

Consumer privacy II

Privacy in Context

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Reminder

- The server challenge is due this evening by 11:59 PM (MST)
 - We'll discuss some more hints at the end of class



Small mention of interesting things...

- [Google transparency project](#)
- [privacy.com](#)
- Using the UA library resources without authenticating directly, using SSH port forwarding



Warm-up discussion

- What does 'autonomy' mean?
- Provide three example situations in which you might control another person by leveraging something you secretly know about them?



College of Social
& Behavioral Sciences

CONVERSATIONS ON PRIVACY

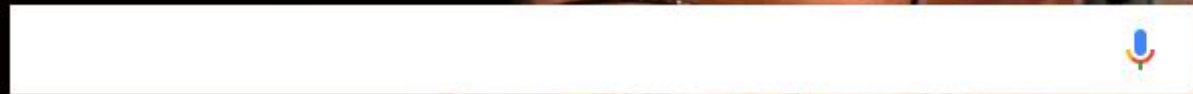
PLEASE SCROLL



“Google is perhaps the most instructive case of how the black box culture developed, and why it matters. Before Google, web navigation for consumers often meant cluttered portals, garish ads, and spam galore.

Google

Google took over the field by delivering clear, clean, and relevant results in fractions of a second. ...But commercial success has given the company almost inconceivable power, not least over what we find online.”
-Pasquale



Google Search

I'm Feeling Lucky

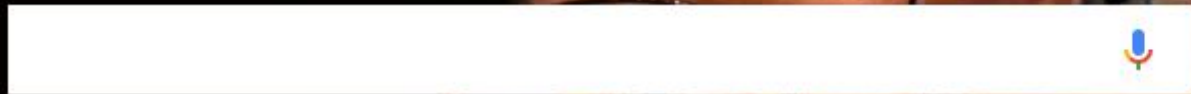
““Better user experience” is the reason the major Internet companies give for almost everything they do.

Google took over the field by delivering clear, clean, and relevant results in fractions of a second.

Even Silicon Valley skeptics credit Google with bringing order to chaos. For the skilled searcher, Google is a godsend, a dynamic Alexandrian Library of digital content.

[...] But surely their interests must conflict with ours sometimes—and then what?

Google

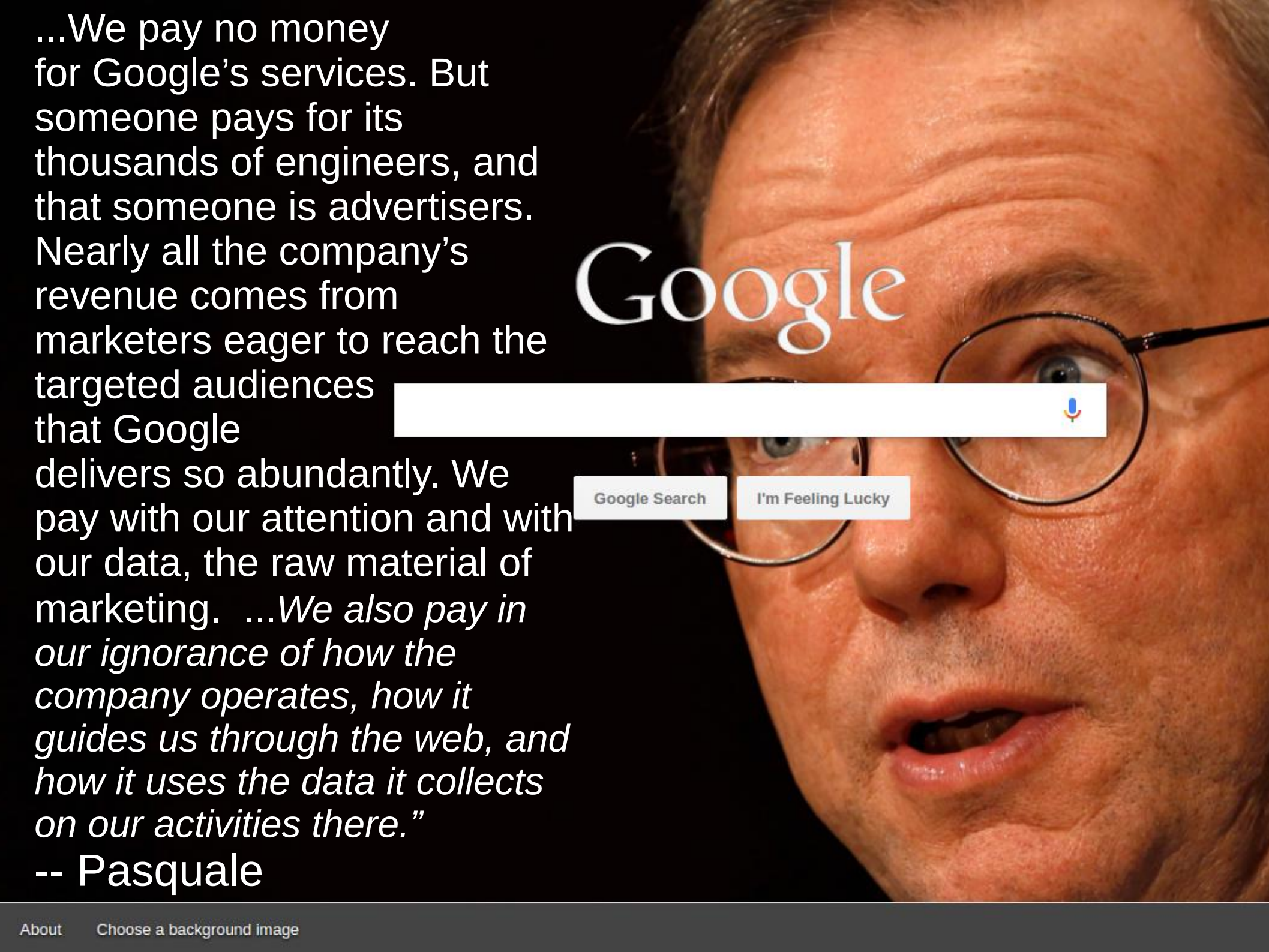
A white rectangular search bar with a small, colorful microphone icon on the right side.

