

Seedling

Biodiversity, Rights and Livelihood

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Convergence?



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Seedling

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Contents

Editorial

1 **IPR epicentres: a geography of intellectual property**

Peter Drahos

Articles

3 **Convergence zone?**

Convergence panel

13 **Software and seeds: lessons in community sharing**

Roberto Verzola

21 **The FAO seed treaty: from farmers' rights to breeders' privileges**

GRAIN

25 **Blue fishers, blue genes: fishy undercurrents in post-tsunami Asia**

GRAIN

Interview

18 **Jack Kloppenburg: "First the Seed" and the march of time**

Sprouting Up

28 **Tribal rights (f)or wrongs in India**

GRAIN

30 Resources

32 Action!

33 GRAIN Home Page

Front cover picture: Panos Pictures/Christien Jaspers (kids listening to the radio);
Panos Pictures/Gisele Wulfsohn (13th Intern'l AIDS conference);
Panos Pictures/Hamish Wilson (woman winnowing)

Back cover picture: Panos Pictures/Hamish Wilson. South Africa: A good day's catch

IPR epicentres

A geography of intellectual property

PETER DRAHOS

Where is intellectual property policy made? Governments make intellectual property law, but where does the policy thinking that lies behind the law come from? More than a decade ago I, along with my colleague John Braithwaite, set out to answer this question. At that time we were struck by the fact that during the late 1980s and into the 1990s governments all over the world were busily introducing or reforming their national systems of intellectual property protection. Countries such as Singapore and South Korea were passing laws on copyright and patents. This was even more puzzling because imitative production was important to these economies just as it had been a century earlier to European states and the US.¹

We approached our study using the methods of historians and anthropologists, reading documents and laws and interviewing and observing individuals who were key players in the domains we were trying to understand. In the case of intellectual property our fieldwork kept taking us back to the same four cities; Washington, New York, Brussels and Geneva. There were other places we went to such as Munich to speak to people in the

European Patent Office, Seattle to see Microsoft, London to see the International Federation of the Phonographic Industry and so on. But over time we realised that it was mainly in four cities that the tribe of intellectual property met and planned.

Other cities turned out to be places of non-planning. So in an interview in Seoul in 1994 I asked a senior official why Korea had agreed to Trade Related Intellectual Property Rights (TRIPS) being part of the World Trade Organisation (WTO). “Because we were ignorant” came back the reply. Two years later I visited New Delhi where I saw the same non-planning. There was a lot of fine speech-making from Indian parliamentarians about the inequity of TRIPS, the new imperialism of knowledge as well as complaints by the generic pharmaceutical industry about the impact of TRIPS on prices of medicines. But there were no real plans or strategies of resistance. In any case Indian political elites had quietly decided to hitch their cart to the glowing star of US hegemony. As part of the price they had to swallow its neo-liberal fundamentalism, which they did, telling themselves that it didn’t taste so bad after all. Ghandi may have kicked out the British Raj, but the politicians of the 1990s led India back into the role of the servant who fades

¹“Imitative production” (ie copying) is a critical stage of industrial development that all industrial countries have been through in developing their inventive and creative capacities. Without the space for imitative production that the US and Europe enjoyed last century, their industrial bases would not have developed so rapidly and successfully.



into an unnoticed background. Today there are thousands of call centres in India politely attending to the faults and troubles to be found in the rich consumer markets of the North. The intellectual property rights that introduce what the economist calls “demand inelasticities” into markets, thereby helping to generate supra normal profits remain in the firm grip of US and European companies.

There are some obvious reasons why Washington, New York, Geneva and Brussels are the dream-time places for new ideas about intellectual property. Washington is the seat of US political power, Brussels is the home of Europe’s super bureaucracy, the European Commission, Geneva has organisational behemoths like the World Intellectual Property Organisation and the WTO, and New York has business organisations, company headquarters and

“Intellectual property laws with their epicenter in Washington, New York, Brussels and Geneva travel like invisible tsunamis to developing countries.”

