

Digital Security and Journalism

FCC breakfast briefing

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hi!

- professor at school of journalism, cuhk
 - care about freedom of speech
 - *research on digital security and journalism*
 - previous research on internet censorship, personal data protection, journalism theory
- formerly at google

what do you do?

three typical attacks and what to do

- physical access to your phone
- spear phishing
- digital surveillance

physical access to your phone

- turn off Face ID and Touch ID
- turn on PIN, "erase data after ten attempts"

spear phishing

goals

- take over your device or account remotely
- reconnaissance

tips

- always keep your apps and OS up-to-date
- use 2-factor authentication (use app, not sms)

digital surveillance

- use end-to-end encryption
- "we kill people based on metadata"
- signal > whatsapp > telegram
- pay for a good VPN

caveats

- no "one-size-fits-all" security tips
- they become dated fast & often not timely
- prevention is good, but also have a plan for when you get hacked

digital security is like public health

provocation: digital security workshops are
NOT very helpful in improving digital security

- not just about knowledge
- not even about skills

ultimately about changing behavior (like ... safe sex)

Washington Post Joins List of News Media Hacked by the Chinese

By [Nicole Perlroth](#)

Feb. 1, 2013



SAN FRANCISCO — The question is no longer who has been hacked. It's who hasn't?

The Washington Post can be added to the growing list of American news organizations whose computers have been penetrated by Chinese hackers.

After The New York Times reported on Wednesday that its computers as well as those of Bloomberg News had been attacked by Chinese hackers, The Wall Street Journal said on Thursday that it too had been a victim of Chinese cyberattacks.

so ... today any improvement?

state of digital security in hk local news orgs

tldr;

- state of digital security in hk news media "has room for improvement"
- poor support for digital security from news organization
- wide range of skills and mindsets, but "security by obscurity" is the norm

(tsui and lee, 2019)

mindset: security by obscurity

"I have no such experience before. I don't think I have any secrets. Therefore I'm not a target for hacking. I haven't worried about it before."

(tsui and lee, 2019)

mindset: security by obscurity

"There is no big issue in Hong Kong, I don't think there is any."

(tsui and lee, 2019)

mindset: security as opportunity

"Sometimes your boss joked that "even if the Chinese government does not read [your messages], the American government does. You think they don't read your Gmail?" I would say "yes, but I'd rather they were read by the American government. Or my Kakao were being watched by the Korean government. I just don't want them to be read by the Chinese government."

(tsui and lee, 2019)

mindset: security as opportunity

"We try our best to avoid phone calls and emails. It's much better, thanks to 3G, 4G ... We used to use Gmail but since it was heavily cracked down, we've switched to instant messaging systems. We don't have to use emails now. We actually explored many options to avoid using emails."

(tsui and lee, 2019)

mindset matters

"Yes, their awareness is poor. Resources will be provided after an attack, and it's not costly, therefore I don't blame on resources. If you ask me, I blame on the poor awareness. Very, very poor sense, a sense as if in the Stone Age."

(tsui and lee, 2019)

poor support from news organization

"In my opinion, on one thing, it [the IT department] would not set up a VPN for China reporting team. Some news organizations have it but we don't. Yes, they then set up one, but it didn't work that well. I ended up buying another VPN just in case."

(tsui and lee, 2019)

poor support from news organization

when asked about the use of VPN

"We use our own way. We don't trust the company's IT department!
Same thing in every company! (Laugh)"

when asked if the company would pay for VPN

"The company won't pay you for these things."

(tsui and lee, 2019)



but wait! i also have good news

THE PANAMA PAPERS

A man in a dark suit is seen from behind, looking out over a vast sea of papers and money. The papers are scattered all around him, some floating in the air and others piled up. The background is a hazy, overcast sky. The overall scene suggests a massive amount of financial data or documents.

Politicians, Criminals and the Rogue Industry That Hides Their Cash

panama papers

- over 400 journalists and 120 news orgs working together
- succesful in protecting source of data
- succesful in protecting access to documents from attackers
- succesful in preventing early disclosure
- succesful in keeping project confidential and secret

(mcgregor et al. 2017)

panama papers: before

- almost half had never used two-factor
- almost half had never used PGP

(mcgregor et al. 2017)

panama papers: after

- everybody used two-factor
- everybody used PGP
- more than half said security compliance was "easy"

(mcgregor et al. 2017)



if you care about press freedom,
you need to care about digital
security

digital security means you get to cover stories
you otherwise would miss out on

four things you and your org can do to improve digital sec

- reduce cognitive load
- know where to get timely support
- cultivate a culture of security
- be the internal advocate for better security policies

reduce cognitive load

- make security routine
- do not wait until you get hacked
- mandate 2-factor
- mandate end-to-end encryption

know where to get timely support

- appoint a digital security expert (your org has a media lawyer right?)
- journalists often have their own "person" for advice
- control quality of advice, lower cost for everyone

cultivate culture of security

break the taboo

- collect and share horror & success stories

"i do it because everyone else does it"

- provide transparency
- award good behavior

be the internal advocate for better security policies

"when I was there, at least the email system was encrypted, wi-fi system was improved, you know, the wifi format was WEP old format at that time, that crap. I told them to change, they didn't approve to change to WPA enterprise level, so I hacked the system, forcing them to change it, simple."

digital security is a press freedom issue

press freedom under threat: yes

but also, digital security seen as press
freedom: something we can (and should)
daily exercise

references

Lokman Tsui and Francis Lee, How journalists understand the threats and opportunities of new technologies: a study of security mindsets and its implications for press freedom. Journalism. 2019. <https://doi.org/10.1177/1464884919849418>

McGregor, S. E., Watkins, E. A., Al-Ameen, M. N., Caine, K., & Roesner, F. When the weakest link is strong: Secure collaboration in the case of the Panama Papers. The USENIX Security Symposium. Vancouver. 2017

good starting points for further security tips

- [security planner](https://securityplanner.org/#/) <https://securityplanner.org/#/> (by the citizen lab)
- [TLDR guide to digital security](https://github.com/hongkonggong/tldr-digital-security) <https://github.com/hongkonggong/tldr-digital-security> (by jason li)

thank you!

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