

'Free to Know or Free to Own?' identifies one of the most important challenges for activists campaigning for social justice and sustainability in the information age.

Defending the common ownership and free availability of knowledge from both traditional state censorship, and commercial imperatives to impose scarcity by limiting reproduction and distribution of information, especially through new online media.

An informed and interconnected public is a threat to any group trying to use public office or business to control what people are free to know, to say, to share, to demonstrate, to publish, and to keep private. In other words, it is a crucial part of any functioning democracy. So why is “intellectual property” being used as an excuse to keep people uninformed and discourage sharing?

***Free to  
Know  
or  
Free to  
Own?***

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A publication of [www.Disintermedia.net.nz](http://www.Disintermedia.net.nz).

Disintermedia is an Aotearoa-based project dedicated to defending everyone's right to access public information, participate in cultural exchange, and take practical steps to protect their privacy. Disintermedia advocates for a simple algorithm; free culture, free knowledge, free people. As such it aims to promote and support the work of various groups in Aotearoa including:

CreativeCommons Aotearoa/ NZ , Open Source Society of NZ, Aotearoa Indymedia, Open Ur Eyes, Kotahi te Ao, Big Picture Film Festival, Radio Chomsky, MatrixFM, Island Bay World Service, and Uncensored.

and around the world: Free Software Foundation, CC International, Electronic Frontiers Foundation, Libre Society, and the Participatory Culture Foundation, amongst others.



- ['ItheFilm'](#) - a brief history of Indymedia
- ['Good Copy, Bad Copy'](#) - alternatives to Intellectual property"
- ['Steal This Film'](#)

## Other Information Freedom Projects:

- [Electronic Frontiers Foundation](#) - defending the freedom and privacy of netizens
- [Wikipedia](#) - a free encyclopedia written and edited by anyone
- [Creative Commons](#) - a pro-sharing means of artistic licensing
- [Sourceforge](#) - free hosting and development tools for free and open source software projects
- [Alternative IMC](#) - a collaborative tool for building, linking and integrating anticorporate social projects
- [Participatory Culture Foundation](#) - developers of open online video platform, and [Miro player](#)
- [Peer-to-Peer Foundation](#) - studies the effect of p2p technology on society
- [Free Culture](#) - student movement for media and information freedom
- [Libre Manifesto](#) - a call to action against the enclosement of the information comons
- [Blag](#) and [Ubuntu](#) - free distributions of GNU/ Linux

## **Introduction: Source of Conflict**

"Anarchism's great project is to dissolve the asymmetry of power. How? There are thousands of alternatives and there is not only one solution. To advance 'one' solution would be a doctrine of power, a manifestation of power."

- University Academic Alfredo Vallota,  
quoted in the Venezuelan paper 'El Libertario'

To most people, growing food and computer programming are worlds apart. But these sectors have both been engineered by modern society, with their social, economic and technological organisation undergoing major changes as they ticked over into the twenty-first century of the Gregorian calendar. Many of these changes are being driven by the commodification of knowledge, ideas and information by for-profit corporations, who seek to entrench the private ownership of information.

Like the double helix of the DNA molecule, the changes in each field parallel each other in a number of ways. This article describes some of those parallels, and introduces some of the ways that communities of growers and programmers are resisting commodification of food and software, beginning with comparison of seed saving and open source code.

# 1) A Recipe for Dissent

A seed is a recipe, a sets of DNA instructions for combining the available resources of the growing environment - water, air, soil and sunlight - into a viable plant. A 'source code' is also a recipe, a set of digital instructions for combining the resources of a computing environment including hardware, operating system and other software into a useful computer program.

Just as cooks often share recipes, many keen growers collect seeds or share cuttings of particularly useful plants. Not only can people benefit from each others experimentation but those useful qualities are dispersed widely through the gene pool when adult plants release pollen, increasing their chances of survival. Projects like Koanga Gardens in Te Tai Tokerau (Northland) act as 'seed banks', ensuring the continued propagation of heirloom plant varieties and the genetic legacy they carry.

Some computer programmers also like to share their recipes - the source code of the software they write. This way other software writers can incorporate existing code into their programs instead of having to write new code from scratch to do the same job. There are obvious benefits in the speed of software development and compatibility between different programs. Plus improvements made to the shared source by these later users are usually submitted back to the 'source pool' which benefits the original programmers and the computer-using community in general. This source-sharing practice was standard in the early days of programming, and today Internet servers like [Sourceforge.net](http://Sourceforge.net) function as 'code banks', providing repositories for shared code and resources to assist in their collaborative development.

