Does Hacktivism Matter?

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Motivation

- We want to know if hacktivism matters
  - hacktivism = any kind of political activism that is performed by hacking
    not: digital activism in blogs etc.

  - matters = has any impact outside the hacker movement itself
    e.g. politics, society, law, …
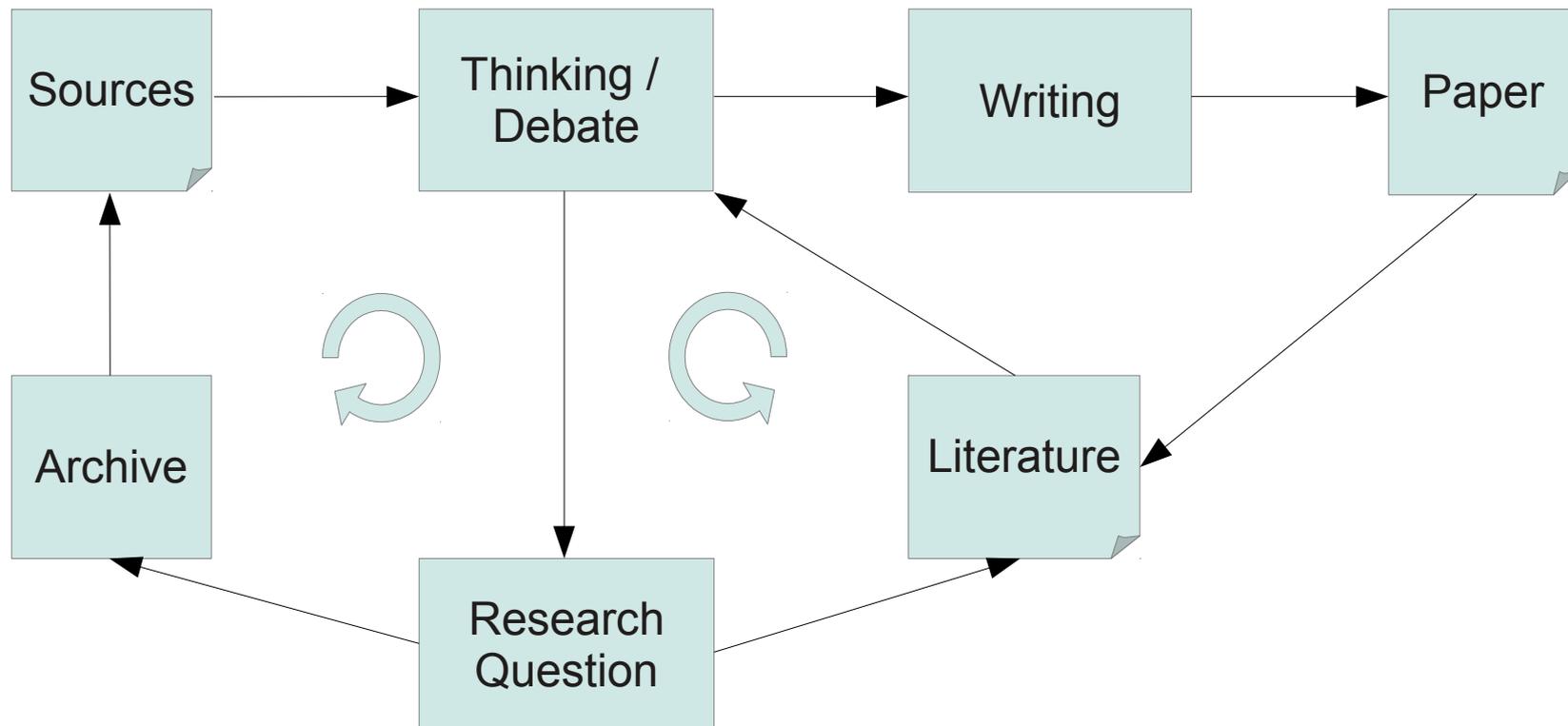
- tl;dr: Yes, it matters—in a way

Agenda

(1) History as a Science

(2) Technology and Society in the 1980s

(3) Hacking Bildschirmtext (Btx)

(4) Computer crime law-making

What do historians do? And why?

