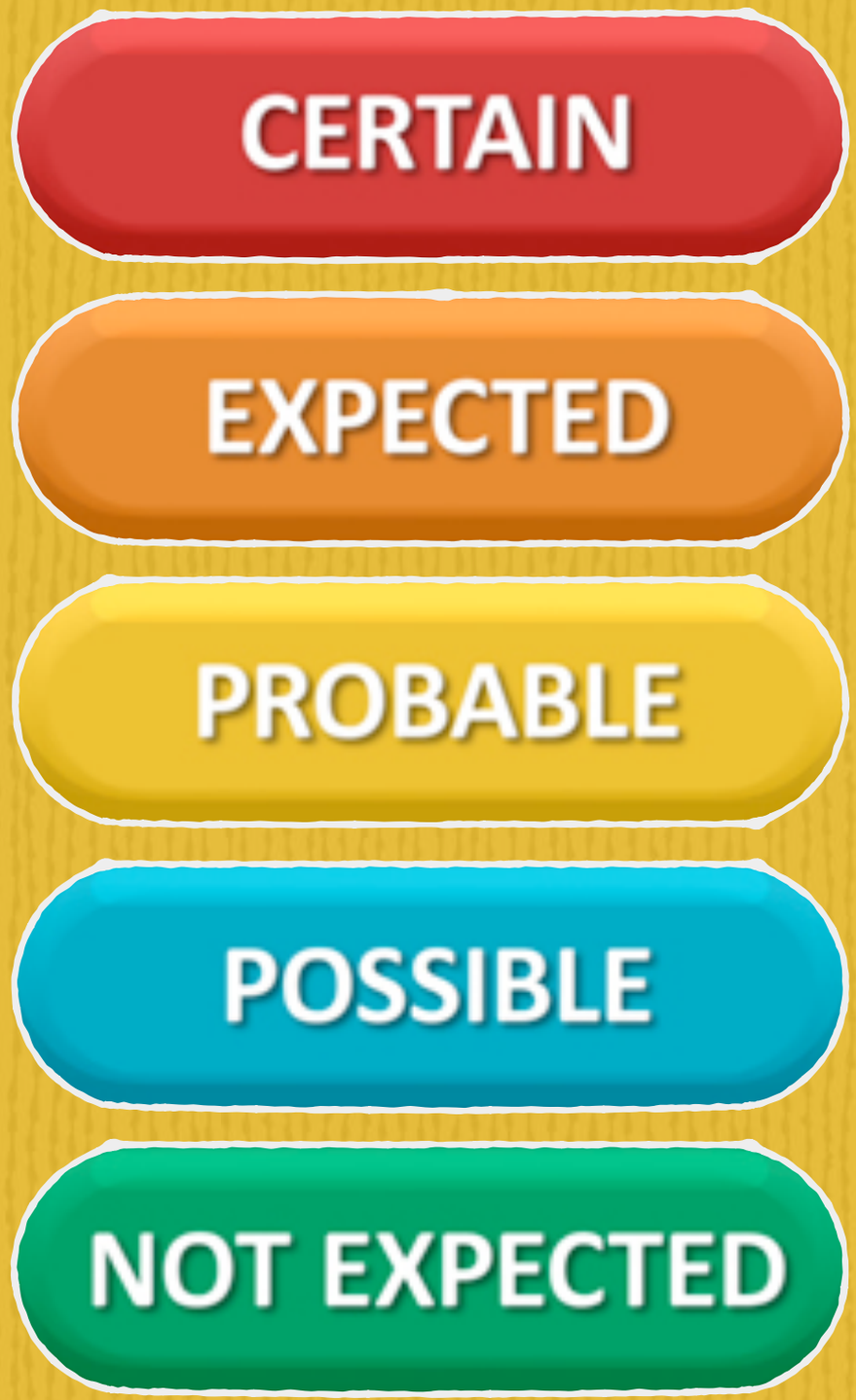
Privacy: Five Lessons from the Library

Jessamyn West @ Vermont Mutual Aid Society

<librarian.net/talks/privacy>

0. "threat model"

Scary word, but understanding what you have to protect yourself (or your data) from is an important part of making solid choices.



