

MASS SURVEILLANCE OF NSA/GCHQ

BY CHRISTIAN GROSS

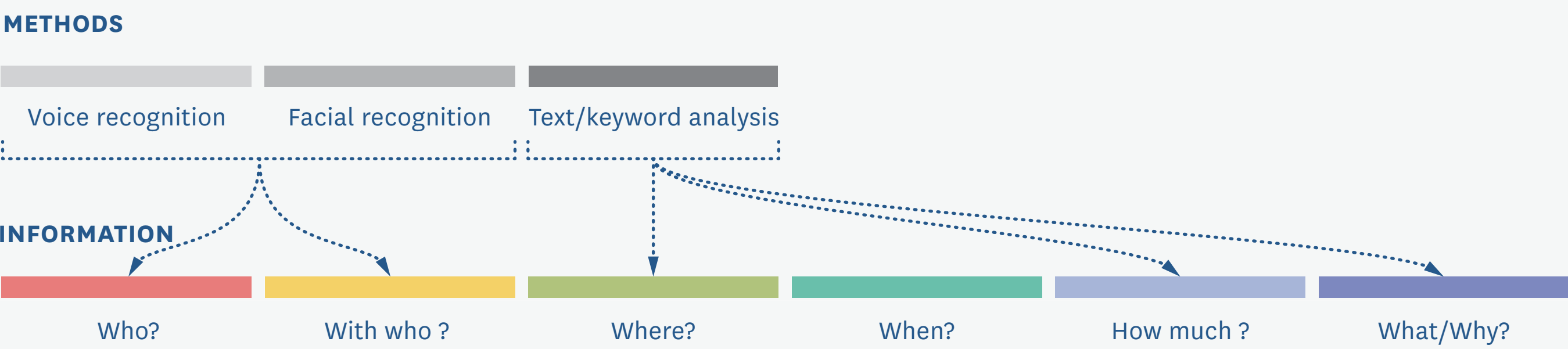
UNTARGETED

TARGETED + all untargeted data

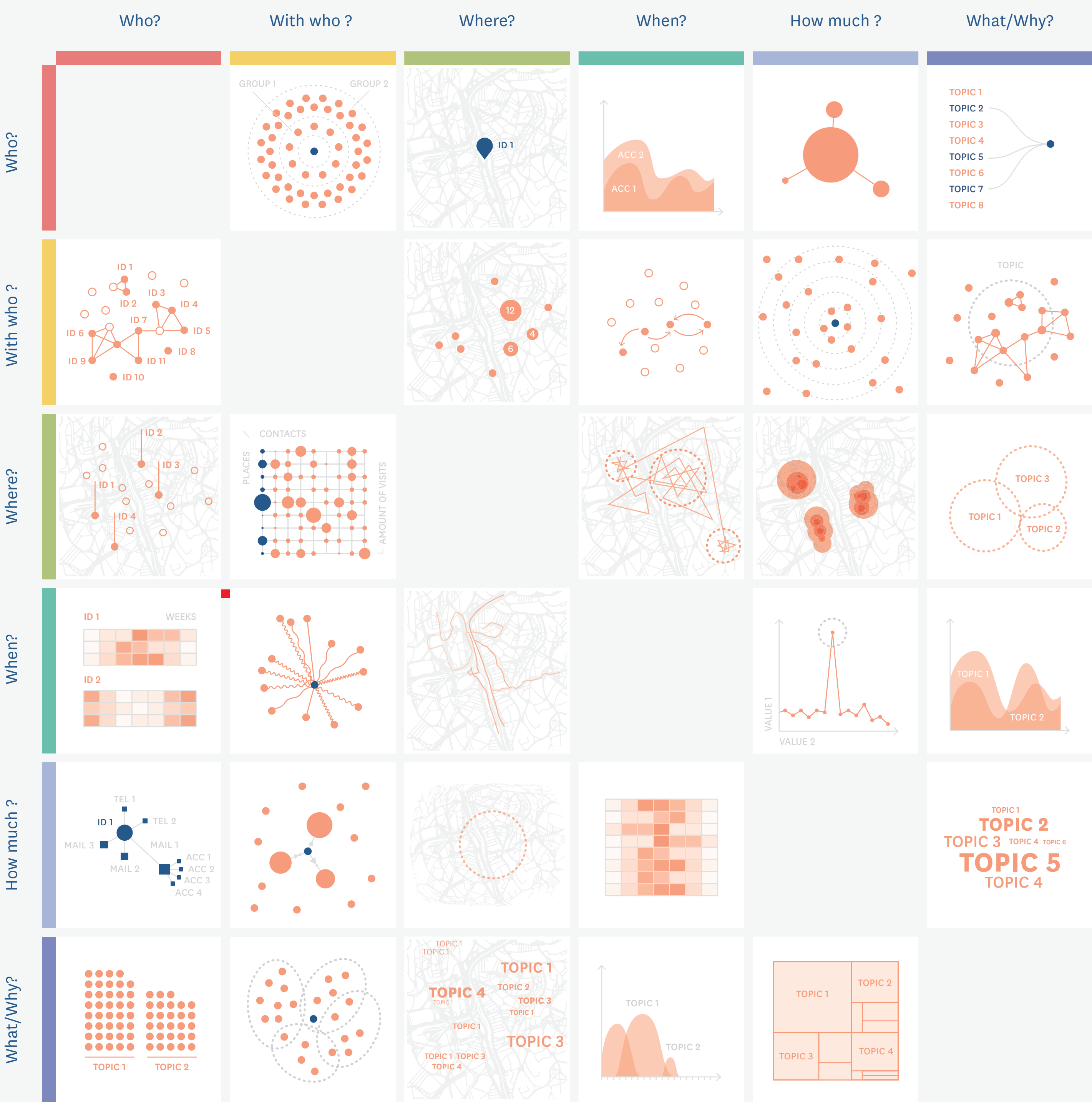
VISUAL ANALYSIS FOR SURVEILLANCE

ANALYSING & VISUALIZING DATA

3 SURVEILLANCE TECHNIQUES AND INFORMATION



4 SURVEILLANCE MATRIX



SURVEILLANCE PROGRAM

Prism

The NSA used this program to request data via selectors (email address, name, telephone number or other methods to identify people or groups) of the leading US internet companies.

All AOL, Apple, Facebook, Google, Microsoft, PalTalk and Yahoo services

LIVE MONITORING

The NSA gets live notification from some providers like logins or even monitoring current text or voice chats.

USER METADATA

- Username
- Name
- Email
- Address
- Register day
- Last Login IP
- Billing information
- Length of service

TARGETED COMPANY SERVICES

Blogs
Blogger

Calendars/Events
Google Calendar, Yahoo Calendar

Chats
Skype, Yahoo Messenger, Google Hangout, Facebook, PalTalk, AIM, iMessage

Cloud/Storage data
OneDrive (SkyDrive), Windows azure, Yahoo Bookmarks, Google Drive

Email
Outlook (Hotmail), Gmail, Yahoo Mail, AOL Mail

Forums
Google Groups, Yahoo Groups, Yahoo Answers

Internet telephone
Skype, Yahoo Voice, Google Voice, Facebook

Photo Collection
Picasa Web Album, Flickr

Search engine
Bing, Yahoo Search, Google Websearch/Imagereach, AOL Search

Social networking
Windows Live, Google+, Facebook

Text Hosting
Office 365, Yahoo Netpage, Yahoo Bookmarks, Google Docs

Video Hosting
YouTube, Facebook

Video conferencing
Skype, Yahoo Screen, Google Hangout, Facebook, PalTalk, FaceTime

Web Analytics
Google Analytics

TARGETED COMPANY SERVICES

Blogs
User name
Time/date
Tags/categories
Photo metadata

Calendars/Events
User name
Time/date
Location
Contacts

Chats
User name of sender
IP address of sender
User name of receiver(s)
Time/date
Numbers of messages
Photo metadata

Cloud/Storage data
User name
IP address
Time/date
Tags/categories
Photo metadata

Forums
User name
IP address
Time/date
Tags/categories
Photo metadata

TARGETED COMPANY SERVICES

Internet telephone
User name of caller
IP address of caller
User name of receiver(s)
Time/date
Length of call

Photo Collection
User name