- traditional view:
  - "…to tell how it really was"
  - reconstructing (political) events

- contemporary view:
  - questioning own concepts (more theory)
  - shift from events to power relations
  - The role of history in producing legitimacy and identity

How does historical research work?
(idealized, generic)

How does historical research work? (in reality)

What is a source?

- Simply put:
  - source = (authentic) object that tells something about the past
- Constraints:
  - We must understand the source.
    - language problem
    - intersubjectively comprehensible
  - We must be able to conserve it.
    - Cf. feelings, memories, opinions...
- Your research question shapes your definition of (valid) sources.
  - In this talk: mostly text

Sources that are passed on...

- ...by accident:
  - shopping lists,
  - accounting docs,
  - gen. communication,
    - letters, orders, logs...
  - diaries

- written without respect to history

- ...intentionally:
  - protocols,
  - chronicles,
  - inscriptions,
    - e.g. on headstones
  - deeds

- written with respect to history

Type II sources are *Uhl*-able!

What Hans-Peter Uhl said:

"[Our country] is governed by security officials who are bound by the law. [...]"

Video
(5:03)

What the protocol reads:

"[Our country] has security officials who are bound by the law. [...]"

Sie mal: Die Chaoten sind schon da!)

Wir haben Sicherheitsbeamte, die Recht und Gesetz ver-
pflichtet sind. Wenn Sie von den Grünen und Teile der
Linken und der SPD auf Schmusekurs zu den Piraten ge-
hen, ist das Ihr Problem. Damit werden Sie kein Glück

(B)   haben.

(Beifall bei der CDU/CSU sowie bei Abgeord-

Btag-Protokoll 17/132, S. 15611

So, is History a Science?

- Well, yes, but...
  - It is closely connected to
    - common sense
    - political agendas (mostly conservative)
  - It is highly subjective

- Still, it has...
  - systematic, public self-correction (cf. esotericism)
  - empirical basis

BTW, can history be a hacking tool?

- … a tool for hacking society?
  - After all, history produces legitimacy and identity.

- Well, history is:
  - conservative
  - slow
- Yet, there are some encouraging examples:
  - e.g. queer / gender / women's history

The topic rephrased (1)

- Does hacktivism matter?
  - What kind of hacktivism exactly?
  - When does something matter?
  - On which sources could we decide this?
  - Where do we find such sources?

- … and don't forget the historical context!

The topic rephrased (2)

- Does hacktivism matter?
  - Hacktivism → CCC activities in early 1980s

    here: The Btx hack
  - Criteria (weak) →
    - some impact on computer-crime laws
    - some impact on reports in the media
  - Sources →
    - Protocols of the German parliament
    - CCC Publications

Does Hacktivism Matter?

Part II

Technology and Society in the 1980s

Technology in the 1980s: Threat or Fascination?

- tightly connected to the peace movement

  - specifically in Germany: the Frankfurt school

- large, opaque, centralized systems

  - e.g. military, nuclear energy, information technology

  - cf. hacker ethic

    - "Mistrust authorities – promote decentralization"

- Green movement / party

The Political Spectrum (short story)

- Stalinist-Marxist left
  - technocratic, centralistic
- alternative movement / Greens
  - technocritic, decentralistic
- liberals, conservatives
  - ambivalent towards technology
- Try to place the early CCC in this spectrum!
  - level of political interest unclear
  - members mostly connected through techno-enthusiasm
  - complicated relations to political parties