Wall Street where rock stars can turn the intellectual property in their music into a tradeable security. But more important are the networks thick with lobbyists, the company men and the expert consultants that

snake their way through the corridors of power. These networks hum with ideas about the future of intellectual property protection for multinationals. Big ideas, like linking intellectual property protection to the trade regime, get put down on paper by technical experts and sent to committees on which big business sits. Those committees send out recommendations, which are more like marching orders, to government. The private hands of command turn the wheels of executive power to their purpose. Trade laws get amended to make them a weapon of economic war in the fight to control a resource even more important than oil – knowledge.

Teams of lobbyists go to work on Congressional representatives. Access is easy because generous campaign contributions have bought the lobbyists and company men meeting time. Congressmen want to be responsive to inventing new intellectual property laws for the US and rest of the world. After all, there will be new elections to contest. Congress passes more and more intellectual property law. An American public, perpetually distracted by a media that sates it with images but no news, hardly notices. Copying is criminalised, copyright terms extended to make the rich even richer and patent laws strengthened. When American citizens ask questions about patents and the price of medicines they get told that soon the rest of the world will also be paying these high prices so the system will be once again be equitable.

Intellectual property laws, with their epicenter in Washington, New York, Brussels and Geneva, travel like invisible tsunamis to developing countries. There they turn the national innovation systems of those countries into so much debris. New laws to serve old masters have to be quickly enacted. There is also loss of life. The patent provisions of free trade agreements complicate access to life-saving medicines. The pharmaceutical company men on the ground in these countries hiss about what will happen to foreign investment if developing countries do not follow the new order of intellectual property. Threats are not always needed. Rewards, including travel to the cities of the epicenter are offered to developing country officials if they toe the line on US intellectual property ideology. Minor acts of betrayal by locals iterated many times over produce in developing countries a culture of compliance with the new order. Some officials even deceive themselves into believing that this new enslavement serves the national interest.

Life for poor people in the cities of non-planning remains the same. They continue to suffer ill health and lack of treatment. Western patent systems have never serviced their needs and never will. For all the prattle that comes out of the West about patent reform the truth is simple. Knowledge capitalism cares more about its mode of production and monopoly profits than it does about producing low cost medicines for the poor in developing countries. Their informal economies are swept away as their cities rezone and rebuild to become protected sites of production for investors rich in intellectual property. City planners pave the way with factories and malls that will deliver the brands for which consumers with bulging wallets and bulging waistlines will pay a premium.

The poor end up being pushed closer to another edge. But then they do what they have always done. They innovate. Whether it is in the form of music that has emerged from the ghettos and slavery of the centuries or in the diverse seeds of life that indigenous farmers have bequeathed us from living in the harshest climates, they innovate. They do so without intellectual property protection, for intellectual property exists to protect what rich imitators have stolen from those innovators that work on the periphery of survival and creativity.

This article originally appeared in *World Information* (www.world-information.org). Peter Drahos is Professor of Law at the Australian National University. For more details, see p. 12.





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Convergence zone



GRAIN has recently been taking an interest in what we have been calling ‘convergence’: the ways in which people are resisting the push for monopoly rights over information in different sectors. In this time of unprecedented centralisation of power and control, resistance is building on many fronts. We couldn’t help wondering if our various struggles might be more effective if we found some common ground. In October 2004, we published an editorial in *Seedling*¹ as a first stab at exploring the possibilities for convergence amongst these social movements in different sectors. The editorial offered some suggestions, but mostly raised a lot of questions. As a next step, we decided to approach a number of people working in different sectors and from different perspectives and get their views on the possibilities for convergence. Our ten-person panel includes people working in the fields

of free and open software (FOSS), access to medicines, seeds, communications and the media.

Each panelist was asked to answer two questions:

- 1 What links do you see between the struggles happening in different sectors around patents, copyrights and other forms of monopoly rights over information?
- 2 What are your views on a convergence of these movements?

