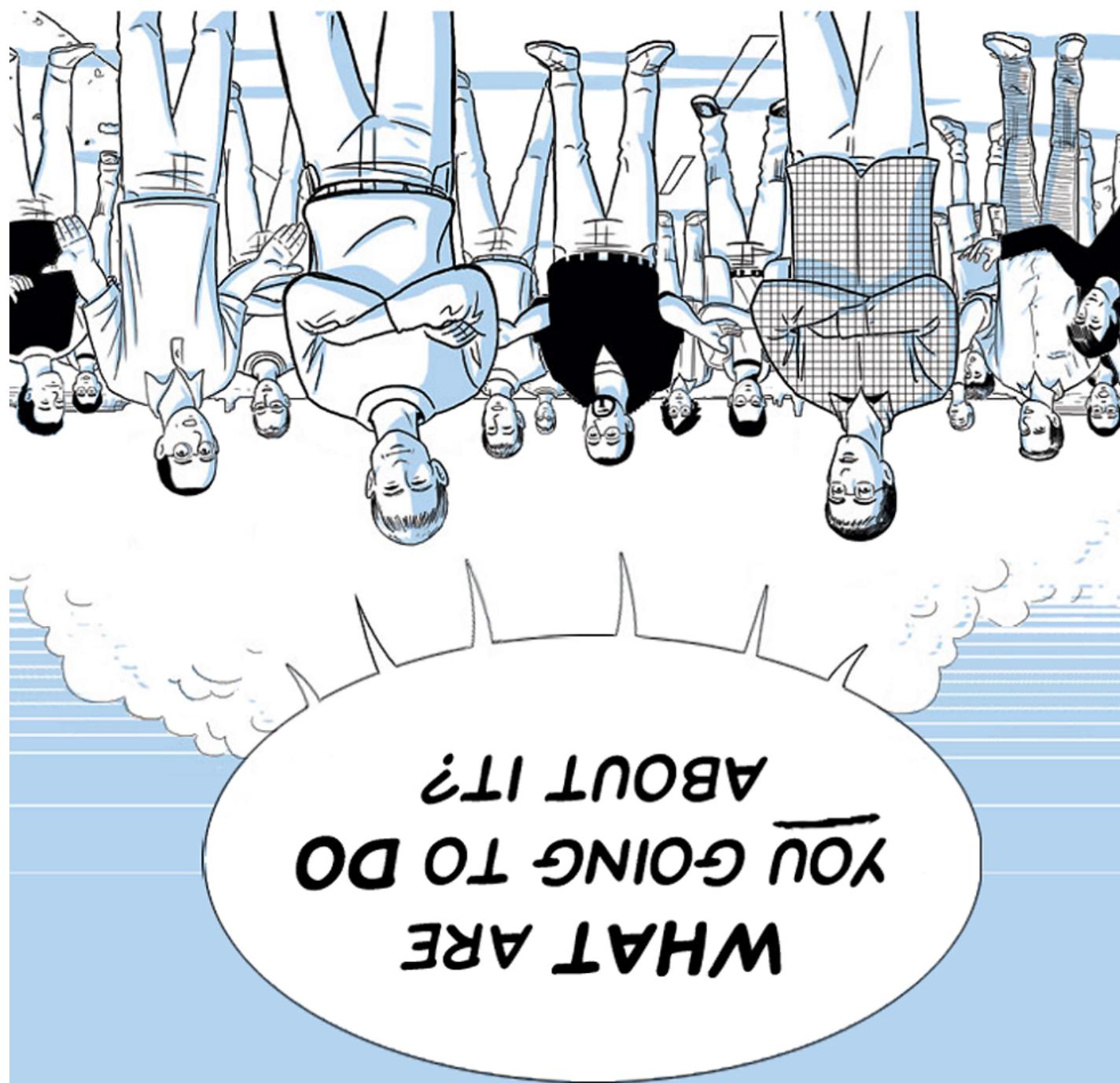
- Source for the piranha quote:  
<https://bigbrotherawards.de/en/2021/what-really-makes-me-angry-google>

• And lastly, hundreds of German data-harvesting publishers and advertising companies, among them Axel Springer, filing an EU antitrust complaint against Google in early 2022, claiming damage for their businesses once third-party cookies are abolished:

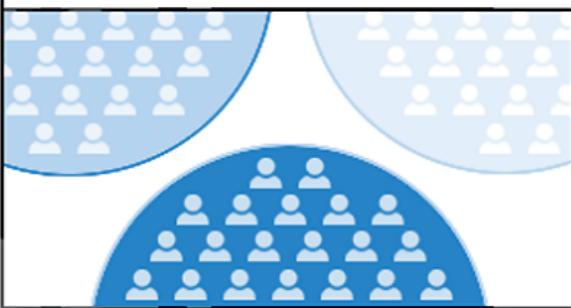
<https://techcrunch.com/2022/01/24/germany-publishers-privacy-sandbox-complaint/>







INSTEAD, CHROME ITSELF WILL ANALYZE ALL YOUR BROWSING HABITS AND - DEPENDING ON YOUR SURFING PROFILE OF THE PAST DAYS - PUT YOU IN A SO-CALLED "COHORT" WITH OTHERS WHO HAVE BEEN TO SIMILAR SITES.