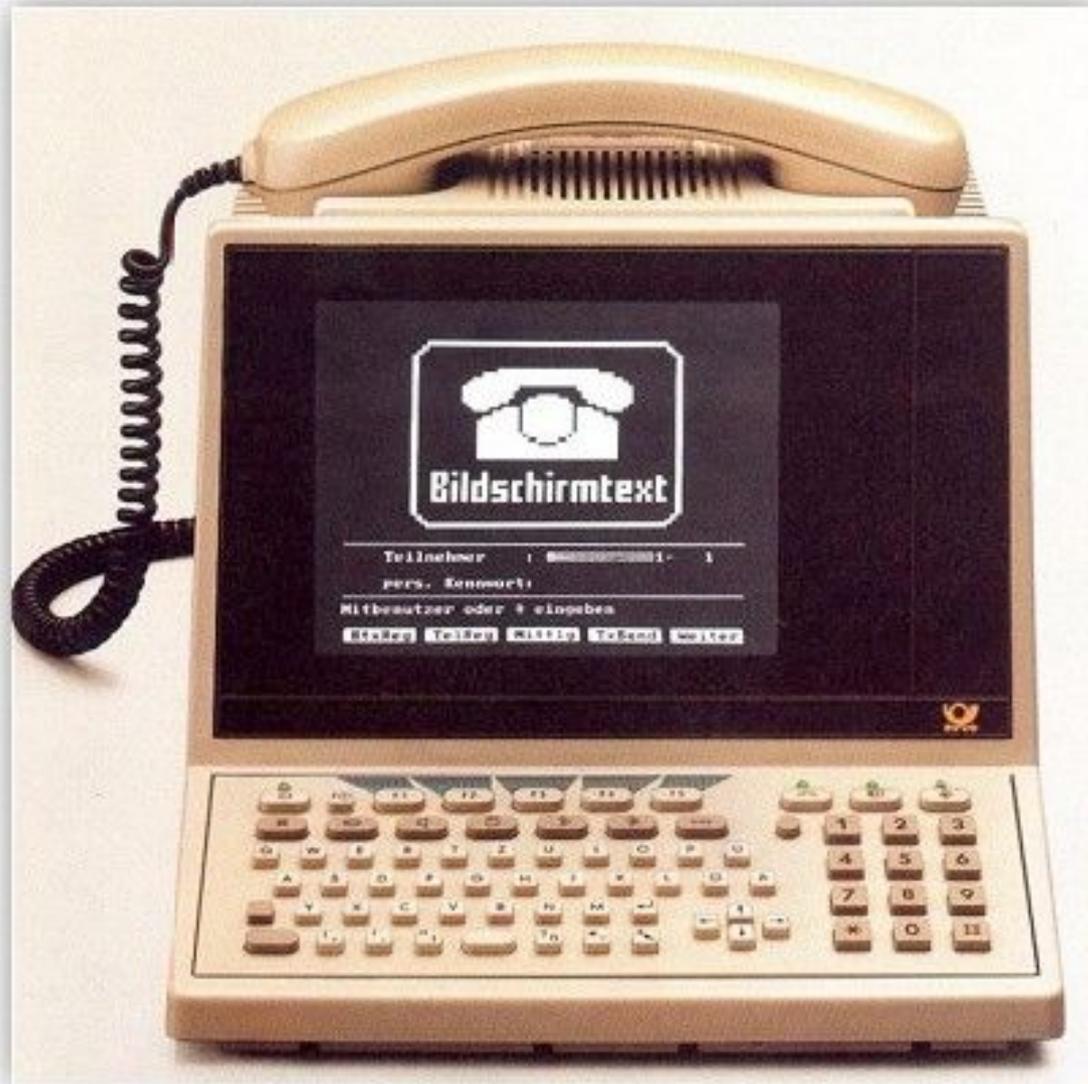# Does Hacktivism Matter?

