



School of Computing

## Metadata can Kill

DCMI Conference 2021



# "We kill people based on metadata."

General Michael Hayden, Former Director of the Central Intelligence Agency (CIA) and the National Security Agency (NSA), 2014 [quoted in Amnesty International report]



## **Early warnings**

- 1980s Duncan Campbell raising the alarm about mass surveillance by GCHQ
- 2013 Amnesty International's report on US drone strikes in Pakistan
- 2014 Edward Snowden's revelations about NSA surveillance of metadata



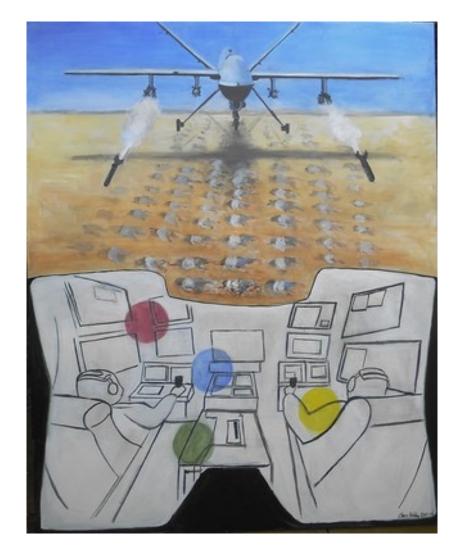
## **Examples**

- Targeting individuals (e.g. drone strikes)
- Control of public dialogue (arrest of activists based on social media activity)
- State-sponsored actions (infrastructure attacks)
- Mis-identification and false arrest
- Metadata manipulation (to cover cyber-criminal activity)



## Targeting individuals

"'Drone Warfare - Killing by remote control -Drone strikes have killed more than 200 children alone in Parkistan & Yemen' (Ref. Book - Drone Warefare by Medea Benjamin. Pub. Verso 2013.)" by Activist Artist - Chris Holden is licensed under CC BY-NC-ND 2.0





### Social media monitoring

"Arab Spring [LP]" by Painted Tapes is licensed under CC BY-NC-ND 2.0





#### Infrastructure



"electrical substation" by ugod is licensed under CC BY 2.0



## **Cyber-criminals**

"Hacker" by Infosec Images is licensed under CC BY 2.0



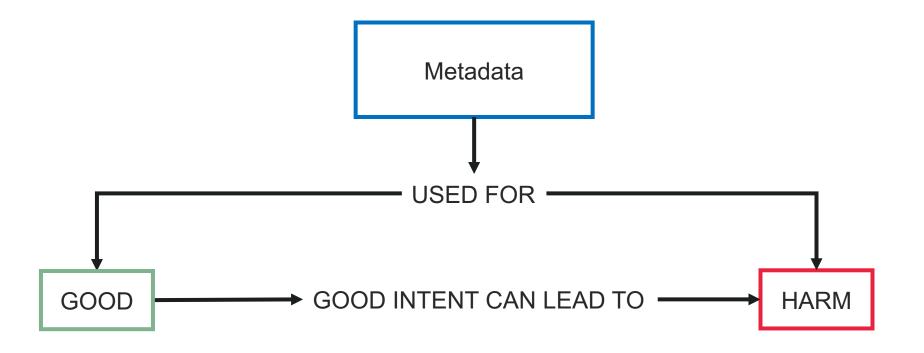


## What way forward?

- Due process and the rule of law
- Independent overview
- Upholding and protecting privacy
- Good governance (e.g. within security and intelligence community)
- Better regulation of telecoms and media



#### Is metadata neutral?





#### References

Daniel Solove (2014). Nothing to hide – the false trade-off between privacy and security

David Haynes (2018). Metadata for information management and retrieval. Facet Publishing, 2018

David Haynes (2018). Metadata – the political dimension. Alexandria

Amnesty International (2013). "Will I be next?": US drone strikes in Pakistan





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## Thank you!

napier.ac.uk/soc