Google Search

I'm Feeling Lucky

...We pay no money for Google's services. But someone pays for its thousands of engineers, and that someone is advertisers. Nearly all the company's revenue comes from marketers eager to reach the targeted audiences that Google delivers so abundantly. We pay with our attention and with our data, the raw material of marketing. ...*We also pay in our ignorance of how the company operates, how it guides us through the web, and how it uses the data it collects on our activities there.*"

-- Pasquale



Google

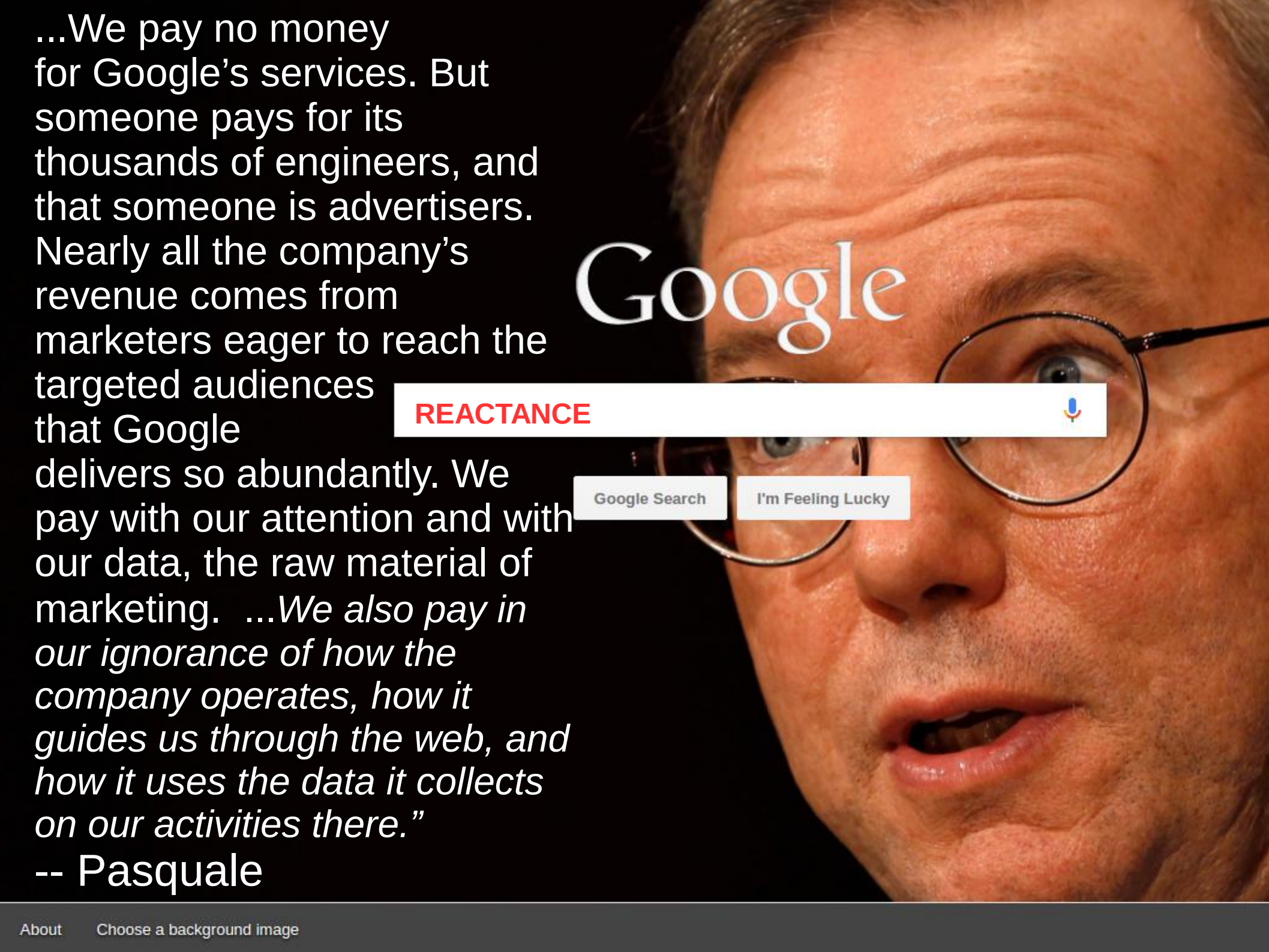


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Google

REACTANCE



Google Search

