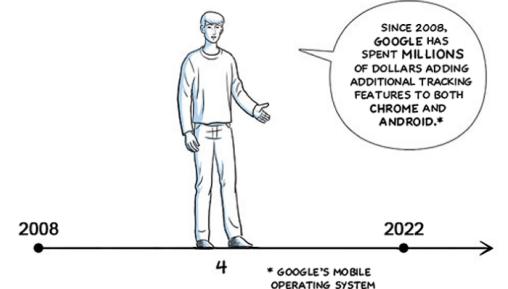
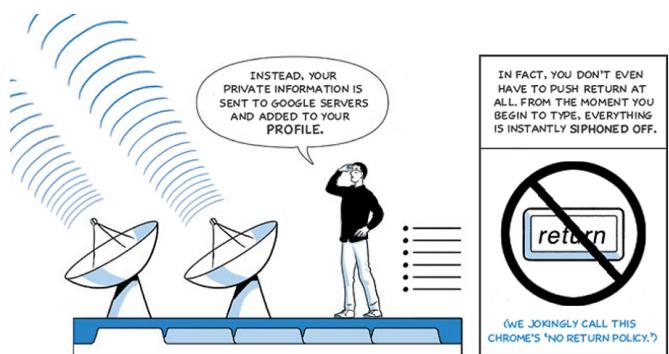
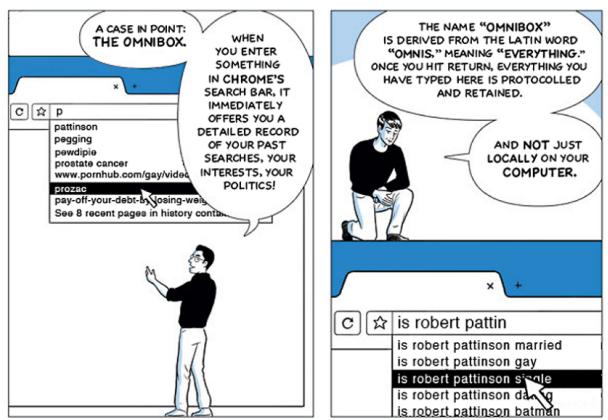
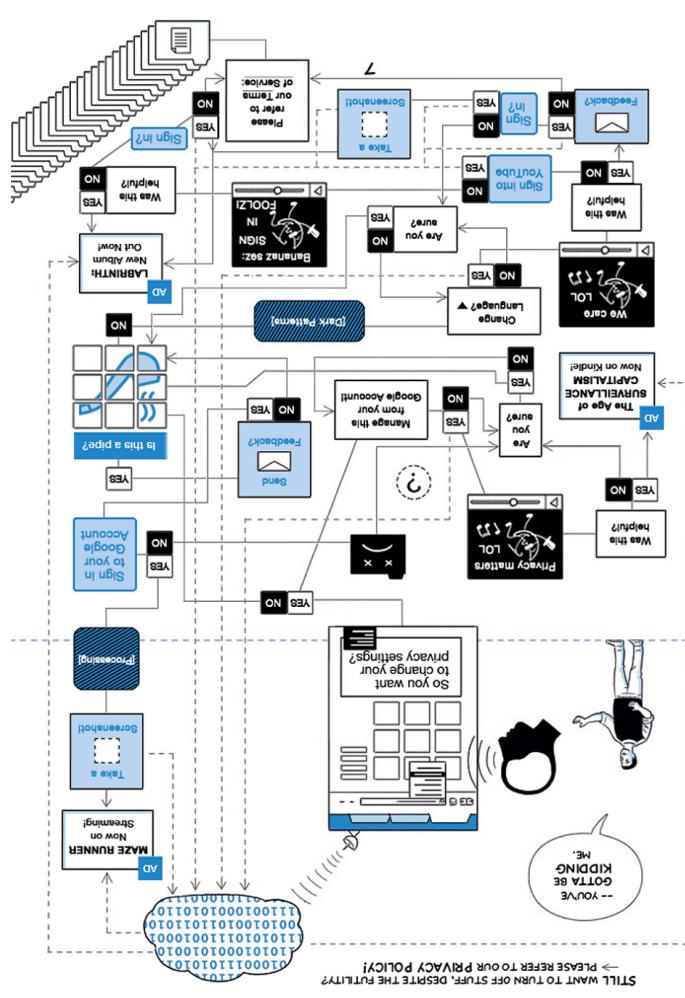
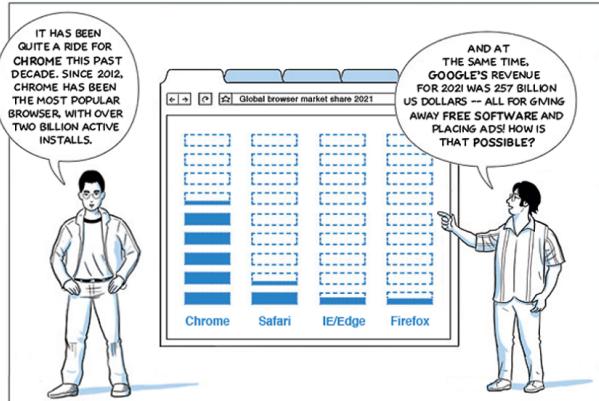
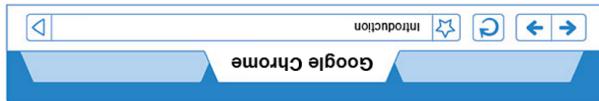
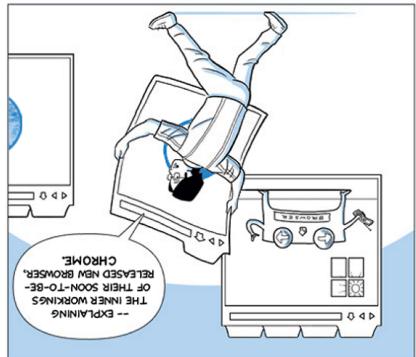
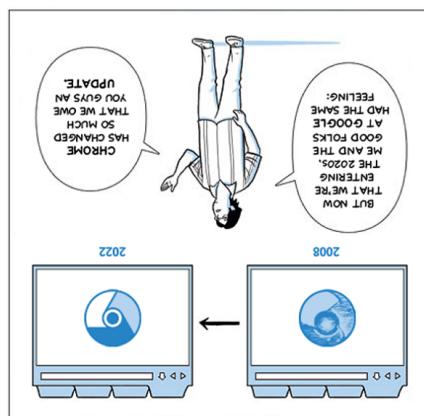
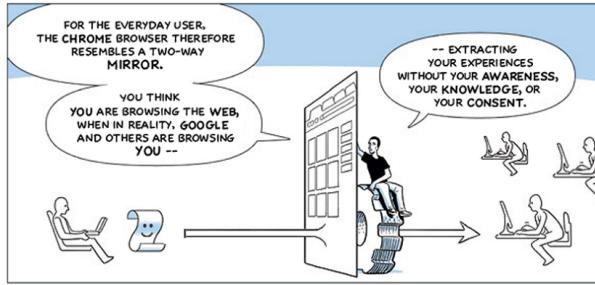
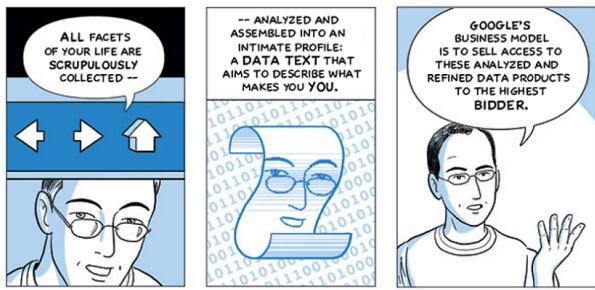
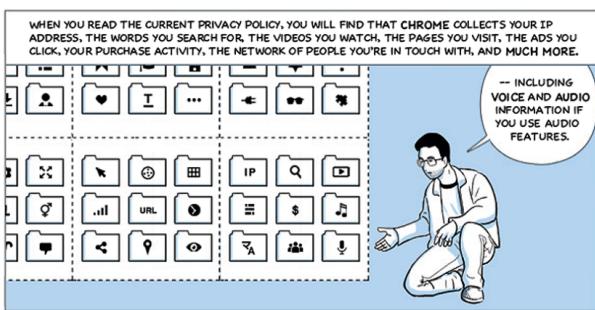
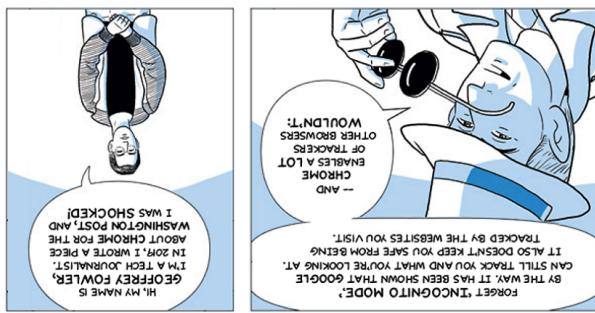
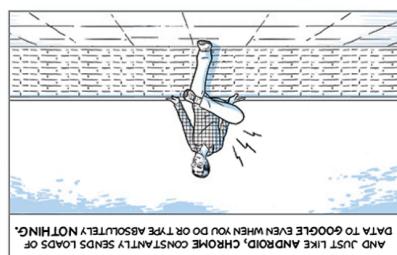


