Cybersecurity Seminars

Hacker Culture and National Security
Friends or Foes?

December 6, 2021

Andrea Monti

Adjunct professor of Digital Law
University Gabriele d'Annunzio, Chieti-Pescara (IT)
amonti@unich.it

Agenda

- A tale from the past
- Do Hackers Exist?
- Hackers in the USA
- Hacker in Europe (and in Italy)
- The (common?) core of the Hacker's Culture
- Hacking, Hacktivism, Crime
- Hacking and Civil Rights
- Hacking and Law
- Hacking and Business
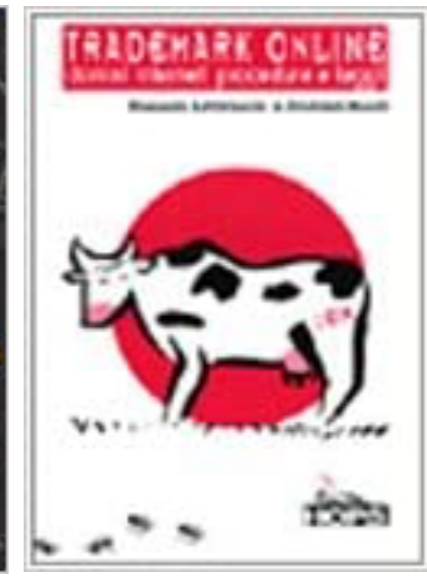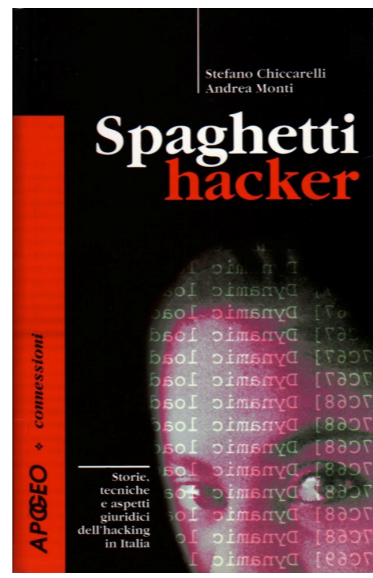- Hacking and National Security