The answers to these two questions are laid out in the following pages. We didn’t expect consensus and we didn’t get it. What we did get is some very thought-provoking and insightful perspectives to stimulate further thinking about the overlap in our various struggles, and the creative ways in which these might be brought together.

¹ GRAIN (2004), “Freedom from IPR: Towards a convergence of movements”, *Seedling*, October 2004, www.grain.org/seedling/?id=301

1

Links?

Dexter X

“Intellectually it’s easy to discern commonalities. Everywhere you look – agriculture, science, software – you can see that every domain of human culture is collectively produced. Anyone involved in music knows there isn’t a style, melody, riff or technique that doesn’t build in some way on what’s been done before. Sometimes obvious, sometimes less so, it’s all a grand collaboration: quotes, references, allusions, hommages, covers, remixes, even venal plagiarisms. Attempts to bottle, commodify and fence-off this ineffable human expression are increasingly convoluted and desperate.

Everywhere there are opportunities to see the rickety pastiche of self-contradictory laws and treaties being used to alienate increasing areas of nature and human endeavour for private profit and to recognise the absurdity of it. Record Industry executives are doing a particularly good job of looking foolish to justify their profiteering, as their business model fails to adapt to new realities. Hopefully their fumbling will encourage people to recognise what a sham the whole system is.

Five major labels control a monopoly that exploits musicians and music-lovers and harms music culture. Some regard peer2peer file sharing and collective licensing as a solution, but most music would still be unavailable if it weren’t commercially viable. As a disk jockey, what is most exciting about peer2peer file sharing isn’t downloading major-label music, but rather the potential for unfettered grassroots collaboration between creative music-lovers, with commerce removed from the mix. The opportunity transcends music, but so do the real world limitations. It’s inane to get excited about file-sharing when half the planet has never used a phone.

2

Convergence?

Monopoly information rights are exacerbating a crisis. HIV/AIDS kills 6,000 people each day in Africa because drugs that can inhibit the virus have been made inaccessible by the people that control their manufacture. Thousands of farmers’ suicides in India can be linked directly to debt and dependency pushed by increasing monopoly control of seeds. These and other crises facing the poor globally are life and death issues. HIV/AIDS is a greater threat to music

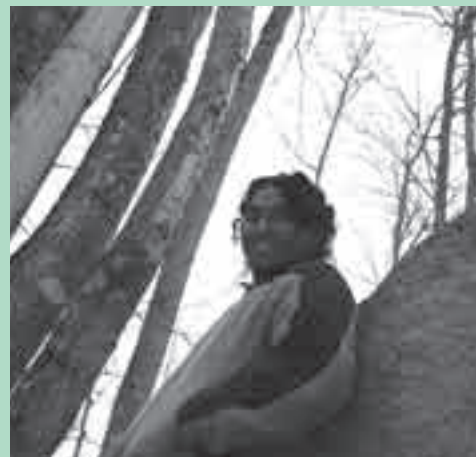
than either music industry monopolies or peer2peer file sharing ever could be. How many potential Fela Kutis and Mozarts have died preventable deaths?

Both our perceptions of the problem and our proposed solutions are influenced by widely divergent positions of privilege and proximity to power. Any solution that requires an army of lawyers and technocrats to implement it will guarantee that those rich and powerful enough to buy an army will trample those who cannot. Those armies are called corporations but we should see them for what they are. People with names and addresses use corporations to limit their liability for the risks they take and the crimes they commit. Every legal and technical tool that is crafted to protect people will be turned against them if fundamental inequalities are left unaddressed.

Real solidarity means looking for leadership from the most disadvantaged and the most adversely affected people. Indigenous people and people of colour, have had everything from musical phrases to medicinal plants taken from them as costless heritage of mankind, and returned repackaged as commodities with prices firmly attached. Copyrights, patents, licenses and abstract rights framed in alien cultures have not and will not provide practical protection against racism, colonialism, violence and greed.”