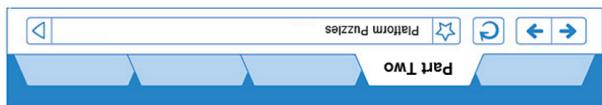
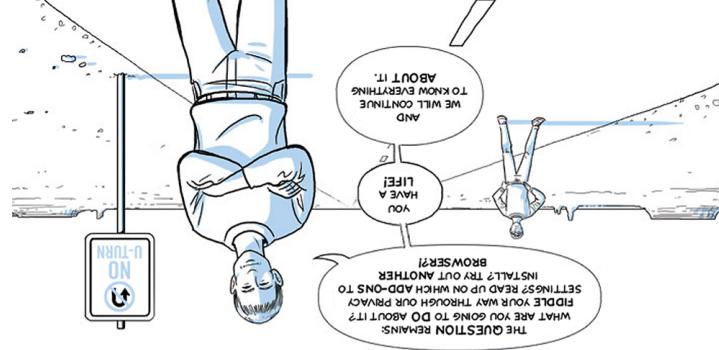
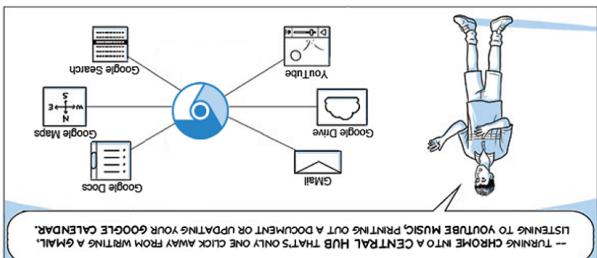
How Google's Browser became a threat to privacy and democracy

