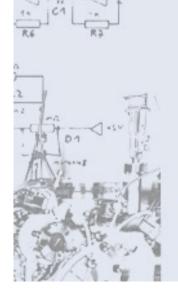


Free Software & Anarchism

Does this compute?

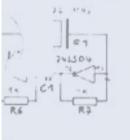


Sandro Gaycken IWT- Bielefeld sandro.gaycken@iwt.uni-bielefeld.de

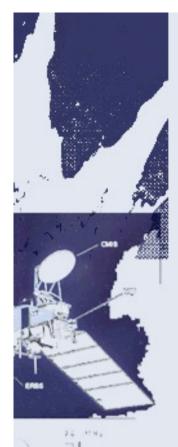


Structure

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- 2. Anarchism & Anarchical Technology
- 3. The Case of Free Software
- 4. A Demonstrative Value
- 5. Ideas for Anarchical Computing



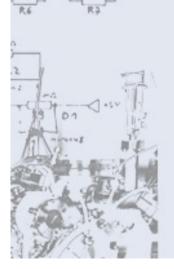




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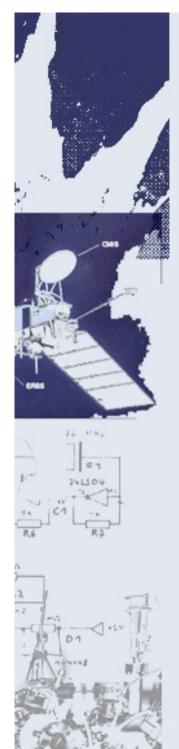
Industrialized Development:

- Corporate interests
- Hierarchically ordered
- By leadership
- Expensive
- Secret

Free

Development:

- Users interests
- Not hierarchically ordered
- By consensus
- Cheap
- Open



Anarchical elements:

- No leadership or hierarchies
- Consensus-based
- Individual design options
- Open for participation

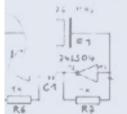
Negative notions (FUD-initiative/Microsoft):

- Orderlessness
- No stability
- No quality



Politicization

- Openness implied:
 - New models of business & production
 - Connections to communities
 - New concepts of ownership & copyright
- Challenges fundamental social structures
- Thus easily extensible to social reform and "revolution"
- Open X-initiatives, Oekonux, institutions



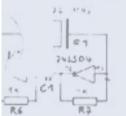


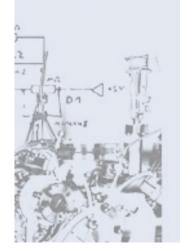


References to anarchy:

Free software development

- "Is a step toward the post-scarcity world"
 - Stallman
- "Counterfeits anarchical methods" -Milsom
- "Has anarchists benefits" Moglen
- "Is an anarchist mode of communication" - Vaidhyanathan
- ...plus some bad ones







Preliminary criticism of the connotation:

- Not a genuine anarchical program
- No references to anarchical theories
- Rather metaphorical uses so far
- Rather colloquial understanding
- Rather superficial connection



Is Free Software really anarchical?



Structure

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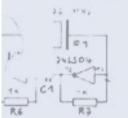






How can technology be political?

- as part of the productive force
- as medialising power structures
- as technically demanding/ predetermining certain structures for political/ social actions (inherent necessities)
- as a conceptual or ideological paradigm
- ...







Politically aware construction of technology:

Political Ideals

construct

Supportive Technology

discard

Destructive Technology

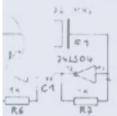




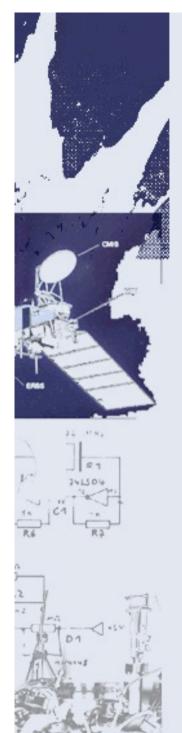
Primary goal of Anarchism:

Individual liberty which is only limited by the liberty of others









Negative freedom (I. Berlin): Abolition of...