4



Dexter X is a disk jockey, activist and musician. A former Program Director at CKUT radio in Montreal, Dexter teaches media workshops, is a disk jockey in mobile sound systems at demonstrations and is currently developing a documentary film project about intellectual property rights. Dexter is also a climbing and civil disobedience instructor for The Ruckus Society and Greenpeace.

Jargon Buster

FOSS (Free and Open Source Software, also F/OSS), is software which is liberally licensed to grant the right of users to study, change, and improve its design through the availability of its source code.

The General Public License (GPL) grants the user of a computer programme the freedoms to run, study and modify the program; distribute copies; improve the programme and release it to the public. The primary difference between the GPL and more 'permissive' free software licenses is that the GPL seeks to ensure that the above freedoms are preserved in copies and in derivative works using copyleft (see below).

Copyleft is a legal tool that gives users the freedom to redistribute software and alter/improve its codes as long as the freedom to copy and change is passed on to every user.

The BSD license (Berkeley Software Division license agreement) is one of the most widely used licenses for free software. It has fewer restrictions than the GPL, putting it relatively close to the public domain.

A **peer-to-peer (P2P)** computer network relies on the computing power and bandwidth of the participants in the network rather than concentrating it in a few servers. P2P networks are typically used for connecting nodes via largely *ad hoc* connections and are used for sharing content files containing anything in digital format, such as audio, video or data.

BitTorrent is both the protocol and the name of the P2P file distribution application that makes it possible to massively distribute files without the corresponding massive consumption in server/bandwidth resources.

Fair Use is the right to use a copyrighted work for educational, academic, or research purposes. The Fair Use doctrine has come under serious threat in the USA as a result of the Digital Millennium Copyright Act (2000), which includes a swathe of restrictive clauses related to the use of copyrighted material with major consequences for public libraries, educational institutions and home use.

The Creative Commons is a non-profit organisation devoted to expanding the range of creative work available for others to legally build upon and share.

Ellen 't Hoen is the coordinator of the Globalisation Project of the Campaign for Access to Essential Medicines of Médecins Sans Frontières (MSF). Her background is in social work and law, and in the past she has



also worked for the consumer network Health Action International and as a consultant on drug policy for a number of institutions, including the World Health Organisation.

Ellen 't Hoen

Links?

1

"At the core of these actions I see the wish to take back space, to protect the public domain, to refocus efforts on the real needs of real people rather than on commercially viable products only. The overriding principle is to strengthen the notion of public interest rather than commercial interest – an attempt to push back the monopoly rights that have become all invasive. In the field of access to medicines this is very clear. Because of the globalisation of Western-style patent regimes we are losing the single most important mechanism to bring drug prices down: generic competition. I see a lack of government will to take action to stop this trend.

Convergence?

2

Even though the different movements are not in regular contact with each other they do strengthen each other. It is obvious that there is a global backlash against monopoly rights that have gone too far. It is important to be in touch and see where we can be supportive of each others' work, to understand each other's strategies and proposals in particular in case of disagreement. But we should also accept that the strength of the different groups is related to their particular area of expertise and interest and it is often fruitless to try to draw one group into working on issues that are not close to their heart. MSF is not working on medicines patents because we have a political or legal position on patents. We took on the issue because we see in our projects that high drug prices as a result of patents are causing enormous human suffering.

Even among the groups that work on patents and access to medicines there are different views on how to take the issues further and which strategies to follow. We have never let the differences stand in the way. The strength of the access to medicines movement has been in finding common ground rather than emphasising differences."



5



Beatriz Busaniche is a member of the Fundacion Via Libre (www.vialibre.org.ar) She is also a founding member of the Free Software Foundation Latin America (www.fsfla.org), whose main goal is to promote and defend the freedoms and rights of software users and developers, specifically the freedom to write, use, redistribute and modify all the software they use.