CHROME CONTRA

Leah Elliott







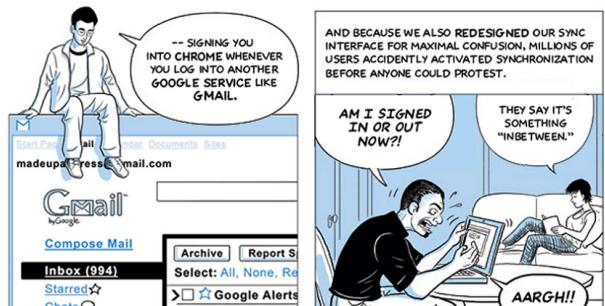
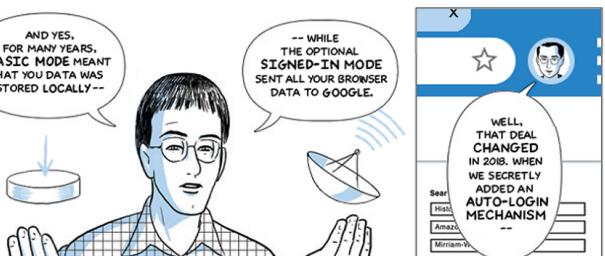
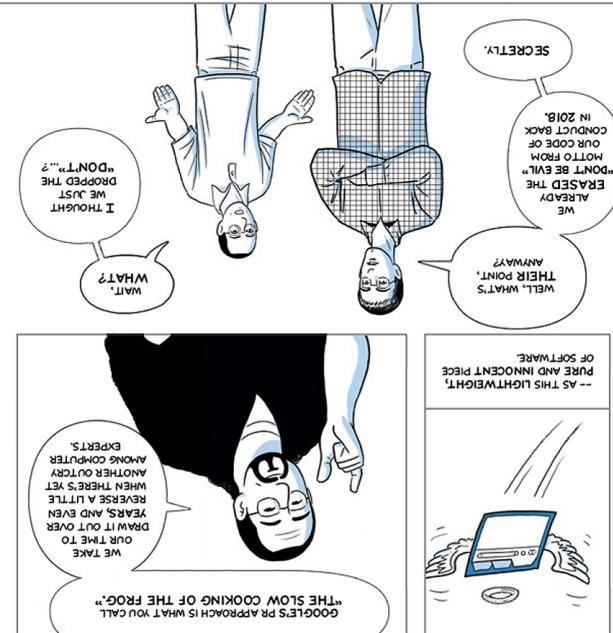
-- ROAM FREELY THROUGH A CLOSE-MESHED FIBER OPTIC WEB, A GARGANTUAN ONE-WAY ANT TRAIL MARCHING TOWARDS GOOGLE'S DATA CENTERS:

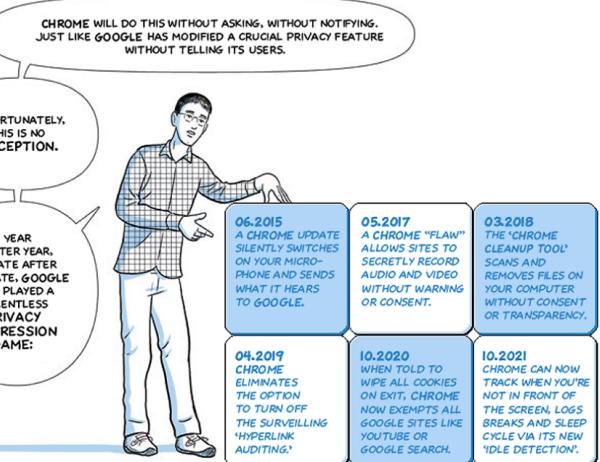
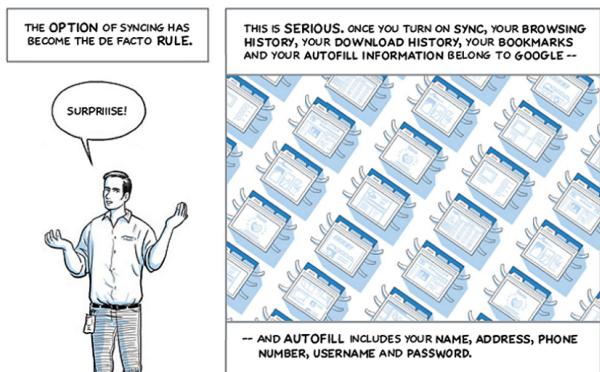
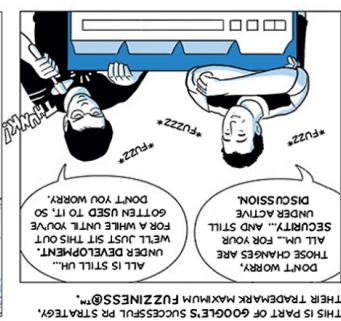
VAST INDUSTRIAL COMPLEXES, HEAVILY GUARDED BY BARBED WIRE FENCES, VEHICLE BARRIERS, BIOMETRIC IDENTIFICATION, AND LASER-BASED INTRUSION DETECTION SYSTEMS.