## References

### More information:

- On the [World Intellectual Property Organisation](#)
- On [TRIPS](#) Trade Related aspects of Intellectual Property

### Recommended Reading:

- '[Information Liberation](#)' - Brian Martin
- '[Free Software, Free Society](#)' - Richard Stallman
- '[Cathedral and the Bazaar](#)' - Eric Raymond
- [Women and Linux](#)
- '[Wto, Patents On Lifeforms And Amendments In India's Patent Law](#)' - Vandana Shiva
- '[Sustainability in a Nutshell](#)' - Starhawk

### Documentaries:

- '[The Future of Food](#)' - a brief future of biotech
- '[Revolution OS](#)' - a brief history of GNU/ Linux

## **In Conclusion: Resisting Mediation**

The question we must ask ourselves and those in positions of influence is: which is more important - the freedom to speak or the freedom to own speech. Multinational corporate advocates are seeking ever increasing powers to control information to keep some kinds of data secret to serve their own agendas and to charge royalties for the use of other kinds. They use misleading euphemisms like 'intellectual property' and 'digital rights management' and work through global institutions like the World Intellectual Property Organisation (WIPO) and the Trade Related aspects of Intellectual Property agreement (TRIPS) being pushed through the World Trade Organisation (WTO).

The logical end result is a world where citizens passively consume content without question and journalists, artists, programmers and growers run assembly lines in information industries turning all news, entertainments, softwares and genomes into commercial products. The alternative vision to this monocultural dystopia is a world where everyone has the freedom to play an active role in the creation, distribution and use of knowledge and information is considered a common good rather than private property. This other world is not only possible but imminent. Making it happen is up to all of us.

"the artist is not a special kind of person,  
but each person is a special kind of artist."

- quoted from Hakim Bey, 'Imagination'

<http://www.left-bank.org/bey/imaginat.htm>

## 2) Erosion of the Commons

The commercialization of personal computers led to software being treated as a commodity, imposing an artificial scarcity on something that can be reproduced instantly, with reproduction costs borne by the end user. This resulted in a tendency of software-selling businesses to keep their code secret. Free software began to give way to proprietary software, distributed as preprocessed 'binaries' in shrink-wrapped cardboard boxes.

While it is easier for the average user to install binaries into their computer than to compile applications from source code, the hiding of the code eliminates the freedom of the user or their organization to improve or adapt the software for their use, or have it checked for bugs or security flaws. There are commercial packages based on free software but they are obliged to share the source code with their customers and there is generally a more mutually collaborative relationship between supplier and client. In recent years, some institutional users have replaced proprietary products with open source packages so that their own technicians could have free access to the source code for problem solving purposes.

During the same period of the late 20th century a mass industrialization of agriculture - sometimes referred to as the 'green revolution' - resulted in food plants becoming a mass-produced commodity. The sharing of heirloom seeds was progressively replaced with the buying of seeds from agribusiness corporations, often hybrid seeds designed to grow into standardized food plants that cannot reproduce. While buying seeds removes the labour-intensive work of gathering, drying and storing seeds it also reduces the genetic biodiversity of food crops and their ability to adapt to the environmental conditions of the local area.

### 3) Movement in Demand

Farmers and gardeners who believe in natural, self-sustaining methods of food production have opposed the industrialisation of food production by organising themselves into a loose movement of 'organic' advocacy organisations. These include the [International Federation of Organic Agricultural Movements](#) and in Aotearoa the [Soil and Health Association](#), publishers of OrganicsNZ magazine. While some growers accept organic products being a niche market within the overall market system there is also a development philosophy called [permaculture](#) in which organic food production is one element of an entire self-sufficient living system for humans and other life. As well as ongoing organising in support of sustainable development there are more activist organisations who defend against threats to the viability of organic growing, for example the [Ban Terminator](#) campaign and locally [GEFreeNZ](#).

The organisational response by programmers who still believe in the sharing of source code has been the evolution of a loose movement of libre software or FOSS (Free and Open Source software) advocates collaborating through the internet. While some organisations like the [Open Source Initiative](#) founded by libertarian Eric Raymond accept shared code being incorporated into proprietary systems, anti-corporate activists tend to support the Free Software Foundation whose project is a purely free computing system they call [GNU](#). [Linux Users Groups](#) have been meeting around Aotearoa for a number of years and more recently a network [GNU/Linux Users Groups](#) has been initiated. There are also activist groups in the computer world including the [Electronic Frontiers Foundation](#) and locally [Aotearoa Indymedia](#).

PCs by office and home users over competitors like Apple, giving Windows and its owner Microsoft their current dominance.

As the PC has become more of an internet terminal and as more people access the internet through portable devices including Palmtops and mobile phones, content industry associations like the RIAA and the MPAA are pressuring hardware manufacturers to cripple their hardware to prevent copying of media. The FSF have termed this practice 'Defective by Design', as it usually limits customers' freedom to use the hardware they have paid for to run free software.

The Trusted Computer Group standard (sometimes known by the Microsoft codename Palladium) is an example which "...provides a computing platform on which you can't tamper with the application software, and where these applications can communicate securely with their authors and with each other. The original motivation was digital rights management (DRM): Disney will be able to sell you DVDs that will decrypt and run on a TC platform, but which you won't be able to copy. The music industry will be able to sell you music downloads that you won't be able to swap. They will be able to sell you CDs that you'll only be able to play three times, or only on your birthday. All sorts of new marketing possibilities will open up." - Ross Anderson.