IP address
Time/date
Tags/categories
Photo metadata

Social networking
User name
IP address
Time/date
Tags/categories/Likes

Text Hosting
User name
IP address
Time/date
Tags/categories

Video Hosting
User name
IP address
Time/date
Tags/categories

TARGETED COMPANY SERVICES

Video conferencing
User name of caller
IP address of caller
User name of receiver(s)
Time/date
Length of video call

Web Analytics
User name
Domain
Website user data with IP addresses

1 SURVEILLANCE PROGRAMS

200 million sms day in 2011

Dishfire/Prefer
Collection of SMS metadata/content

Mainway
Collection of US telephone metadata

Marina
Collection of internet/computer metadata

Upstream
Collection of internet/telephone/fax metadata and content

9% of all internet traffic in 2011

2 SURVEILLANCE DATA

COMMUNICATION CHANNELS

SMS

METADATA
Phone number sender/receiver
Serial number of SIM card
Serial number of device
Time/date of call
Duration of call
Location including GPS data

CONTENT
Message text

METADATA BASED ON CONTENT
Missing call alerts
Network roaming alarms
Attached electronic business cards
Route information

TELEPHONE

METADATA
Phone number caller/receiver
Serial number of device
Serial number of SIM card
Time/date of call
Duration of call
Location including GPS data

CONTENT
Audio

FAX

METADATA
Phone number sender/receiver
Time/date of Fax

CONTENT
Fax text

INTERNET

Email

METADATA
Name sender/receiver
Email sender/receiver
IP address
Day/time
Unique ID of email and related emails
Mail client header formats
Read recipient request
Number and size of attachments
Size of email
Encrypted

CONTENT
Message text
Attachments

METADATA BASED ON CONTENT
Address Footer

Surfing

METADATA
URL
Activity including pages visited
Time/date
IP address
Internet service provider
Device hardware details
Operating system
Browser version
Locally stored data

CONTENT
Text
Flashstream

Searching

METADATA
Search subject
Search results
Visited pages

ONLINE FILES

PHOTO

METADATA
create date and time
camera model
camera settings
photo size and resolution
geo location

CONTENT
photo

VIDEO

METADATA
create date and time

CONTENT
video

TEXT

METADATA
create date and time

CONTENT
text

AUDIO

METADATA
create date and time

CONTENT
audio