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

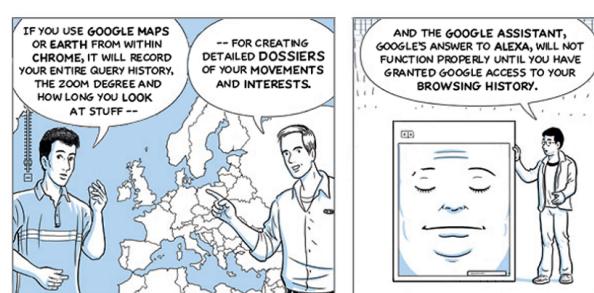
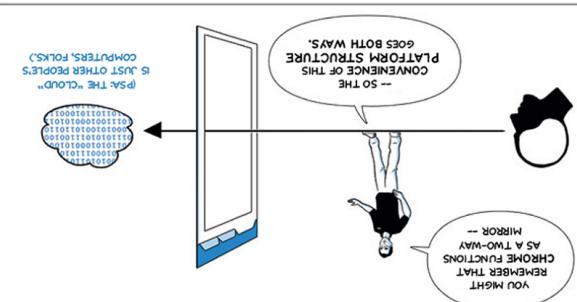
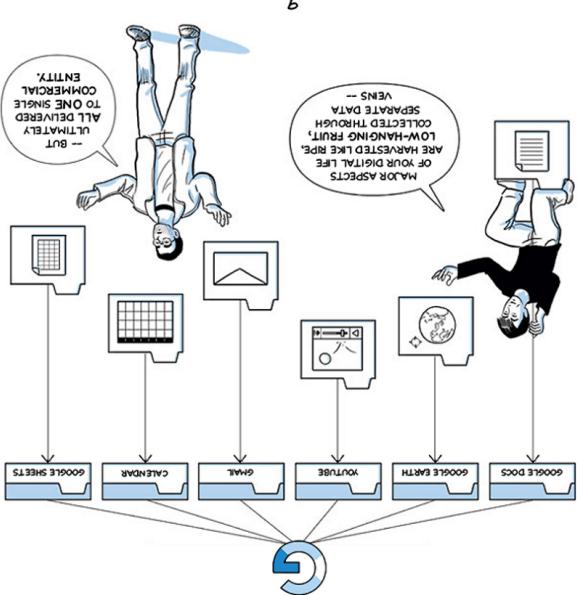
-- LEAVES, WHICH, JUST AS THEIR PHOTOGRAPHIC COUNTERPARTS, ORGANIZE BUNDLED INFORMATION IN ORDER TO CONSTRUCT A PRECISE PORTRAIT OF YOU. AT THE CENTER OF IT ALL:

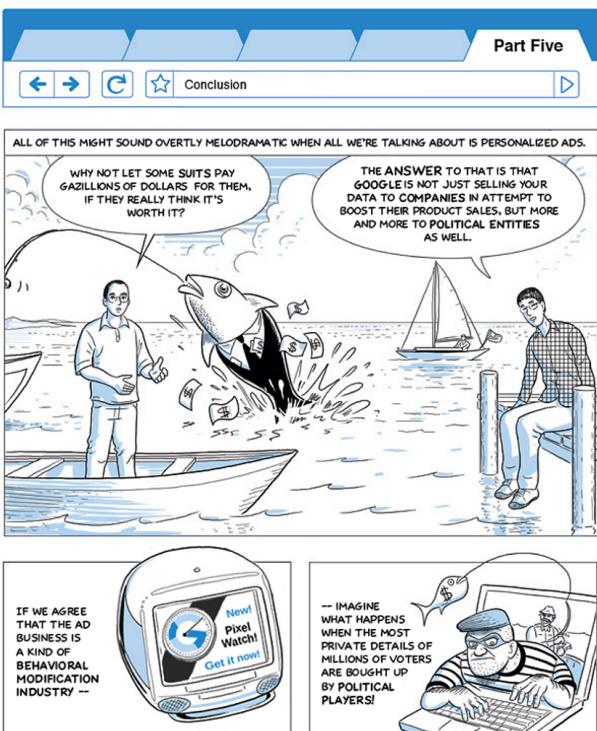
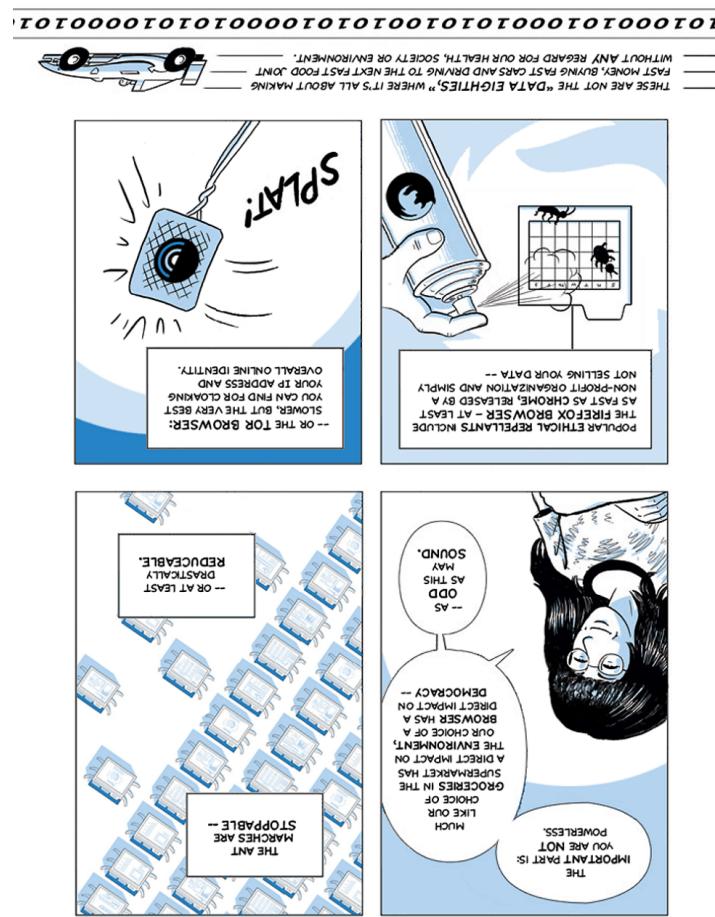
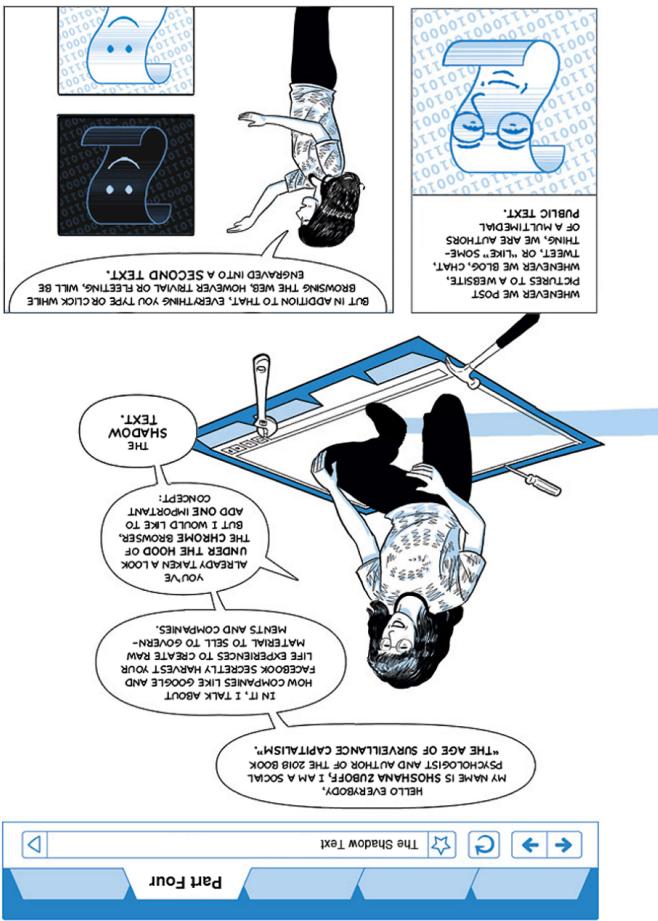
A LENS - EXPRESSIONLESS AND EVER-WATCHING.