1. passwords

Why are they so complicated?

Is it OK to write them down?

Advanced: password manager.

Advanced: two-factor authentication.

Advanced: what's a passkey?

UNCOMMON (NON-GIBBERISH) BASE WORD

ORDER UNKNOWN

Tr0ub4dor&3

CAPS?

COMMON SUBSTITUTIONS

NUMERAL

PUNCTUATION

(YOU CAN ADD A FEW MORE BITS TO ACCOUNT FOR THE FACT THAT THIS IS ONLY ONE OF A FEW COMMON FORMATS.)

~28 BITS OF ENTROPY

2^{28} = 3 DAYS AT 1000 GUESSES/SEC

(PLAUSIBLE ATTACK ON A WEAK REMOTE WEB SERVICE. YES, CRACKING A STOLEN HASH IS FASTER, BUT IT'S NOT WHAT THE AVERAGE USER SHOULD WORRY ABOUT.)

DIFFICULTY TO GUESS:

EASY

WAS IT TROMBONE? NO, TROUBADOR. AND ONE OF THE Os WAS A ZERO?

AND THERE WAS SOME SYMBOL...

DIFFICULTY TO REMEMBER:

HARD

correct horse battery staple

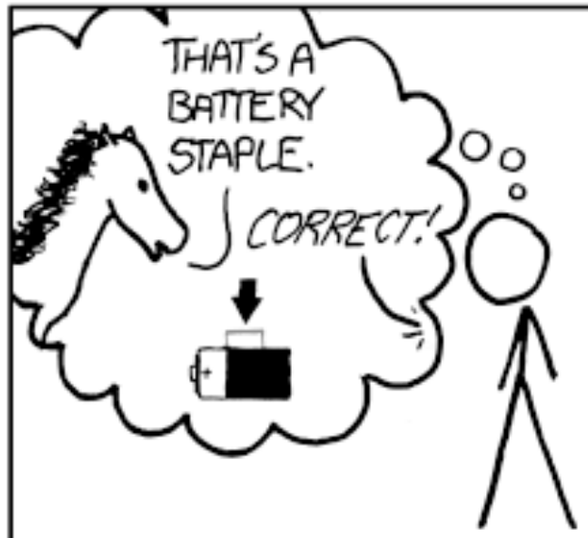
FOUR RANDOM COMMON WORDS

~44 BITS OF ENTROPY

2^{44} = 550 YEARS AT 1000 GUESSES/SEC

DIFFICULTY TO GUESS:

HARD



DIFFICULTY TO REMEMBER:

YOU'VE ALREADY MEMORIZED IT

THROUGH 20 YEARS OF EFFORT, WE'VE SUCCESSFULLY TRAINED EVERYONE TO USE PASSWORDS THAT ARE HARD FOR HUMANS TO REMEMBER, BUT EASY FOR COMPUTERS TO GUESS.

2. internet traffic

Private browsing.

Public wifi.

Online banking/medical stuff.

Is it HTTPS?

Advanced: VPN or TOR.

3. listening devices & AI/ChatGPT

If it's not online, it can't spy on you.

Anything that listens for your voice is actively paying attention and maybe storing your info.

Privacy for your guests/patrons & others.

What you type into a box, is "remembered" in another box

Siri, Alexa, Google, ChatGPT, Deepseek, your TV…

“Please be aware that if your spoken words include personal or other sensitive information, that information will be among the data captured and transmitted to a third party through your use of Voice Recognition”

– Samsung

4. tracking

Review your browser settings.

Many browser plug-ins can stop this & are simpler to use than you think.

We've moved on from "What are cookies?"

Don't keep all your eggs in the Google or Microsoft or Apple basket.