Who Am I and
Why you could find this talk interesting
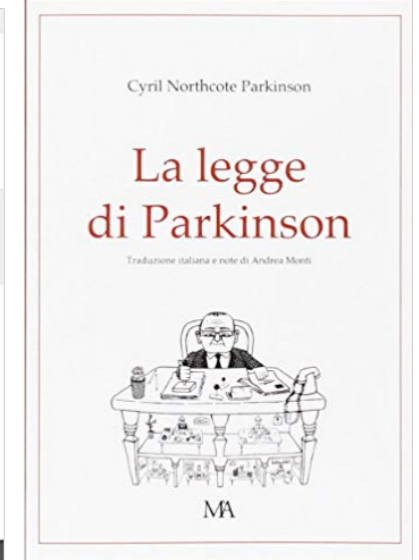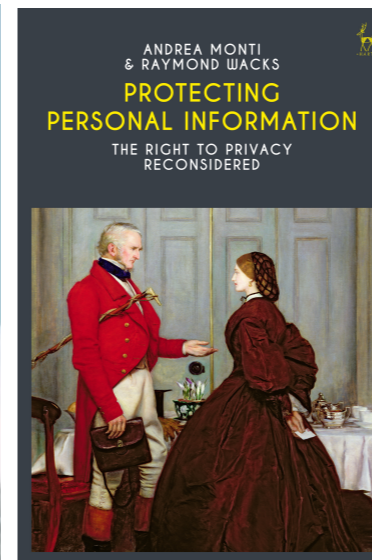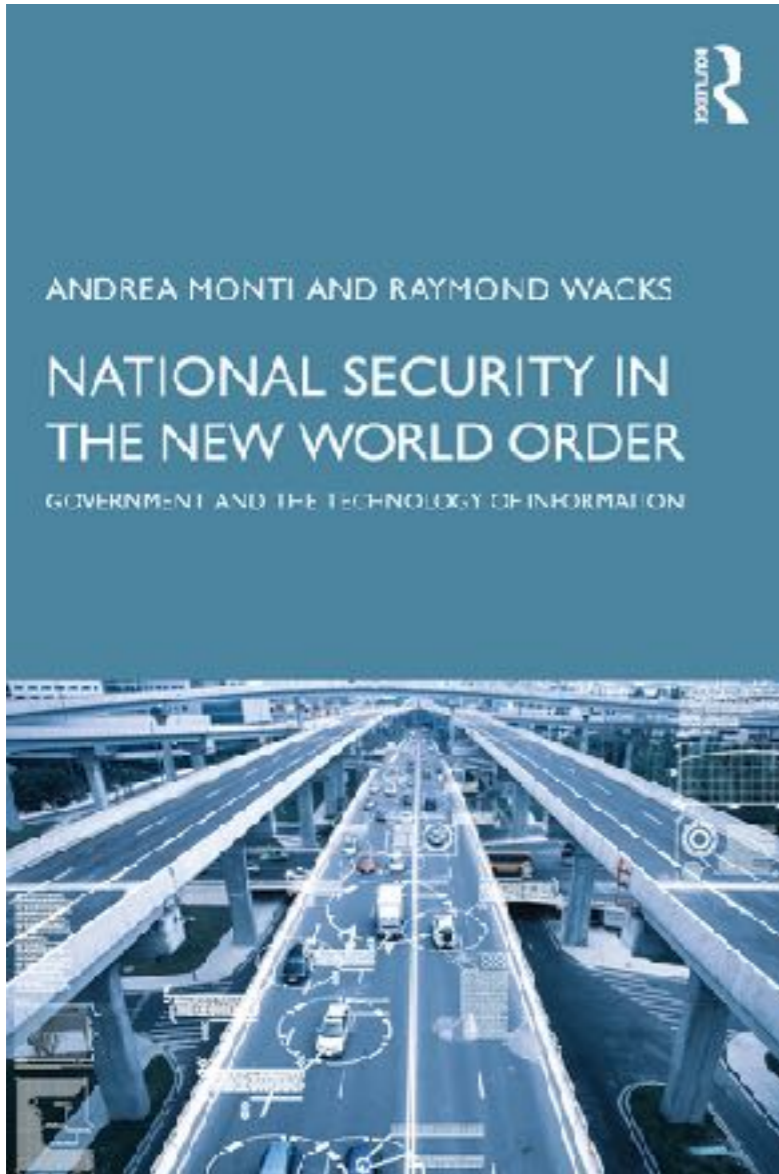
Do You Know Them?

Blue-Box Builder

https://www.technotification.com/2014/04/steve-jobs-and-wozniak-started-their.html

Cracker

https://www.forbes.com/sites/stevemorgan/2016/02/18/
microsoft-co-founder-bill-gates-was-caught-hacking-45-years-
ago/?sh=3f50e2e3ba47

?

SAPIENZA
UNIVERSITÀ DI ROMA

Let's set the record straight

Steve Jobs
(b. 24 Feb 1955)

Dennis Ritchie
(b. 09 Sep 1941)

Become a hipster, sell stolen ideas

Invent UNIX and C
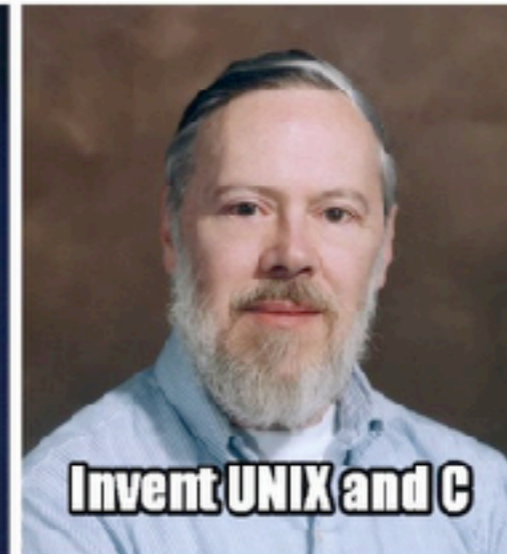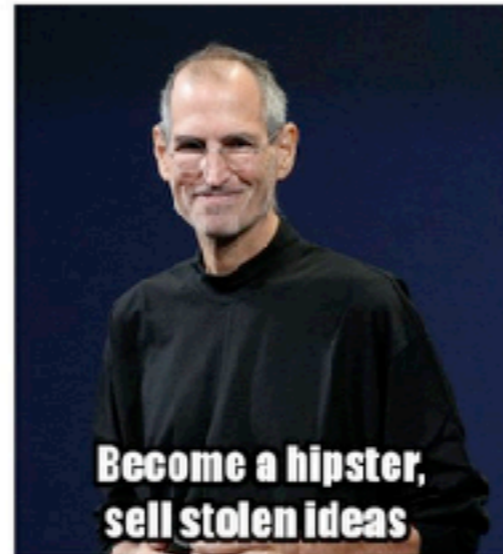
DIED 05 OCT 2011

