The Snowden revelations, five years on

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Edinburgh

These slides: on my web page
The leak
Background

• GCHQ: Government Communications Headquarters, UK intelligence agency
• NSA: National Security Agency, US intelligence agency
• GCHQ and NSA work very closely together, and also with CIA, MI6, US and UK military, police, etc.
• The Heilbronn Institute: GCHQ's academic mathematical brand.
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Edward Snowden’s leaks

Former IT professional for CIA and NSA.

In May 2013, leaked many thousands of classified documents to journalists.
Means of mass surveillance

- Email
- Web browsing
- Phone calls
- Text messages
- Skype calls
- Bank transactions
- Physical location
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NSA/GCHQ overarching philosophy

In extremis, it has been possible to read someone's letter, to listen to someone's call, to listen in on mobile communications. The question remains: are we going to allow a means of communications where it simply is not possible to do that? My answer to that question is: no, we must not. —David Cameron, 2015

New Collection Posture

- Sniff it All
  - Torus increases physical access
- Partner it All
- Know it All
  - Automated FORNSAT survey - DARKQUEST
- Exploit it All
- Collect it All
  - Increase volume of signals: ASPHALT/A-PLUS
- Process it All
  - Scale XKS and use MVR techniques

Work with GCHQ, share with Misawa

Analysis of data at scale: ELEGANTCHAOS
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Intelligence Services Commissioner Sir Mark Waller, on hearing the Snowden revelations, went to see GCHQ and satisfied himself they were unfounded. At the Home Affairs Select Committee, questioned by Keith Vaz MP:

Keith Vaz MP: And how did you satisfy yourself? It seems from your comment that you had a discussion with them.

Sir Mark Waller: Certainly.

You heard what they had to say.

Certainly.

And you accepted what they had to say?

Certainly.

Is that it?

Certainly.

Just a discussion?

Certainly.

And that's the way you were satisfied that there was no circumventing UK law. You went to see them, you sat round the table, you had a chat? They have had to make out their case . . . and I have absolutely, clearly, accepted it.
UK oversight of GCHQ

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The reactions
Media reaction
NSA collecting phone records of millions of Verizon customers daily

Exclusive: Top secret court order requiring Verizon to hand over all call data shows scale of domestic surveillance under Obama
GCHQ taps fibre-optic cables for secret access to world's communications

Exclusive: British spy agency collects and stores vast quantities of global email messages, Facebook posts, internet histories and calls, and shares them with NSA, latest documents from Edward Snowden reveal
GCHQ taps fibre-optic access to world's communications

Exclusive: British spy agency collects quantities of global email messages, histories and calls, and shares them with US intelligence agencies.

The NSA files

Optic Nerve: millions of Yahoo webcam images intercepted by GCHQ

- 1.8m users targeted by UK agency in six-month period alone
- Optic Nerve program collected Yahoo webcam images in bulk
- Yahoo: 'A whole new level of violation of our users' privacy'
- Material included large quantity of sexually explicit images

The GCHQ program saved one image every five minutes from the users' feeds. Photograph: Chris Jackson/Getty
A secret British spy unit created to mount cyber attacks on Britain’s enemies has waged war on the hacktivists of Anonymous and LulzSec, according to documents taken from the National Security Agency by Edward Snowden and obtained by NBC News.

The blunt instrument the spy unit used to target hackers, however, also interrupted the web communications of political dissidents who did not engage in any illegal hacking. It may also have shut down websites with no connection to Anonymous.
Media reaction

Revealed: how US and UK spy agencies
defeat internet privacy and security

- NSA and GCHQ unlock encryption used to protect emails,
  banking and medical records
- $250m-a-year US program works covertly with tech
  companies to insert weaknesses into products
- Security experts say programs 'undermine the fabric of the
  internet'

Q&A: submit your questions for our privacy experts

Show UK
Us, Hackers

Through covert partnerships with tech companies, the spy agencies have inserted secret vulnerabilities into
encryption software. Photograph: Kacper Pempel/Reuters

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connection to Anonymous.

The GCHQ program saved one image every five minutes from the users' feeds. Photograph: Chris Jackson/Getty
Media reaction

Data protection

UK gathering secret intelligence via covert NSA operation

Exclusive: UK security agency GCHQ gaining information from world's biggest internet firms through US-run Prism programme

△ The GCHQ program saved one image every five minutes from the users' feeds. Photograph: Chris Jackson/Getty
The Guardian

Guardian and Washington Post win Pulitzer prize for NSA revelations

Pair awarded highest accolade in US journalism, winning Pulitzer prize for public service for stories on NSA surveillance.
The Guardian
Guardian and Washington Post win Pulitzer prize for NSA revelations
Why did the math world react like that?
The bargain

Glenn Greenwald:

[There is a] bargain that is offered in all political cultures...that essentially says: if you make yourself completely unthreatening to what it is that we in power are doing, we will promise you that you will more or less be left alone and unbothered. If you just end up being a submissive citizen who acquiesces to what it is that we want to do and don’t impede what it is that we want to do in any way, you don’t have to worry—you will more or less be left alone.
Why is the intelligence community so patronizing?
What’s happened since
GCHQ/Heilbronn’s reputation-laundering
GCHQ/Heilbronn’s reputation-laundering
The power of grassroots action

Margaret Mead:

Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has.