ABP

F***B***
Purity

uo

DuckDuckGo

...but turn off that AI tho

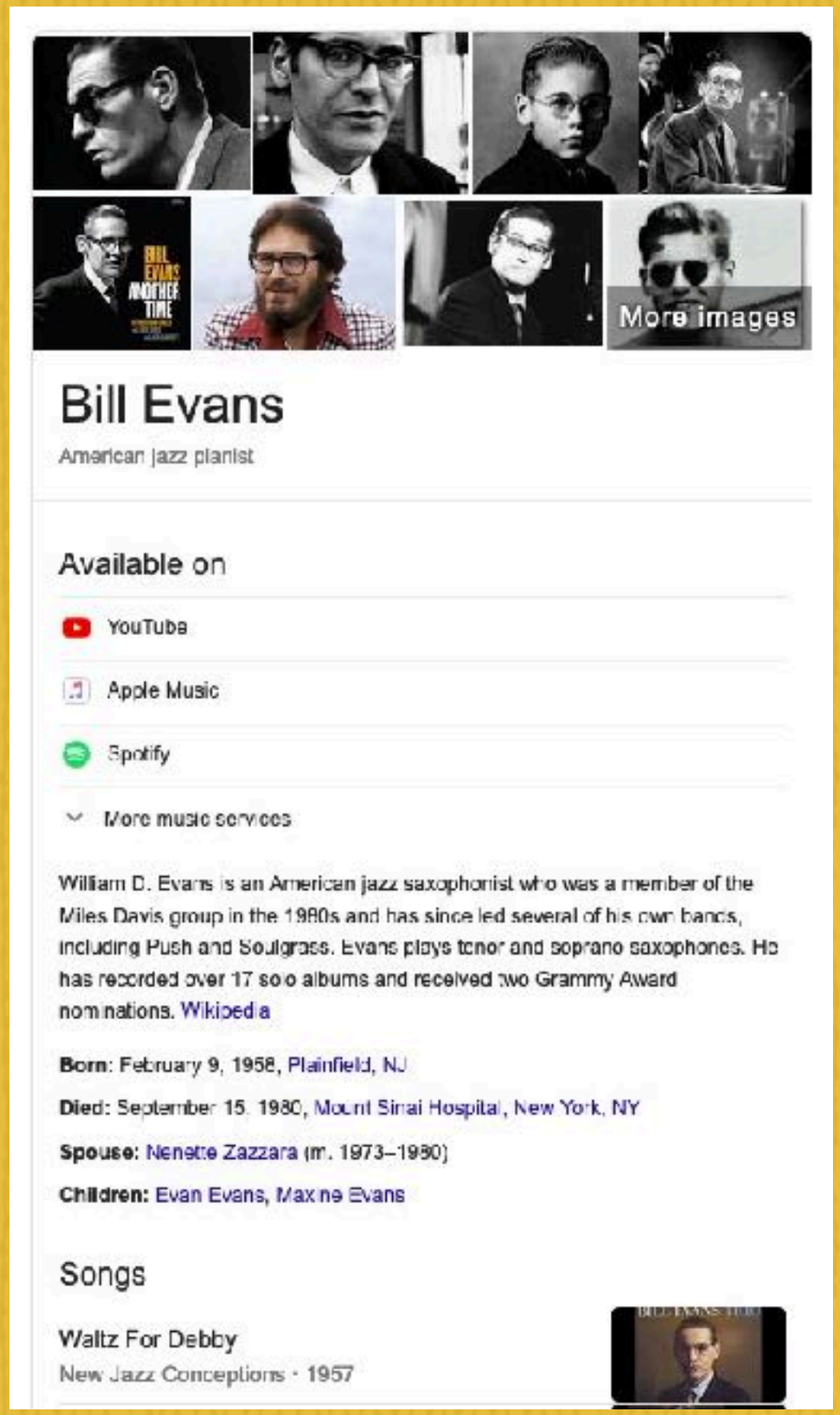
5. trust but verify

"Where does this news come from?
Do I trust them?"

Don't click on mystery email links. Don't call numbers you see in pop-ups. Your computer probably doesn't have a virus.

Know how to see where a link goes.