Beatriz Busaniche

GRAIN: You recently stated that the battle for free software has been won. Why?

Free software has accomplished what I call a “revolution by construction,” which means that instead of tearing down a system (private software), it simply built another parallel system, with its own rules and its own tools. Now we have a huge software ‘structure’ that is open to everyone to use, learn, improve and share. Over the past 20 years, a huge army of hackers around the world provided source code for this amazing collective construction effort. Almost in silence, they built the software that now is everywhere, freely distributed and unbound by the greedy conditions imposed on private software. This is a practical revolution - not utopia, but reality. Some 70% of the world’s servers are now running free software. We have created and proven free software that is actually being used by thousands of people around the world. And that community continues to build it, almost in silence. This revolution cannot be stopped. Now all we need is more people being part of the movement. This is our next battle.

What forms of defence to you envisage against the appropriation of knowledge?

The license problem is fundamental, particularly since it is now being applied to much more than software and which extend well beyond the requirements of copyright laws. Many online publications such as scientific journals now impose licensing conditions that tremendously limit access. In some cases they even block printing and often charge for each read-through, meaning you can never “buy” a copy nor store this kind of material

for later access or to share with others. These licenses, also known as EULAs (end user license agreements), set ‘copyright-plus’ use conditions on publications. EULAs on private software often forbid reverse engineering and other actions that copyright law permits.

In contrast, there are several kinds of free software licenses, the most popular of which is the GNU General Public License, which is used by around 60% of free software available in the world. This license assures the four freedoms for free software (see box), but contains a “copyleft” license, stipulating that the redistribution of any products derived from GPL software must be subject to the same license conditions. This minimal restriction allows more and more software to be added to the edifice of free software, while keeping people and companies from imposing restrictions on GPL free software. This provides developers the assurance that whatever they release will not be fettered by any limitations except for the GPL license itself.

This distinctive approach taken by the free software movement is an original defense against the monopoly privatisation of knowledge, and is now expanding to other cultural arenas, as we see with the licenses issued by the Creative Commons project. Just like the hackers, once led by Richard Stallman, found their own way to preserve free access to knowledge in their arena, each specific area must find its own approach, since models cannot easily be transposed.

This is a time to explore alternatives, to experiment with what others have done, but looking for specific and distinctive solutions in each field of knowledge. Open access to scientific knowledge and to publications, for example, are alternatives that are catching on in several places in the world. But there are many issues to be considered, and it is urgent that movements converge in their resistance against privatising life and knowledge.

What common ground does the FOSS movement share with the struggle against IPR on life?

What we are fighting in both cases is a growing monopolisation over knowledge by major corporations, many of which are more powerful than most governments. These companies can deny others access to knowledge and the benefits of science. We are all fighting against this exclusion. Our common points are the spaces where we struggle on all the fronts, such as WIPO, the WTO, agreements like TRIPs, free-trade agreements, etc. In addition, these movements are united by the idea



that there are parts of knowledge and of life that must not be the property of anyone, that no one has a right to preclude access by others to certain “common goods”. When we speak of knowledge, access to these goods is not exclusive, nor does it degrade or destroy them.

There is another detail uniting us which must be carefully considered due to the particular dangers it presents: code-based regulations. In software and digital culture, we speak of digital rights management (DRM), which is a means to restrict access to culture by means of regulatory code (software). In the fight against the privatisation of life, we confront other forms of regulation also based on codes, such as the genetic modification of seeds and the creation of suicide (Terminator) seeds, whose genetic code has been modified to no longer give life, to stop reproducing. Both of these code-based regulations go beyond mere legal requirements, both consolidate monopolies and both are invisible but obvious enemies in our common struggle (see box on p 15).

Another similarity in some cases has to do with community. Free software has been built via a collective, community process, fed by programmers from different corners of the planet who do their part writing code, reporting errors, making suggestions, and so on. The concept of “community” is very strong for us, and brings us closer to all communities that work collectively.