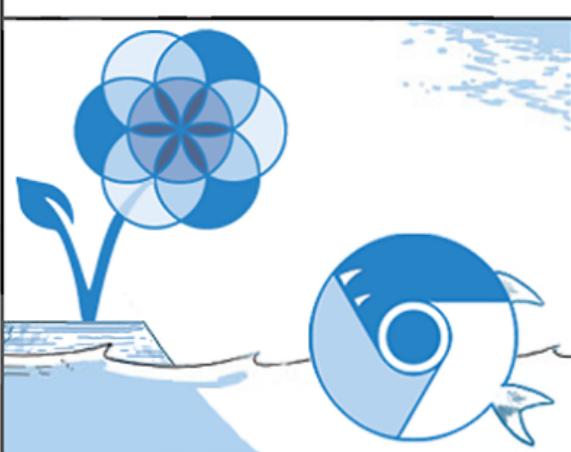
ACCORDING TO GOOGLE, THIS WAY YOUR PRIVACY WILL BE PROTECTED MUCH BETTER THAN BEFORE.

ACCORDING TO PRACTICALLY EVERYONE ELSE, AMONG THEM MANY INTERNET EXPERTS, YOU WILL BE MONITORED EVEN MORE PRECISELY AND RELENTLESSLY THAN BEFORE.

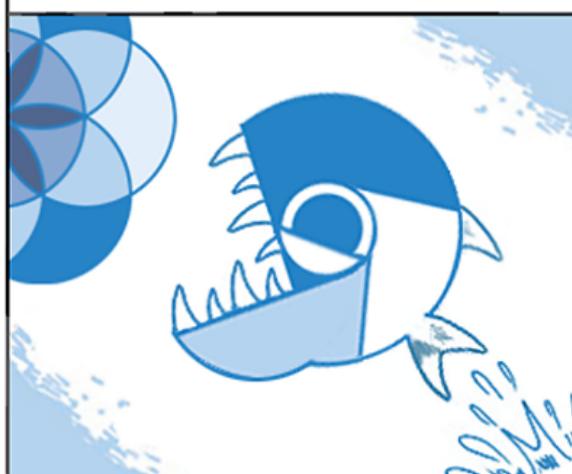


ANOTHER OUTCRY ENSUED, AND ANOTHER ROUND OF GOOGLE BACKPEDALING, A TINY BIT, FOR NOW.\*

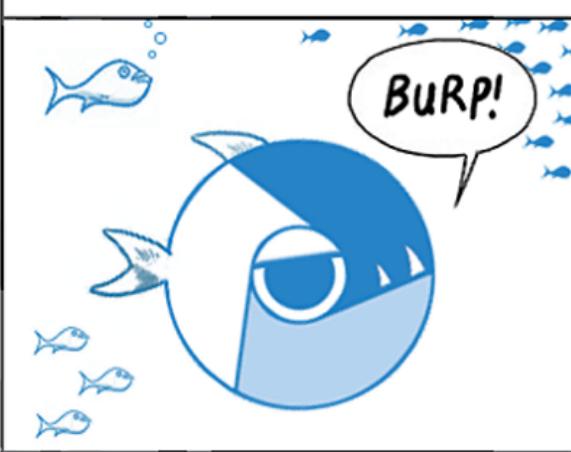
BUT, AS RENA TANGENS, MEMBER OF GERMAN PRIVACY NGO DIGITALCOURAGE, RECENTLY REMARKED: "PIRANHAS WILL BECOME VEGANS..."



"...BEFORE GOOGLE FOREGOES 99 PERCENT OF ITS PROFITS." - TRACKERS GONNA TRACK.



THIS IS MUCH MORE ABOUT GOOGLE BLOCKING ITS DATA-HARVESTING COMPETITORS IN ORDER TO AMASS EVEN MORE MARKET POWER IN ITS OWN HANDS.



BY THE WAY, MOST OTHER BROWSERS HAVE BEEN BLOCKING THIRD-PARTY COOKIES FOR A LONG TIME NOW WITHOUT REPLACING THIS SURVEILLANCE TECHNOLOGY WITH ANOTHER ONE.

AND YET IT WILL BECOME A GLOBAL STANDARD THE MOMENT IT IS ROLLED OUT WITH CHROME.