I'm Feeling Lucky



How Google's interests are sometimes different from our own

- “But surely [Google's] interests must conflict with ours sometimes—and then what?”
- In groups of two, discuss some ways that Google's interests may diverge from the interests of the users of its services (use the live-question tool)



How Google's interests are sometimes different from our own

- Using organic search results to sell paid search results
- “advertising funded search engines will be inherently biased towards the advertisers and away from the needs of the consumers.” (Page and Brin 1998)



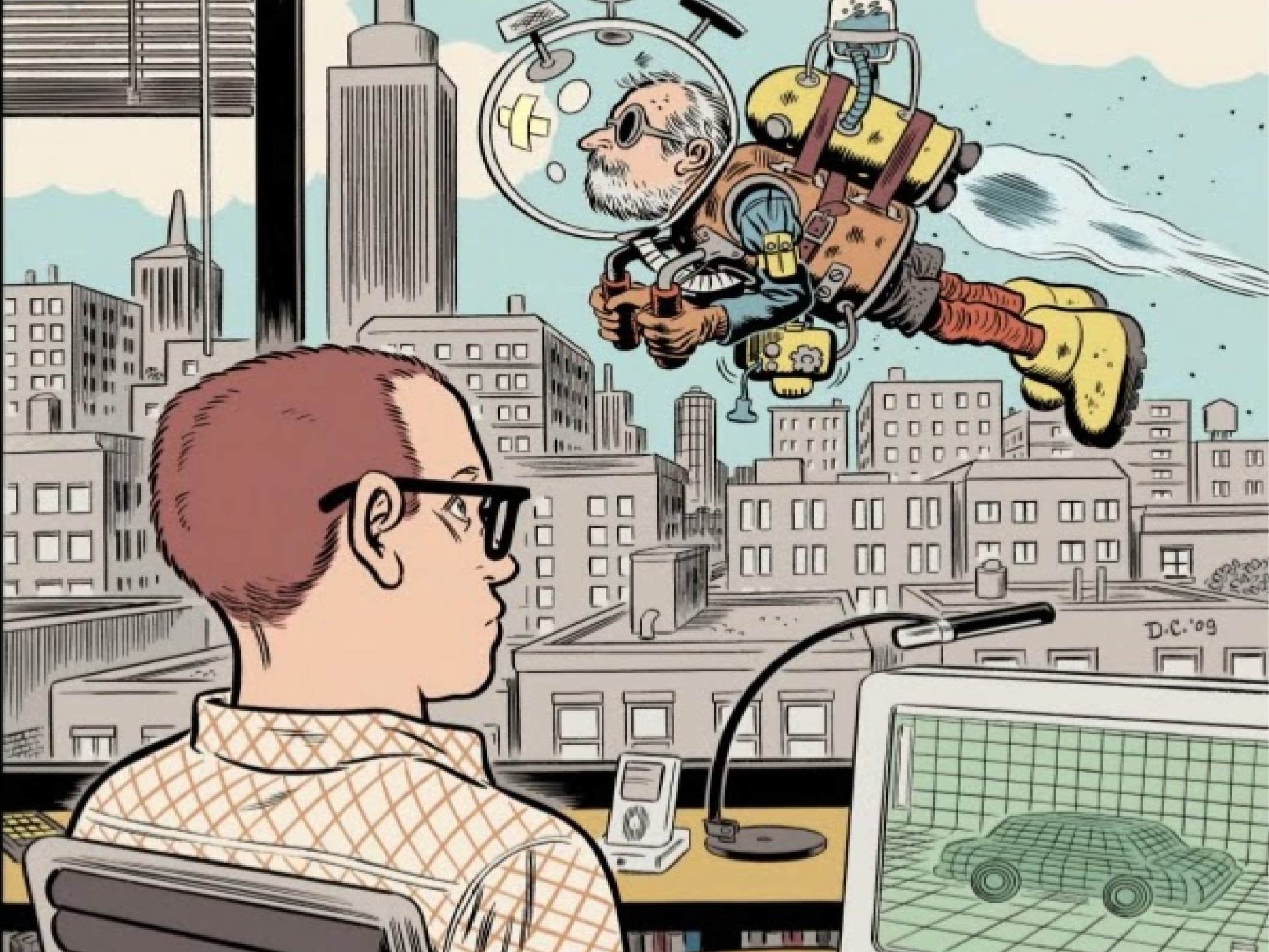
How Google's interests are sometimes different from our own