What are the differences you perceive?

There are several points of divergence. To begin with, we must look at the kind of regulations that control each situation. Regarding knowledge and software issues, we fight copyright and software patents. On matters related to the privatisation of life, we generally deal with patent laws. There are other differences too. A programmer can write software with a piece of paper and a pencil, while a pharmaceutical patent rides on a huge investment in research and development. These different characteristics mean that the possibilities for resisting monopoly will also be different. The other difference we see today is that the free-software movement has already consolidated a hard-to-beat form of resistance, while other movements are still searching for a strategy.

What has your experience been in the process of convergence to resist IPRs?

Overall it has been excellent and we have much to learn from other movements. Even so, I still see other

movements that resist IPRs but are dominated by the very discourse they seek to resist. It is incredible to see movements resisting intellectual property while demanding more protection for their own intellectual property. Our convergence is still not mature and there is much work to be done. But I do believe maturity will come as other movements strengthen their discourse and actions, as the free-software movement has.

Meanwhile, I am filled with frustration every time I see social movements that are perfectly aware of the implications of monopolies, know what they mean and fight them, but turn on their computers and use Microsoft software. Resistance begins with words, and continues with action. Convergence will be difficult if broad sectors continue talking about “intellectual property” while writing their documents with Word. The free-software movement is ready to support other movements, but this must be reciprocal.

“I am filled with frustration every time I see social movements that are perfectly aware of the implications of monopolies, but turn on their computers and use Microsoft software.”

What pathways to you see being worth exploring in the quest for this convergence?

We need to find a common language that will help us unite forces, know each other better and strengthen the points we share, with no pretension of forcing those we do not share. We also need to establish common points for a minimum consensus, while avoiding trying to maximise points of agreement.

In other words, establish basic points, pillars on which to work, and let each movement find its own strategies and build its own alternatives. These are difficult times, in which we not only must resist but build as well, and our resistance goes by the construction. Building convergence is not easy, but it is the first step we must take.

The four freedoms of free software:

Freedom 0: Freedom to use software for any purpose.

Freedom 1: Freedom to study how software works and to adapt it to your needs. This means access to the source code.

Freedom 2: Freedom to make copies and to distribute them to help your community.

Freedom 3: Freedom to improve the software and redistribute it, in order to contribute to the collective development of software.





McKenzie Wark teaches media and cultural studies at the New School University in New York City. His most recent book is *A Hacker Manifesto* (Harvard University Press, 2004). *A Hacker Manifesto* grows out of that experience, and attempts to provide a theory to go with the practice of creating and sharing free knowledge in a digital gift economy.

1

Links?

McKenzie Wark

“While the details can get very complicated, it all comes down to the same question: who owns information? And since when is information something you can own? The consolidation of a strict, and strictly enforceable, ‘intellectual property’ regime is the dream of a new kind of class. I call this the vectoralist class. It is no longer so interested in owning land or capital because the actual production of primary and secondary goods can be contracted out. Rather, the vectoralist class aspires to control production and distribution through owning a portfolio of patents, copyrights, brands and ‘trade secrets’, protected under international law.

Movements that challenge the consolidation of intellectual property as the new basis of class domination all have something in common, even if they don’t know it. The so-called ‘piracy’ of media products, is a social movement in all but name. I think everyone who creates ‘intellectual property’ could consider themselves part of the same class – the hacker class – and as having convergent interests. That could include programmers, musicians, writers, and also engineers, chemists – all sorts of people who are culturally distinct. What we have in common is that we have to sell the products of our intellectual labour to corporations who have a monopoly on realising its value. We invent the idea, but they control the means of production. The laws that used to protect us – copyright and patent – have been subtly changing over the course of the last few decades to protect corporate owners of existing ‘intellectual property’, not individual creators of new ideas. The *Hacker Manifesto* dramatises this emerging conflict.