DIED 12 OCT 2011

Without Steve Jobs, we would have:

- No iProducts
- No over-expensive laptops

Without Dennis Ritchie, we would have:

- No Windows
- No UNIX
- No C
- No programs
- A large setback in computing
- No generic text languages
- We would all read in Binary

Praised by media as Jesus of computing

Ignored

They died in the same year, but it seems only few notice the death of Dennis Ritchie compared to Steve Jobs

SAPIENZA
UNIVERSITÀ DI ROMA

What is a Hacker, again?

- A commonly accepted definition comes from RMS*
  - hacking is a state of mind. It means thinking out-of-the-box, being clever, having fun in the process
  - hackers typically had little respect for the silly rules that administrators like to impose, so they looked for ways around
  - there is a distinction between security breaking and hacking—by using the term "cracking" for security breaking. The people who do it are "crackers". Some of them may also be hackers, just as some of them may be chess players or golfers; most of them are not.

  * Stallman, R. On Hacking - https://stallman.org/articles/on-hacking.html

December 6, 2021 - Cybersecurity Seminars - Hacker Culture and National Security: Friends or Foes?
Andrea Monti - Adjunct Professor of Digital Law - Digital Marketing Faculty - University of Chieti-Pescara - amonti@unich.it

SAPIENZA
Università di Roma

Do you consider yourself a hacker (or do you want to become one)?

- At first sight, RMS definition of hacking has (and is) nothing special
- It defines clever people that existed way before the MIT and computers (think of Leonardo da Vinci, or greek and roman achievements in engineering)
- It creates a flag under which 'clever people' could unite
- However, the tricky question for a computer security expert is: **Do you consider yourself a hacker (or do you want to become one)? And if so, why?**

Why the hacker/cracker difference matters

- There are flaws in RMS' definition of hacker
  - He associates cracking with security breaches, and security breaches with illegal activity. Unless, though, something is forbidden by the law, it is not illegal (even if unethical). Security breaches are not the only 'illegal' action related to computing and network (and might be not illegal at all),
  - It looks like cracking is the only thing that should be not acceptable, while everything else is,
  - It relies, as said, upon a Übermensch-like attitude, according to which there are neither rules nor authority when it comes to hacking
  - It would even unnecessary to keep using the 'H' word