- Authoritarianism & hierarchies of all sorts, implicit or explicit
- Inequalities
- Capitalism, Competition, ...

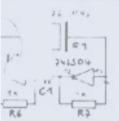
Positive demands:

- Self-determination
- Decentralisation
- Communities in free association
- Free agreement



What is an anarchical technology?

It's a technology which supports the positive anarchical demands while trying to abolish the menaces stated in the negative demands.







Minimal demands:

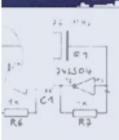
- Power structures: not medialising power principles
- Size and proportion: fitted to decentralized, local demands and a few workers
- Complexity and needed skill: fitted to little organization, training and maintenance
- Ressources: fitted to local ressources wt little energy and infrastructure



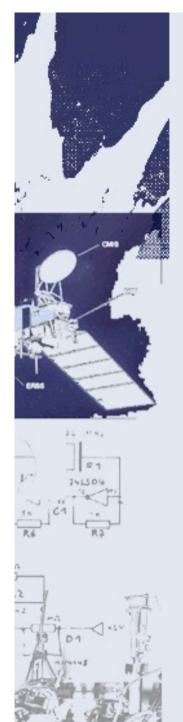


Maximal demands:

- Full automation and full mechanization of an production
- Fully sustainable local production,
 renewable energies and no pollution
- Emergence of "positive" technologies
 - which allow people "to further develop their creative and human potentials" (Bookchin)
 - which proliferate "autonomous and creative intercourse among persons" (Illich)







Negative example:

A large steel factory compound...

- many workers
- hierarchical order, decisionmakers, specialists
- only one product
- sophisticated ressources, energy and infrastructure
- a big market

Positive example:

A sun furnace...

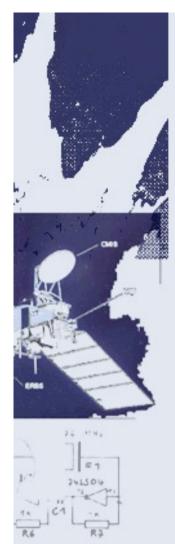
- just a few workers
- only basic organization
- no special skills to operate
- a variety of products
- little ressources, energy and infrastructure
- works for local demands





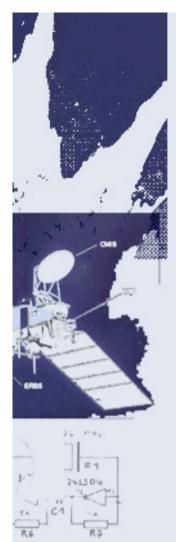
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Free software as a technology:

- Is a component of computers
- Computer **production** demands:
- Division of labour
- Hierarchies
- Global ressource infrastructures
- High energies
- Big markets

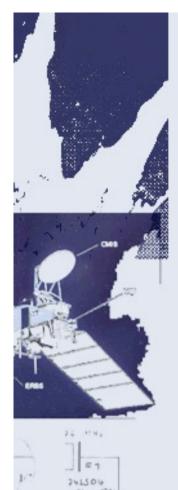


Use presupposes:

- Money
- Energy, Infrastructure
- Specialists for maintenance

Other characteristics:

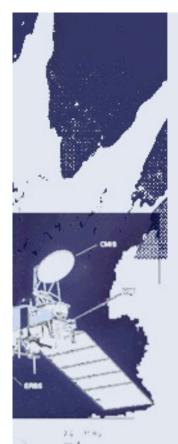
- Predetermined in its possible uses
- Often medializes power (The lost war?)
- Proliferating social and ideological paradigms regarding hierarchy, authority, .. (i.e. information - experts)



Free Software as a technological design method:

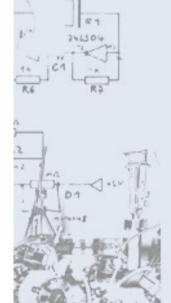
Is partly anarchical because:

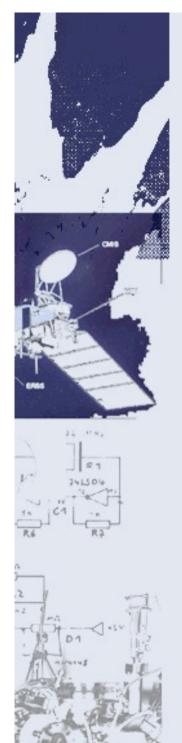
- Consensus based
- Unguided (except for internal logic)
- Individually variable
- Open
- (Non-profit)



But freedom is enframed by:

- Rules (implicit Do's 'n' Dont's, Copyleft: GPL, CreativeCommons, ..)
- Often implicit hierarchical structures
- Requires specialist knowledge
- Often capitalist measurements
- Software as a technology





Free Software is not a genuine anarchical technology!

- As a technology: it happens only in computers which need extensive capitalistic production methods, are still luxury commodities and often medialize power
- As a design method: it is enframed by rules and implicit hierarchies and only accessible by specialists



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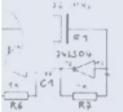




A Demonstrative Value

Capitalists & authoritarianists argue:

"Effective production & development need hierarchical structures, competition and financial stimulus"



Free Software has demonstrated the opposite:



Quality and productivity do not need interest in profit, competition or authoritative structures!



A Demonstrative Value

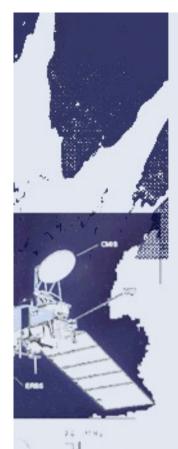
Free Software as a case study against the alleged connection of production/ development and profit and authority



A non-capitalistic, non-hierarchical society is productive, probably even more so.

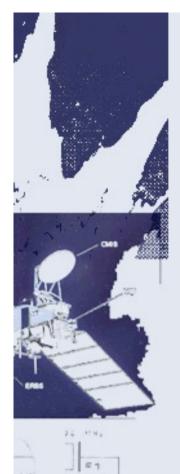


Free software is **politically valuable as a case study**, but not political itself!



Structure

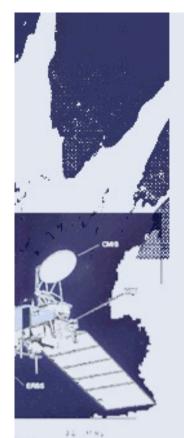
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Ideas for Anarchical Computing

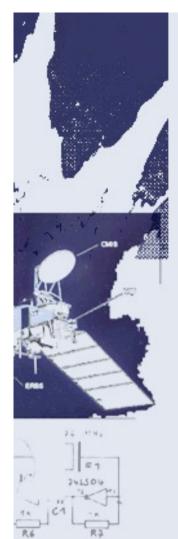
Other ideas can be developed out of the demands for anarchical technology:

- Further liberate free software by abandoning rules & implicit hierarchies and by..
- Making programs & programming a lot easier so everyone can participate (unexpertise)
- Writing free machine software which works on specific production machines to free communities from company dependence



Ideas for Anarchical Computing

- Designing free (= patent free)
 hardware which embodies anarchical principles to promote anarchical communities
- Designing sabotage software and devices enabling people to sabotage surrounding technologies they do not approve of (Hacking for Everyone)



Ideas for Anarchical Computing

Opening up the choice to sabotage:

- Slightly helps people to control inherent necessities in political and social contexts
- Allows people to de-medialize power structures around them
- Gives people more choices towards technological determinism
- Has strong and substantial demonstrative value as social protest against technological determinism