## 6) The Right to Copy

Another well publicized Monsanto biotechnology program was the Terminator Seeds an example of a kind of technology now being referred to by the euphemism Genetic Use Restriction Technologies (GURT). Their aim was to use genetic engineering techniques to produce infertile food plants. Like the use of hybrid breeding mentioned earlier this forces farmers, community growers and home gardeners to buy seeds every year if they want to grow food. But hybrid plants often still produce fertile seed even if plants grown from them do not have the same carefully selected characteristics as the parent plant. Growers can still save seed and many organics enthusiasts carry out their own experimental breeding programs. As well as threatening to remove any possibility of seed sovereignty, GURTS technology could easily spread to other crops, and even other species, through horizontal gene transfer. Such transfer can be seen in cases of 'superweeds' in Europe and North America, where pesticide resistance genes from genetically modified crops like soy and corn have crossed over into wild plants occurring in the areas where the crops are grown.

The organic philosophy is summed up in the slogan "Healthy Soil, Healthy Food, Healthy People". The open source philosophy could be expressed along similar lines as "free software, free speech, free people". Just as the organic movement see the cultivation of the living soil as the basis of sustainable food production, the free software movement views the integration of all the different shared application codebases through a free operating system like GNU/Linux as the basis of freedom in information technology.

The greatest threat against the viability of free software lies in the changes occurring in the design of computing equipment. Traditionally the open architecture standards of the PC platform allows any company to produce pieces of equipment for use inside or with PC computers. Ironically it was this flexibility that drove the widespread adoption of

## 4) Code of Practice

In order to protect shared source code from privatisation through copyright, the various software development communities and companies have written specialised 'copyleft' licenses that specifically release the right to use, copy and modify the code. There are a galaxy of lesser known licenses serving different purposes but the two most commonly used licenses are the GNU General Public License ([GPL](#)) which covers the GNU/Linux operating system, and the more laissez-faire [BSD](#) License.

Both prevent later users claiming exclusive ownership of shared source code but the primary practical difference is in the clauses that cover the reuse of shared code. Free software licenses like the GPL insist that a programmer who incorporates code from free software into a new program must share the entire code of their program under the same license terms. Other open source licenses like the BSD allow shared code to be incorporated into otherwise proprietary software. Underlying this distinction is a complex philosophical debate over whether it is more important to protect software freedom for the benefit of the computing community or the freedom of programmers and their employers to license their code on their own terms. There is also the strategic debate of whether it is beneficial to the development of open standards

The parallel here between the free software vs. open source debate and the philosophical differences between the more subsistence-orientated permaculture approach to organics and large scale farms growing for commercial markets may seem to fall short. After all the Free Software Definition explicitly allows for commercial use of shared code while permaculture principles includes zerowaste - recycling all outputs back into the local system - which taken to its logical extreme is incompatible with growing food for sale.

However while the Free Software Foundation takes a laissez-faire position on commercialization of software, many free software advocates such as the Ubuntu community believe that software should be gratis ("free as in beer" - Richard Stallman) as well as libre ("free as in speech" - RS). In practice the sharing of code allows anyone with the skills to compile their own programs at no cost. Then there is the national Small Growers Scheme which allows smaller scale organic growers to certify their produce for sale in local markets. While it still involves the buying and selling of food this newer scheme is more influenced by the permaculture ideal of local production for local need than the export-orientated approach of the larger certifiers. As with any radical movement free software and permaculture activists have to work towards the realisation of their ideals within the limitations of society as it is.

## **5) Patently Absurd**

The voluntary standards exemplified by open source licenses and organic certifications stand in stark contrast to use of nation-state power by transnational corporations to turn common knowledge into intellectual property. Legislation like the US federal governments DMCA (Digital Millenium Copyright Act) and international treaties like TRIPs and ACTA, driven by a cabal of "intellectual property" lobbyists from corporate front groups like the Recording Industry Association of America (RIAA) and the Motion Picture Association of America (MPAA), have many governments a waging war on sharing.

In some countries including the US patenting laws have been bent to treat software as an invention, allowing the patenting of programming ideas on top of the existing copyright protection of source code. Companies can then charge royalties from other programmers implementing a similar idea even if they write new code from scratch - a waste of time that could be spent improving and adding

features to the existing code according to free software advocates. If this had been allowed in the early days of the personal computer Microsoft might now be able to demand money from anyone who programs an operating system with a graphical desktop - even though they copied the idea from the Apple Macintosh by adding Windows 3.0 to DOS. Ironically MS was taken to court by Apple, who were pushing for recognition of their ownership of the idea of graphical 'windows'. Apple lost.

Biotechnology corporations who have genetically engineered food crops to be resistance to pesticide chemicals (Monsanto 'RoundUp-Ready' soy beans) or to secrete pesticide (Aventis 'Starlink Corn') claim these innovations deserve patent protection. The idea of patenting life forms is inherently abhorrent to many social justice campaigners who remind us that the ownership of life used to be known as slavery. Others have warned that life patents threaten the ability of ordinary people to freely grow plants for their own needs. Commenting on a new law being introduced by the government of India scientist and food sovereignty campaigner Vandana Shiva said "it threatens to tear down the entire fabric of food security and health security we had built carefully and democratically since independence, by creating patent monopolies for seeds and medicines".