A taxonomy

Knowledge and Tools
ツールと知識

Lamer

レイマー

Geniuses
天才

Tool Makers
ツールの創造者

Criminals
犯人

Intelligence
諜報機関

Target Information
標的に関する情報
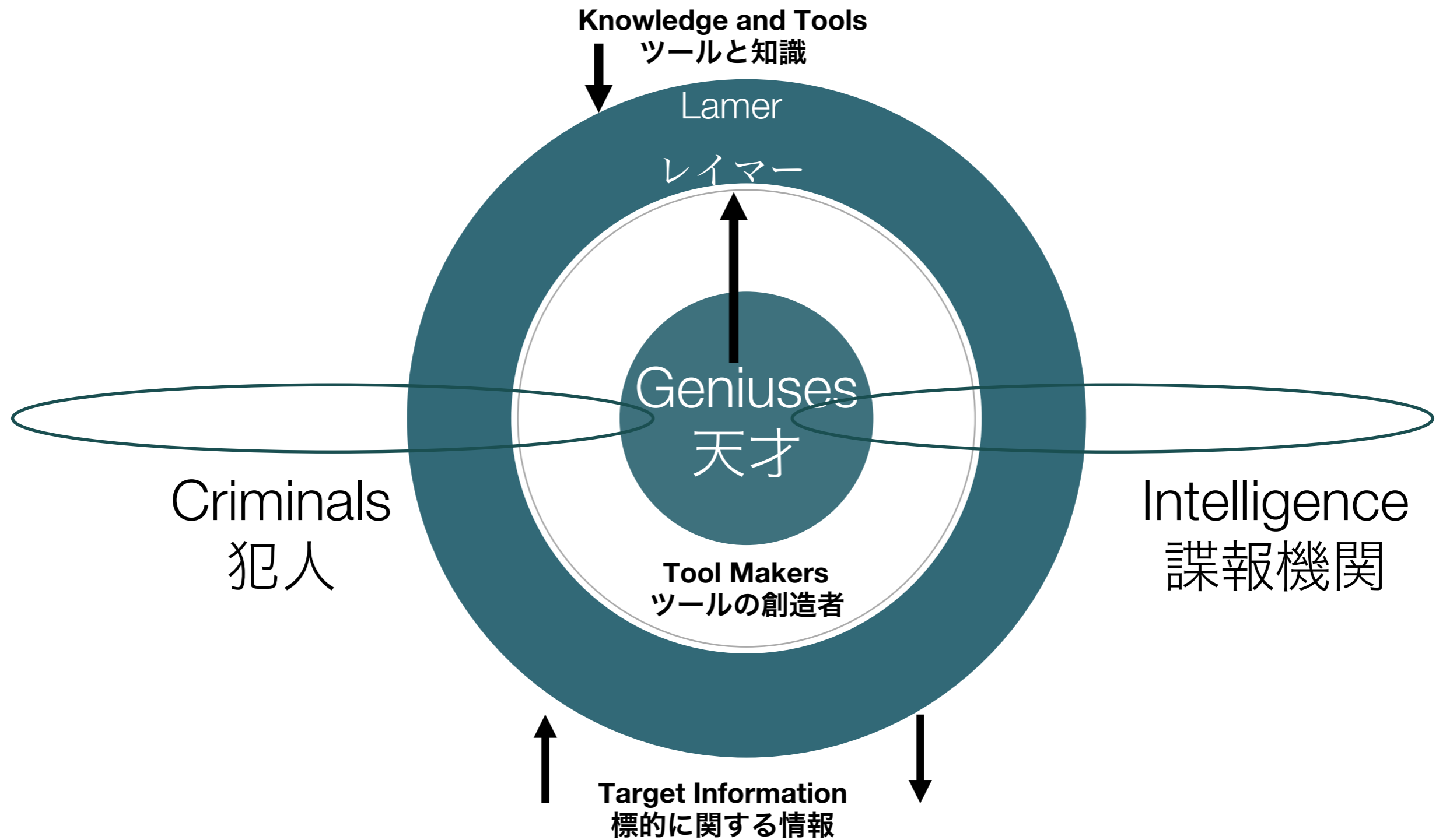
Chart based upon Winkler, I. *Corporate Espionage* Prima Publishing 1997 - p. 86

SAPIENZA
UNIVERSITÀ DI ROMA

December 6, 2021 - Cybersecurity Seminars - Hacker Culture and National Security: Friends or Foes?
Andrea Monti - Adjunct Professor of Digital Law - Digital Marketing Faculty - University of Chieti-Pescara - amonti@unich.it

Hack in the USA

- 1971 YIPL (Youth International Party Line)
- 1980 the Hacker Groups (Legion of Doom, Masters of Deceptions, Cult of the Dead Cow, etc.) and e-zine (Phrack, Cult of the Dead Cow, 2600) Era
- 1986 Computer Fraud and Abuse Act
- 1990 The beginning of hacker conferences
- 1990 SJ Games vs US Secret Services (http://www.sjgames.com/SS/affidavit.html)
- 1996 Hacktivism and the active role in political issues
- 1999 US-German-Dutch-Spanish Hacker coalition against China and Iraq (https://web.archive.org/web/20060316225519/http://www.cultdeadcow.com/news/statement19990107.html)