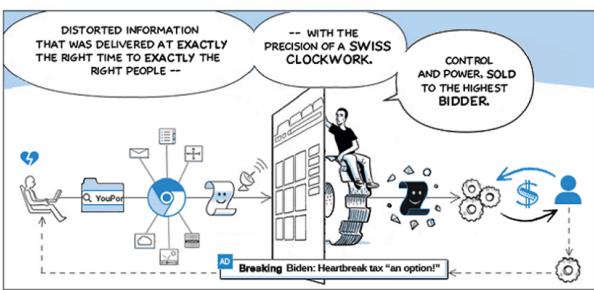
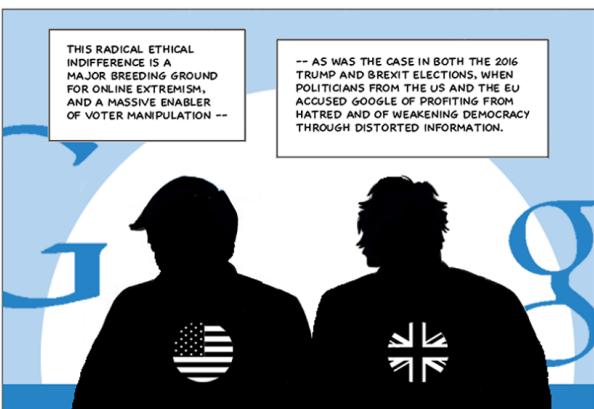