## ANNOTATIONS

### INTRODUCTION

#### Page 1

- The online version of Scott McCloud's original Chrome Comic from 2008 can be found at:  
<https://www.google.com/googlebooks/chrome/index.html>

See also <https://scottmccloud.com/7-consulting/index.html>

#### Page 2

- Google Chrome active installs:  
<https://pctechmag.com/2016/11/google-chrome-hits-a-milestone-of-two-billion-active-installs/>
- Global browser market share 2020:  
<https://gs.statcounter.com/browser-market-share-or> or  
[https://en.wikipedia.org/wiki/Usage\\_share\\_of\\_web\\_browsers](https://en.wikipedia.org/wiki/Usage_share_of_web_browsers)  
(It's worth noting here that browsers like Edge, Opera and Vivaldi are merely built on top of Chrome's core technology.)
- Google revenue in 2021:  
<https://www.statista.com/statistics/266206/googles-annual-global-revenue/>

### PART 1 – DIAL O FOR OMNIBOX

#### Page 4

- On the Omnibox “No Return Policy”:  
<https://www.theguardian.com/technology/blog/2008/sep/04/googlechromeprivacyissuesusa>
- Cf. this blog post by John Hopkins cryptographer Matthew Green, “Why I’m done with Chrome”:  
<https://blog.cryptographyengineering.com/2018/09/23/why-im-leaving-chrome/>

#### Page 5

- Chrome’s current Privacy Policy:  
<https://www.google.com/chrome/privacy/>
- Panels 2-5 are based on, and sometimes heavily quote, Shoshana Zuboff, “The Age of Surveillance Capitalism” (New York: Hachette Book Group, 2019), pp. 186–187.

#### Page 6

- On the not-at-all incognito mode, see  
<https://choosetoencrypt.com/privacy/chromes-incognito-mode-isnt-private-so>

[whats-the-point/](#) as well as

<https://spreadprivacy.com/tracking-in-incognito/>

- Chrome tracking your movements even when you have turned off location “services”:

<https://apnews.com/828aefab64d4411bac257a07c1af0ecb/AP-Exclusive:-Google-tracks-your-movements-like-it-or-not>

• “Both Android and Chrome send data to Google even in the absence of any user interaction.” (From „Google Data Collection”, a 2018 paper by Vanderbilt University professor Douglas C. Schmidt)  
<https://digitalcontentnext.org/wp-content/uploads/2018/08/DCN-Google-Data-Collection-Paper.pdf>

- The original Washington Post article will not be linked here, as the only way to peek behind its paywall is to be thoroughly tracked; you can find Geoffrey Fowler’s arguments here as well (some of which have made it directly onto the comics page):  
<https://www.newstalkz.co.nz/lifestyle/technology/geoffrey-fowler-why-googles-web-browser-has-become-spy-software/>

#### Page 7

- A helpful tool for breaking down Chrome’s labyrinthine Privacy Policy:  
<https://myshadow.org/lost-in-small-print/googles-privacy-policy>

### PART 2 – PLATFORM PUZZLES

#### Page 10

- On Chrome for Android sending location coordinates to Google, see Geoffrey Fowler’s article listed under Page 6.
- If you use Chrome and/or have a Google account, you can verify the worrying Google Maps/Google Earth behavior by visiting:  
<https://myactivity.google.com/>
- About Google Home privacy issues:  
<https://www.theguardian.com/technology/2019/jul/11/google-home-assistant-listen-recordings-users-privacy>

#### Page 11

- For details on Google’s data center security practices, see:

<https://www.datacenterknowledge.com/archives/2017/01/13/paper-details-google-data-center-security-design>

### PART 3 – THE REGRESSION GAME

#### Page 12

- The new sync mode has been widely discussed and criticized:  
<https://www.zdnet.com/article/google-secretly-logs-users-into-chrome-when-ever-they-log-into-a-google-site/> and  
<https://www.wired.com/story/google-chrome-login-privacy/> and  
[https://www.vice.com/en\\_us/article/gyny83/google-chrome-sync-privacy](https://www.vice.com/en_us/article/gyny83/google-chrome-sync-privacy)

It was also the focus of Matthew Green’s infamous blog post listed under Page 4.

#### Page 13

- See the Chrome Privacy Policy listed under Page 5.
- Chrome as covert listening tool:  
<https://boingboing.net/2015/06/24/chrome-update-turns-browsers-i.html>
- Secret recordings of audio/video:  
<https://thehackernews.com/2017/05/browser-camera-microphone.html>

• About the Chrome Cleanup Tool “poking through your underwear drawer without asking” (Matthew Green):  
[https://www.vice.com/en\\_us/article/wj7x9w/google-chrome-scans-files-on-your-windows-computer-chrome-cleanup-tool](https://www.vice.com/en_us/article/wj7x9w/google-chrome-scans-files-on-your-windows-computer-chrome-cleanup-tool)

- On Chrome’s surveilling hyperlink auditing:  
<https://boingboing.net/2019/04/08/no-opt-out.html>

• On Google secretly exempting its own websites when you ask Chrome to wipe all cookies and site data:  
[https://www.theregister.com/2020/10/19/google\\_cookie\\_wipe](https://www.theregister.com/2020/10/19/google_cookie_wipe)

- On Chrome monitoring your sleep cycle and daily routine via ‘Idle Detection’: [https://www.theregister.com/2021/09/22/google\\_emits\\_chrome\\_94\\_with/](https://www.theregister.com/2021/09/22/google_emits_chrome_94_with/)

#### Page 14

- On Google restricting modern ad blockers:  
<https://www.forbes.com/sites/kateoflahertyuk/2019/05/30/google-just-gave-2-billion-chrome-users-a-reason-to-switch-to-firefox/> and