December 6, 2021 - Cybersecurity Seminars - Hacker Culture and National Security: Friends or Foes?
Andrea Monti - Adjunct Professor of Digital Law - Digital Marketing Faculty - University of Chieti-Pescara - amonti@unich.it

SAPIENZA
UNIVERSITÀ DI ROMA

Hack in the Old World

- Altos and Altger as exchange point between continents and among europeans
- Germany: Chaos Computer Club
- Spain: !Hispahack
- France: ADM - Association des Malfaiteurs
- Nederland: Hack-Tic

SAPIENZA
UNIVERSITÀ DI ROMA

Hacking in Italy

- The role of microcomputers and video games
- The role of software cracking in the development of the "Smanettoni"
- The BBS era
- The telco industry scenario
- The past
  - Metro Olografix
  - Strano Network
  - Decoder
  - Autistici
  - Black Hats
  - Zone H
- The present: from hackers to security experts
  - Hackinbo - Bologna
  - Romhack - Rome
  - R00tMI - Milan
  - No Hat - Bergamo

SAPIENZA UNIVERSITÀ DI ROMA

December 6, 2021 - Cybersecurity Seminars - Hacker Culture and National Security: Friends or Foes?
Andrea Monti - Adjunct Professor of Digital Law - Digital Marketing Faculty - University of Chieti-Pescara - amonti@unich.it

The Hackers'Role in the Evolution of the IT Security Market

- **1985** Altos and Altger's and the early IRC-based hackers' communities
- **1990** Targeting the Telcos: Phone Phreaking and Social Engineering
- **1994** Software Industry, BBS and the Italian Crackdown
- **2000** (about) hackers are "discreetly" hired by multinationals to run penetration tests
- **2001** Ettercap by Alberto Ornaghi and Marco Valleri
- **2002 - 2004** Telindus Bug, The Hacker Goes Business, Defacement As Marketing Tools
- **2008** - The Telecom Sismi Scandal
- **2010 - Today** The Big Four Enter the Market

SAPIENZA
UNIVERSITÀ DI ROMA

December 6, 2021 - Cybersecurity Seminars - Hacker Culture and National Security: Friends or Foes?
Andrea Monti - Adjunct Professor of Digital Law - Digital Marketing Faculty - University of Chieti-Pescara - amonti@unich.it

Hacking and Security in Italy

- The present: from hackers to security experts
  - Hackinbo - Bologna
  - Romhack - Rome
  - R00tMI - Milan
  - No Hat - Bergamo

What National Security is All About?

- **There is no such thing as 'National Security' (in the Legal World)**
- National Security used to be taken apart from Law Enforcement
- Things changed with the ReVIL case

Hacker Culture and National Security

- The PGP case and the weaponisation of knowledge
- Hacker Culture and the role of Information Want to Be Free Mantra
- The raise of whistleblowing: Wikileaks
- The King is Naked
- The inevitable clash between rights and security

SAPIENZA
UNIVERSITÀ DI ROMA

Bibliography

- Gibson, W. *Neuromancer*
- Stephenson, N. *Snow Crash*
- Lapsley, P. *Exploding the Phone*
- Levy S. *Hackers*
- Sterling, B. *The Hacker Crackdown*
- Shimomura, T. - Markoff J. *Takedown*
- Mungo, P. - Clough, B. *Approaching Zero*
- Stallman, R. *On Hacking*
- Alberts, G. *Hacking Europe: From Computer Cultures to Demoscenes*
- Monti, A. - Wacks, R. *National Security in the New World Order*
- Chiccarelli, S. - Monti, A. *Spaghetti Hacker*

SAPIENZA UNIVERSITÀ DI ROMA

December 6, 2021 - Cybersecurity Seminars - Hacker Culture and National Security: Friends or Foes?
Andrea Monti - Adjunct Professor of Digital Law - Digital Marketing Faculty - University of Chieti-Pescara - amonti@unich.it

Conclusion

- Hacker Culture played an essential role in shaping modern National Security
- It exposed the mixed attitude of powers-that-be toward civil rights
- At the same time, it has shown the fragility of the National Security system because of the overwhelming role of private contractors

Thank You!
:)

SAPIENZA
Università di Roma