- In the US there is no legal recourse for removing your data from Google's search results
 - Who does have recourse? Other corporations
 - “If Sony or Disney wants fifty thousand videos removed from YouTube, Google removes them with no questions asked. If your daughter is caught kissing someone on a cell-phone home video, you have no option of getting it down. That's wrong. The priorities are backward.” -- Mark Fertik, Reputation.com, in the New Yorker



How Google's interests are sometimes different from our own

- Aggregating data across search and the 60+ services Google offers
 - data can be sold directly, or advertisements can be sold
- On to some hands-on work!





Apropos

- apropos is used to search for man pages when you don't know the name of the command
- example: apropos password



How to work with text files, again

- echo, cat
- view a text file: less, head, tail
 - nerd joke: “less is more” (and then some)
 - try pressing ‘v’ in less: what happens?
- Echo “hi!” to a file called ‘conversation’, then use tail to keep it open, viewing changes. Open a new terminal (keeping the original visible) and echo “hi there” in to conversation.
- Echo “Bye!” into the same file (conversation), and show all lines but the first



How to work with text files, again

- finding files: `find`, `whereis`, `whence`
- finding text in files: `grep`
- counting words, lines: `wc`
- Challenge: Can you find all files named `syslog` (not `syslog.blah`), using `find`? You should find exactly two results, and no error messages
- Find all `syslog` entries that include the word 'ERROR'



Watch me now!

- calling a command repeatedly, with some delay: watch



Permissions

- chmod and permissions
- In plain english, what are the permissions for
 - comm
 - example{1,2,3,4}?
- example1 is a named pipe (FIFO)
- example3 is a directory. What do the mode bits mean there?
- example4 is a setuid binary. What does that mean?



Vim

- text editor
- two modes: edit and command.
 - typing 'i' puts you in insert mode, <esc> puts you in command mode



Vim command mode

- In command mode,
 - ‘h’ moves left, ‘l’ moves right
 - ‘j’ moves up, and ‘k’ moves down
 - ‘x’ is like delete, and ‘X’ is like backspace
 - ‘u’ is undo, ‘^r’ is redo
- colon (:) lets you put in commands
 - :e <filename> opens an arbitrary file
 - :w saves
 - :q quits without saving (you will get a prompt)



Vim insert mode

- In insert mode,
 - arrows move you around
 - backspace removes text
 - typing enters the letters into the editor
- Doing 'R' from command mode puts you in replace mode, which means your text will overwrite whatever is already there



Let's go over assignment 0

- Volunteers!



Assignment 2: Watchfulness

- The permissions for `mr_phony_pants` directory are more restrictive in light of the tongue-lashing he got from the sysadmin for his previous mistakes
- Your task is to keep an eye out for a permissions mistake by `mr_phony_pants`, and use it to copy his home directory.
- You'll find a file in there that you can use (with some work) to log in as `mr_phony_pants`
- You can do this with only the tools we now know

Next time

- We will have a speaker next class:
Prof. Laura Brandimarte
 - The assignment is to respond to Prof. Brandimarte's scholarly article, 'Does Government Surveillance Give Twitter the Chills?'
 - Describe the main points, assess strengths and weaknesses, and provide some context for the article with respect to broader privacy issues. You should also write three questions for the author; you will ask one of these in class.
 - Be ready for discussion! Part of your grade for the assignment (10%) is based on in-class performance