Part III

Hacking Bildschirmtext (Btx)

Bildschirmtext
Epitome of Information Technology

- Bildschirmtext (Btx):

  - communication and information system

  - developed in the 1970s, deployed in the 1980s

  - different brands: Btx (Germany), Prestel (UK), Minitel (France)

- Operator:

  - Deutsche Bundespost (telco monopolist)

  - Fernmeldetechnisches Zentralamt (FTZ, Darmstadt, tech. op)

- Target:

  - consumers, companies

  - for communication and e-commerce

Look'n'Feel Btx
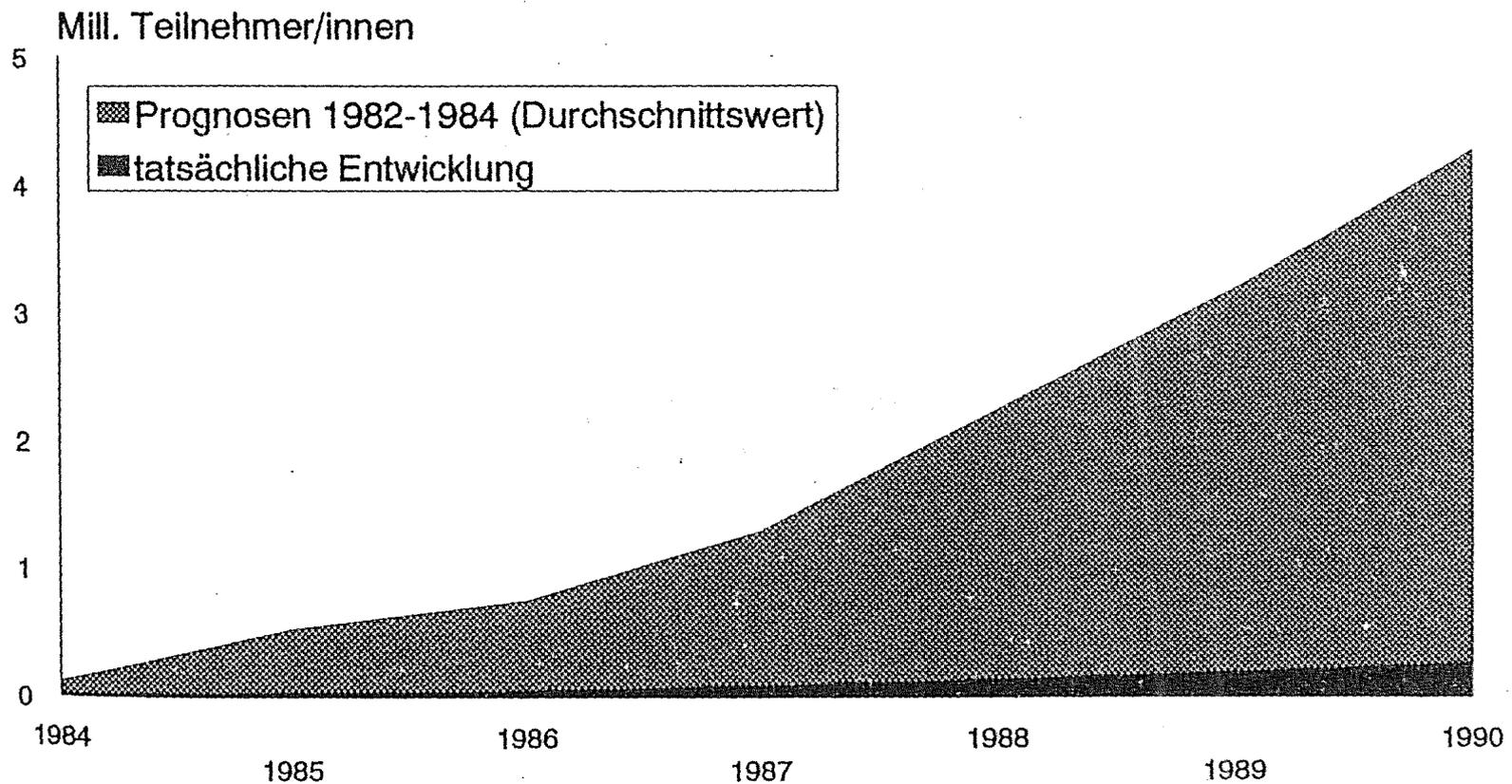
Btx's Technical Properties