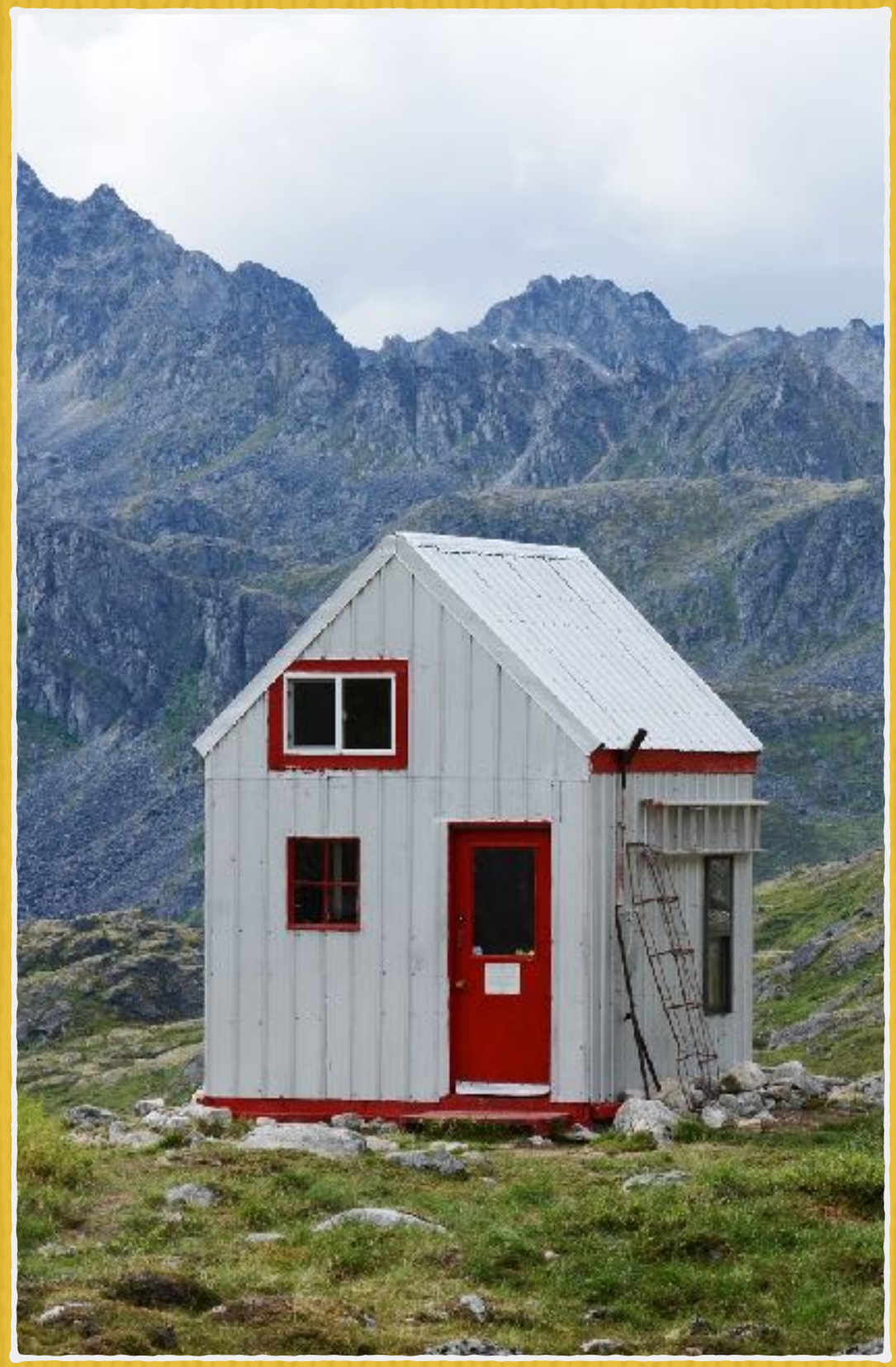
Advanced: tell your friends, report what's wrong.



Learn to live with imperfect privacy.

Don't let that stop you from trying to do better.

Help people feel good about making informed privacy choices that work for THEM.



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Librarians or other professionals can help you or refer you to people who can help.

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