

The Freedom Zero Problem

Free Software and
the Ethical Use of Software

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Overview

- Software Freedoms
- The Freedom Zero Problem
- GPL v3 and DRM
- Ethical Perspectives on Freedom Zero
- On the Ethical Use of Software

Software Freedoms

From the Free Software Definition:

- Zero** The freedom to run the program, for any purpose
- One** The freedom to study how the program works, and adapt it to your needs
- Two** The freedom to redistribute copies so you can help your neighbor
- Three** The freedom to improve the program, and release your improvements to the public, so that the whole community benefits

Why 'Freedom Zero'?

- Hacker humor
- Bedrock principle
 - protect user's right to deploy software in whatever fashion, towards whatever end
 - creator of the software must relinquish control over uses of his work -- autonomy and responsibility go to the user

The Problem

- Freedom Zero grounded in “Hacker Ethic”
 - Unfettered access to information
 - Restrictions on running software may directly restrict inquiry and access to information
- But software may be used to achieve ethically questionable ends
- E.g., free software may be used to infringe privacy, thus contributing to the restriction of freedom

GPL version 3

- The recently-released version 3 of the GNU General Public License is the first new version in 15 years
- The new version went through four Discussion Drafts, supported by a sophisticated tool for soliciting public comment
- The tension surrounding Freedom Zero was manifested in the vigorous discussion around privacy and anti-DRM terms in the new version

Discussion Draft 1

3. Digital Restrictions Management

No permission is given to distribute covered works that illegally invade users' privacy, nor for modes of distribution that deny users that run covered works the full exercise of the legal rights granted by this License.

Why not, for instance, deny distribution to covered works that are components of weapons of mass destruction?

This is an unacceptable restriction on the functionality of modified versions and discriminates against possible uses of the work.

I'm concerned that this may be a restriction on use of the works disguised as a restriction on distribution

This makes about as much sense as a tool designer withholding permission to manufacture and sell hammers that illegally hurt users' thumbs.

Discussion Draft 2

3. No Denying Users' Rights through Technical Measures.

Regardless of any other provision of this License, no permission is given for modes of conveying that deny users that run covered works the full exercise of the legal rights granted by this License.

Will the downloaded work still be protected by this clause when a DRM vendor decides to decrease their rights after conveyance?

What happens if it is not the mode of conveying that denies the users their rights when they try to run covered works? For example,...

I'm uneasy about "legislating" technology like this, and it seems an all-or-nothing approach works best, but that means GPL should be forked into two distinct licenses IMHO.

Final Version

3. Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures.

When you convey a covered work, **you waive any legal power to forbid circumvention** of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

Shades of GPL vs BSD

- The FOSS community constantly tussles with the scope of the freedoms of free software
- This looks a lot like the debate about copyleft:
 - is it legitimate to restrict programmers' freedom to restrict users' freedoms?
- The copyleft response: the restriction is very narrowly focused for one specific purpose
 - See S. Chopra & S. Dexter. "A Comparative Assessment of Free Software Licensing Schemes," *Proceedings of CEPE2005*.

Why Freedom Zero?

- Free software might be run for the purposes of
 - Infringing users' privacy
 - Debugging proprietary software
 - Sending spam
 - Streaming child porn videos
 - Performing stem-cell research
 - Guiding nuclear missiles
- Why doesn't Free Software include *droit moral* for programmers?

Why Freedom Zero?

- So, how might Freedom Zero be justified from a societal perspective broader than the Hacker Ethic?
 - Rawlsian argument
 - Balkanization
 - Futility

Rawlsian Argument

[M. Butcher]

- Consider a free software community (users, programmers, documenters) assembled under a veil of ignorance
- The group attempts to determine what rights should be granted to whom
- Most plausibly, no restrictions on use
 - All members would justifiably fear possible future restrictions on their use

Balkanization

- Restrictions on use could fracture the free software community along ideological fault lines
 - Recall “...but that means GPL should be forked into two distinct licenses IMHO...”
- The FSF has considered this with respect to the HESSLA license
 - Unnecessary: access to source is enough to prevent feared abuses
 - Ineffective: proprietary alternatives available
 - Weakens FS position

Futility

- Software is easily reproducible and disseminable
- Artists' droit moral are often contingent on works' tangibility and irreproducibility
- Restrictions on use for intangible works (poetry, music) are harder to characterize and enforce
- Legal wrinkle: some restrictions may infringe free speech rights

Ethical Use of Software

- Option of licensing software under a more restrictive non-free license (eg HESSLA) is always available to original developers
 - But is that a morally defensible action? (FOSS community appears neutral)
 - In the US, copyright-based licenses may *not* restrict use

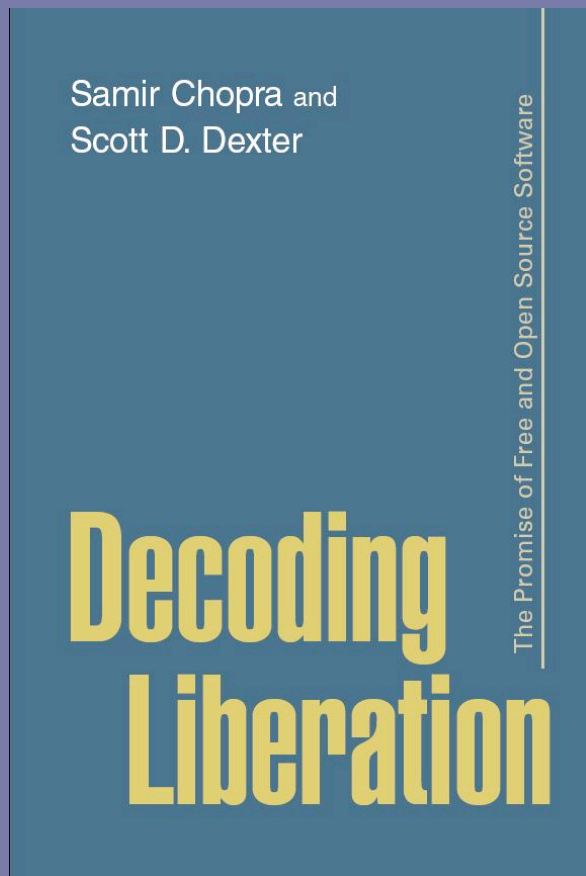
Ethical Use of Software

- These arguments rely on a significantly utilitarian stance that limiting Freedom Zero is less desirable than any alternative
- Never directly interacts with deontological prescriptions against 'immoral' applications
- A familiar theme in the continuous debate over uses of scientific knowledge
- Perhaps licenses best evaluated through the lens of virtue ethics

Is Freedom Zero Wrong?

- Can a free software licensor be morally culpable for granting Freedom Zero?
 - No more than a mathematician whose work on partial differential equations is later applied in optimizing munitions delivery
 - Viewing code as scientific knowledge enables us to embed this debate in a larger one and draw upon its insights
 - Should programmers be expected to anticipate all possible uses of software? Too-great moral burden (Sidgwick)

Decoding Liberation: The Promise of Free and Open Source Software



Forthcoming from
Routledge

*Routledge Studies in New
Media and CyberCulture*

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decodingliberation.blogspot.com