- look'n'feel mostly like Teletext systems on TV

- modem speed of 1200 bit/s in the beginning

- distinguished client/server

  - central mainframe

  - distributed database servers

  - consumer devices, connected to TV sets

- distinguished roles

  - information providers

  - subscribers

- could perform simple animations

- built-in micropayment system

Btx' Proliferation

Entwicklung der Btx-Anschlüsse

Mill. Teilnehmer/innen

Prognosen 1982-1984 (Durchschnittswert)
tatsächliche Entwicklung

cf. Schröder 1999, S. 179

Appropriating Btx

- consumers were reluctant

- The CCC was eager to use it.

  - CCC's "services" on Btx

    - information pages

    - donation page

  - highlighting problems of Btx

    - data protection

    - security

- The Bundespost tried to downplay such findings.

Hacking Btx (short story)

- the "Btx hack"

  (1) get identification codes of Hamburg's savings bank (HASPA)

  (2) modify your Btx decoder set faking HASPA's identity

  (3) access automatically your own donation page.

  - evil haxxors: $$$$... eh DM DM DM DM (135,000 DM)
  - good hackers: report yourself to the data protection commissioner

  (4) achievements unlocked:

  - get a lot of attention
  - embarrass your arch nemesis (the Deutsche Bundespost)

Hacking Btx (short story) - 2

- money transfer between Btx accounts
  - not between actual bank accounts

- How did they obtain the ID codes?
  - CCC: security flaw in Btx
  - DBP: observed during public demonstration

HASPA's Reactions on the Btx Hack

Benno Schölermann, HASPA manager

„Alle Hochachtung vor der Tüchtigkeit dieser Leute. Man muss sagen, es ist bedauerlich, dass erst durch den Beweis den diese Leute erbracht haben, die Post davon überzeugt werden konnte ... dass ihre BTX-Software noch nicht allen Anforderungen gerecht wird.“

"I hold the diligence of these people in high regard. One can't stress enough how regrettable it is that the Post [DBP] couldn't be convinced before this evidence produced by these people that its Btx software does not fulfill all requirements."

heute journal, 11-19-1984
http://chaosradio.ccc.de/doc002.html

Reactions on the Btx Hack

- HASPA's manager expressed his respect for the hackers.
  - For they had revealed that the promises of the DBP had been wrong.
- The media mostly cheered for them.
  - for revealing data protection flaws, of course
  - a David-versus-Goliath sceniaro
- The DBP tried to downplay the hack:
  - admitted its possibility first
  - but then denied the seriousness of the hack
  - allegedly the HASPA had been careless
- The Comittee for Post and Telecommunication blamed the DBP for its clumsy communication politics.

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Part IV

Computer Crime Law-Making

Germany's Computer-Crime Law-Making

- end of the1970s

- laws for the information age

  - focus on the criminal code (Strafgesetzbuch, StGB)

  - no penalty without a law

- problems like

  - computer fraud, tapping data

  - can computers err?

  - the results of calculations are no legal deeds

    - (In the German law system, a deed is any written document that can serve as evidence in court.)

2. WiKG

- "2. Wirtschaftskriminalitätsbekämpfungsgesetz"
- negotiated ~1980-1986
- for fighting "white-collar" crimes, such as
  - some uninteresting economic crimes
  - computer fraud
  - counterfeiting deeds
  - tapping data*
  - destroying data or programs*
- supported by coalition *and* opposition

The Bill in Detail

- the original bill only included computer fraud and counterfeiting digital deeds

- after a hearing with stakeholders the committee revised and extended the bill

  - stakeholders from

    - industry

    - law enforcement

    - *but:* neither hackers nor users

  - introducing norms for tapping or destroying data

The Bill in Detail – 2

- ## §202a StGB (tapping data)
  - Old §202 StGB applied only to letters with an envelope.