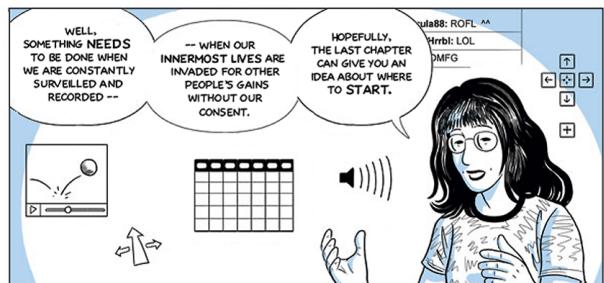
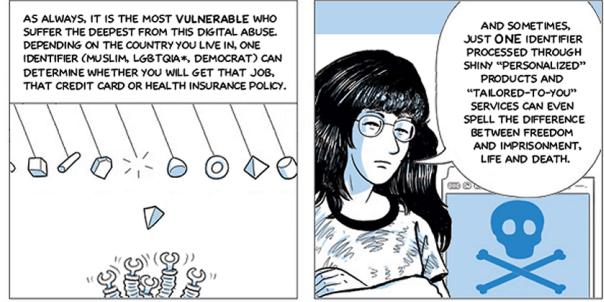
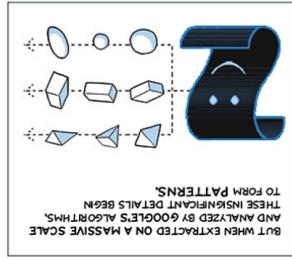
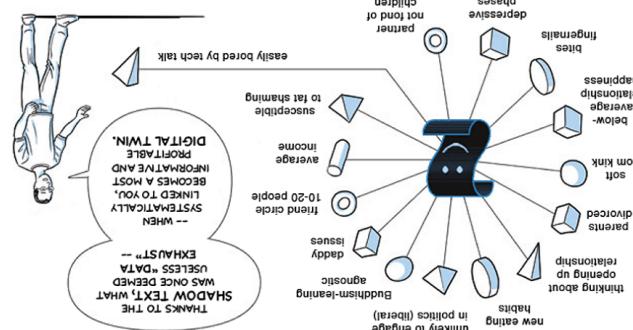
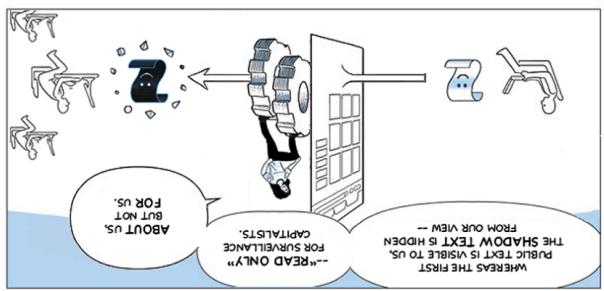
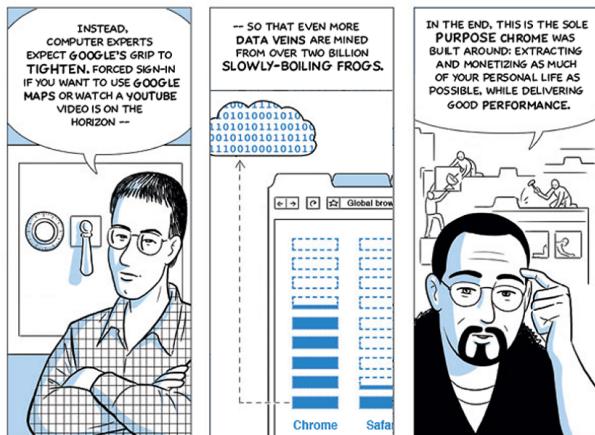
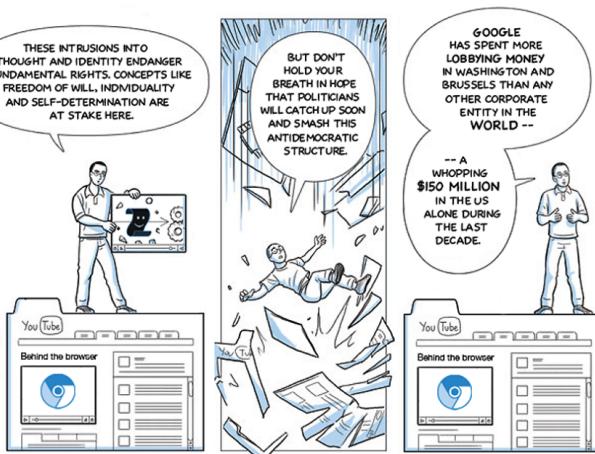
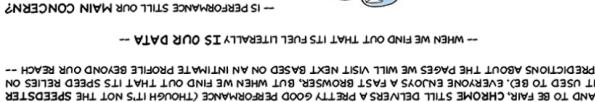
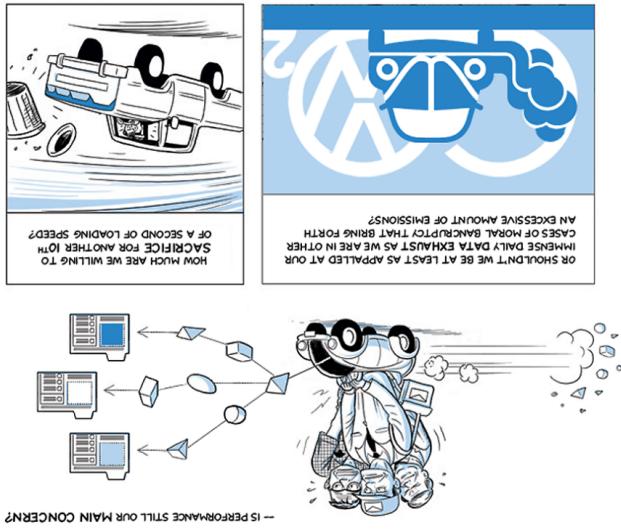
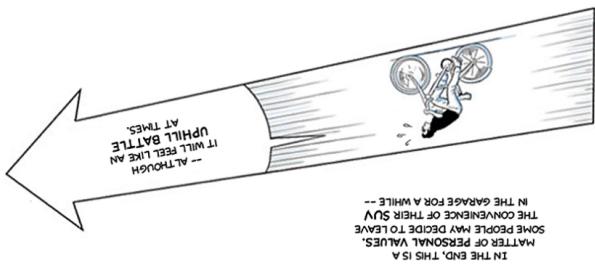
- 06.2015 A CHROME UPDATE SECRETLY SWITCHES ON YOUR MICROPHONE AND SENDS WHAT IT HEARS TO GOOGLE.
- 05.2017 A CHROME "FLAW" ALLOWS SITES TO SECRETLY RECORD AUDIO AND VIDEO WITHOUT WARNING OR CONSENT.
- 03.2018 THE "CHROME CLEANUP TOOL" SCANS AND REMOVES FILES ON YOUR COMPUTER WITHOUT CONSENT OR TRANSPARENCY.
- 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."

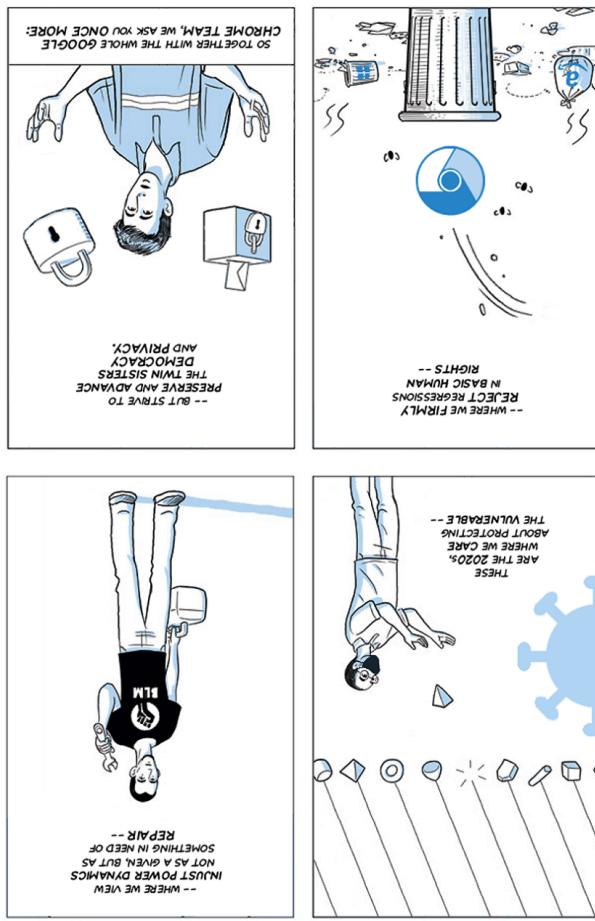




REPORTERS AT BUZZFEED DISCOVERED THAT GOOGLE ENABLED ADVERTISERS TO TARGET ADS TO PEOPLE WHO TYPE RACIST AND ANTI-SEMITIC SLURS INTO THE OMNIBAR.







<https://9to5google.com/2019/05/29/chrome-ad-blocking-enterprise-manifest-v2/>
 • The original filing submitted by Alphabet to the US Securities and Exchange Commission (SEC):
<https://www.sec.gov/Archives/edgar/data/1652044/00016520441900004/google10k2018.htm#B8A92C82A7085B27A37E41202216BC6F>

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://qzmodo.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 "likes" 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/alexanderwong/google-allows-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-zuboff>

• 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-hacked-democracy>

• 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://hightherewards.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/>

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-flo-terrible-idea-and>

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

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

• Report on Google's backpedaling concerning FLoC:

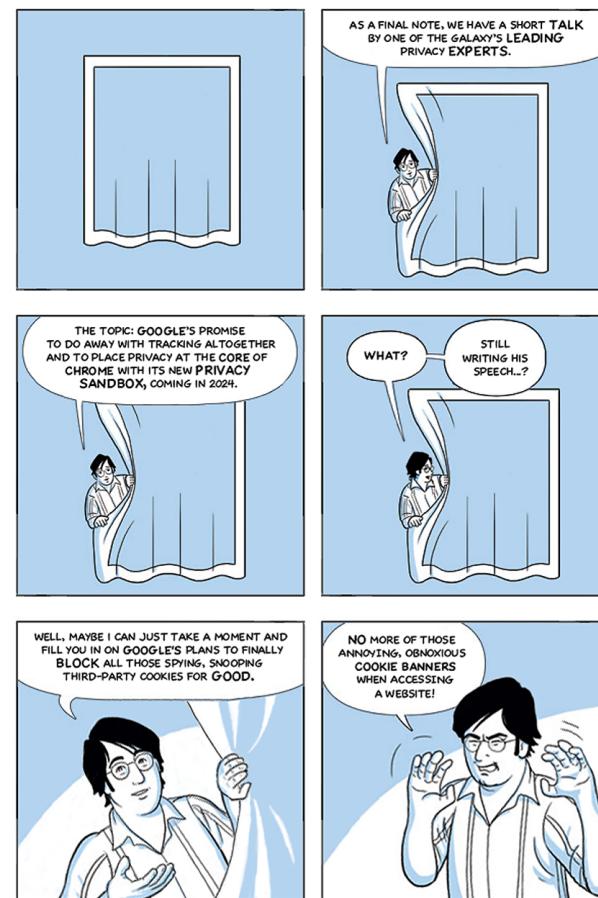
<https://arstechnica.com/gadgets/2022/01/google-drops-floc-after-widespread-opposition-pivots-to-topics-api-plan/>