- ## §263a StGB (computer fraud)
  - Old §263 StGB applied only to humans – and computers couldn't err.

- ## §303a StGB (unauthorized data change)
  - Old §303 StGB (damage to property) applied only to material things.

The Draft in Detail: §202a StGB

"A person fulfills the elements of the offense if he or she overcomes access guards, for example by repeatedly typing combinations of letters and numbers on the keyboard of a home computer ("hacking") and, as such, gains access to data not designated to be accessed by this person. [...]"

(Explanation to the draft by the BMJ for the Committee, June 11, 1985.)

Inside the Committee...

- The hearing highlighted the necessity to extend the scope:
    - to meet the stakeholders' wishes
    - to discuss another draft filed by the Ministry of Justice
- October 23rd, 1985:
    - the committee agreed to the revised draft
    - the Btx hack left its footprint
        - see next slide
    - btw, 1+9+8+5 = 23
- Concerning the Ministry of Justice's idea of hackers:
    - no noteworthy technological skills
    - hacking a mere trial and error by entering guessed passwords

Inside the Committee... - 2

- The committee considered
  - exempting "good hackers" and "young computer enthusiasts"
  - from punishment for their "beneficial work"
  - They were "impressed" by hacks in which "hobbyists" proved large companies and organizations' security measures to be "insufficient."
- The Committee also mentioned "one case:"
  - "in which two members of a computer club managed to transfer a large amount of money from a bank to their own account using Btx, thus proving that DBP's security guarantee was false."
  - Even the conservatives agreed
    - they sympathized with hackers and were impressed by "intellectual discipline."

Cf. Protocol of the Committee for Legal Affairs, Parliamentary Archives (PA-DBT 3109 A 10/6), Prot. 63, pp.38-47.

Inside the Committee... - 3

- The committee's opionions

  - necessary to limit their "hobby"
    to a "justifiable extent"

  - §202a StGB seen as an
    inevitable part of the new legislation

  - data protection issues as a legal excuse

  - avoid a legal definition of
    "politically correct hacking"

§202a StGB – release candidate

- So, the Committee reshaped §202a StGB:
  - punishable
    - tapping data
    - that is protected by some protection mechanism
  - not punishable
    - merely logging in
    - breaking protection mechanisms
    - as long as no data is obtained
- This version was submitted by the committee and adopted by the parliament in 1986.

The Law in Journals

- The idea of good hackers can be found in law journals, too – e.g.:

  - Haft (1987) maintained the impunity of hobbyist hacking

  - Gravenreuth (1989) distinguished between hackers, crackers, crashers, …

- Evidently, these attempts were silenced:

  - Ernst (2007) underlined the little effect telling good from bad hackers had in practise.

The Law and Hacktivism

- Source: hacker literature
  - a law against hacking?
  - a law only aimed at real white-collar crimes?
  - However, it was a kind of tariff list for hacking.

- To keep hacking, one author concluded, they had *to hack the law* by finding ways for legal hacking.

Conclusion

- History is slow and conservative.
  - Yet, it led to surprising results on the long run.
  - History of hacking still in its infancies.
- Btx is an epitome of 1980s' technology
  - It combines expectations and fears.
  - It was one place of effective hacktivism.
- Hacktivism changes law by changing images.
  - "good hackers"
    - consumer / data protection
    - yet marginalized as hobbyists

Contact

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- http://denker.net/
- Phaidros @ IRCnet
- PhaidrosDA @ Freenode and Twitter

Sources

- Pictures:

    - http://rollmops.files.wordpress.com/2007/01/btx1.jpg

    - http://www.c64-wiki.de/images/b/b4/Brotkastencorner.jpg

    - http://www.emschertal.de/gif/zugang.gif

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