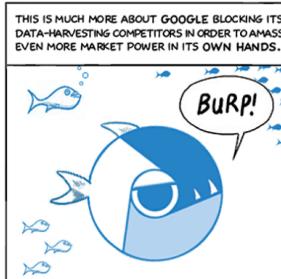
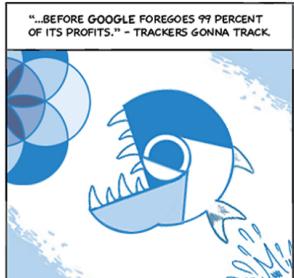
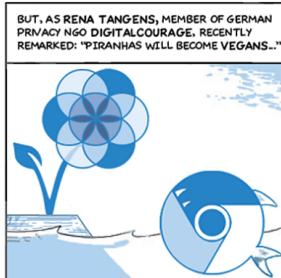
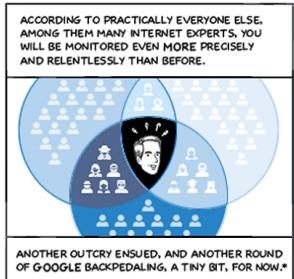
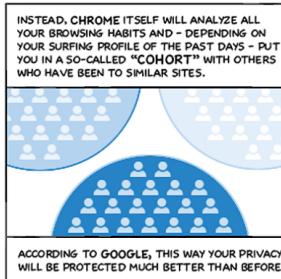
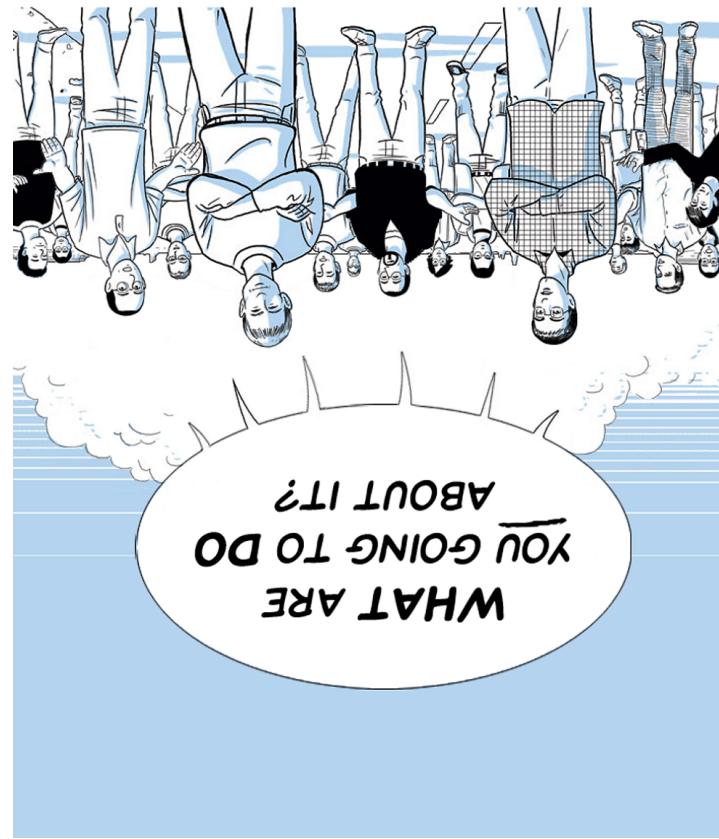
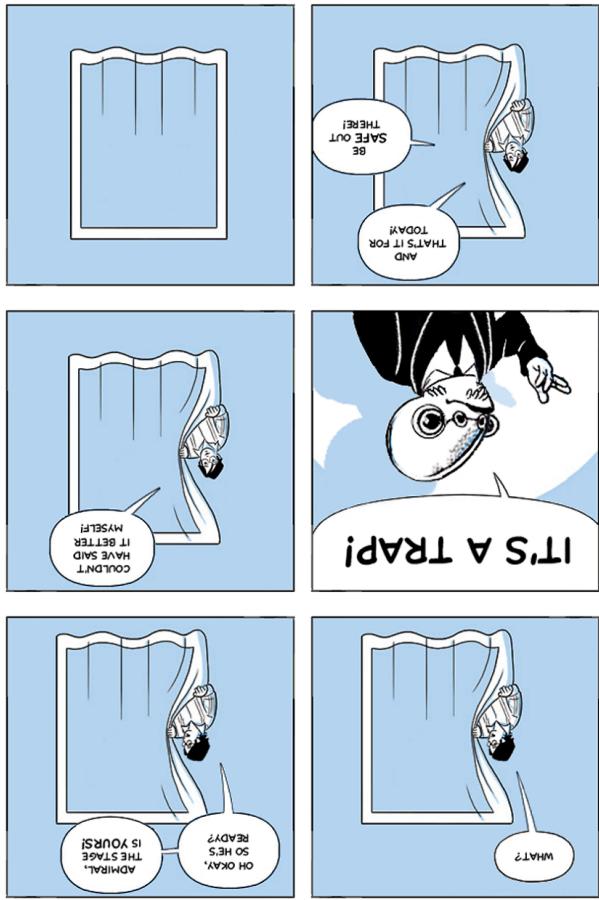
• Source for the piranha quote:

<https://hightherewards.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/>





ANNOTATIONS

INTRODUCTION

Page 1

- The online version of Scott McCloud's original comic from 2008 can be found at: <https://www.google.com/googlebooks/chrome/index.html>
- See also <https://scottmccloud.com/~consulting/index.html>

Page 2

- Google Chrome active installs: <https://techmag.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>
- (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/2009/sep/04/googlechromeprivacyissues>
- 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

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

<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 critized: <https://www.cnet.com/article/google-secretly-logs-users-into-chrome-everwhere-they-log-into-a-google-site/> and <https://www.wired.com/story/google-chrome-login-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/w7xd9/google-chrome-scans-files-on-your-windows-computer-chrome-cleanup-tool

On Chrome's surveillance auditing: <https://boingboing.net/2019/04/08/no-one-out.html>

- On Google secretly exempting its own websites when you Chrome to wipe all cookies and site data: 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_web/

Page 14

- On Google restricting modern ad blockers: <https://www.forbes.com/sites/katefahertyuk/2019/05/01/google-just-gave-2-billion-chrome-users-a-reason-to-switch-to-firefox/> and