2

Convergence?

The various movements for an information commons overlap. They all grasp part of the big picture. It’s not that everyone working on the ownership of genes should run open source software, and so on. It’s about tactical alliances, and collaborations in seeking understanding of how information became something that could be subjected to something approaching an absolute private property regime.”

“I see the movements fighting monopoly rights facing a common struggle polarised around three simple issues: money, power/ authority and mass. A simple example in the information technology industry is the widely known struggle between Microsoft and the movement for free and open source software. One side insists on enforcing copyright, while the other favours public license. The war between these two sides is quite ugly in Indonesia, and has resulted in significant casualties. In the last three months, the police raided many Internet kiosks in dozens of cities in Indonesia, and in some cases they confiscated the computers and put people in jail. Such action has prompted a outcry against Microsoft and started a migration process towards Free and Open Source Software, especially Linux-based software.

The key to making this kind of shift happen is changing the mind-set of software users, and fostering a strong community focus. Increasing education and cultivating the spirit to share will help the shift towards a more liberalised market and a fruitful proliferation of work in the public domain. This in turn will reduce poverty and engender further community participation.

Creating pro-poor, pro-community and pro-liberalisation policies is always a struggle. We can win through money, power, or mass. For the poor, creating mass is the only option – and it can be very effective. A simple example is the liberation of 2.4GHz WiFi/ Wireless Internet in Indonesia. Until recently the Indonesian government controlled all telecom frequencies. But the rise of an alternative network installing Internet using wireless network technologies that bypass the telecommunications companies has created sufficient mass that the Indonesian government was forced to delicense the 2.4 GHz frequency in January 2005.”



Onno Purbo

Onno Purbo is Indonesia’s celebrated promoter of wireless networking; he is credited with inspiring the creation of RebelNet, which now links over 1,500 schools, 2,000 cybercafes and more than 2,500 outdoor WiFi “hotspots” in Indonesia.





Geert Lovink is a media theorist and activist who has lived and worked in Berlin, Budapest and throughout Central and Eastern Europe for the last two decades, teaching media theory and supporting independent media and new media culture.

Geert Lovink

Convergence?

2

I am not sure if a convergence, or even a merger, will happen – or should be a desirable move in the first place. Giant meta-movements can easily be hijacked by ordinary politicians, as happened with World Social Forum. We're not talking about visiting each others meetings, signing each others' petitions or other traditional forms of solidarity, but a critical exchange of experiences. For the free software and open source movement, if you want to call it a movement, it could be very useful to learn from the internal strategy debates within the environmental movement. What is the benefit of running your own institutions? How do you create a collective memory so that vital experiences can be passed from one generation to the next? How do you run campaigns and reach large parts of the population? How do you translate complex issues into easily comprehensible issues? How do you overcome self-referential ghettos?

On the other hand (and unlike ten or fifteen years ago), the NGO world is everything but innovative when it comes to the strategic use of new network technologies. Why are so many social movements and NGOs in the iron grip of Microsoft, even though they argue relentlessly against similar monopolies in their own fields? US law professor James Boyle has talks about the need for 'environmentalism for the Net'¹. It would be great to read similar theories written by environmentalists that recognise the new media as environments to take action in, not merely as tools that can be used for their cause."

¹ www.law.nyu.edu/ili/conferences/freeinfo2000/confpapers/enviro.html.

1

Links?

"What these movements share is a rather abstract drive to construct a 'public domain'. In some cases this public domain is under construction and secured through licenses, such the GPL and Creative Commons; in other cases, it is only a proposal. In the case of urban environments we're facing a rapid decline of public spaces through privatisation, surveillance and control. But at a metaphorical level, there is plenty of room for speculation. The links are there, but what we need is a lively process of social hybridisation. This could be a process of continuous mixing, based on local ingredients. We don't need grand theories that explain everything. This will only fuel conspiracy theories in which the source of all evil is reduced to one Enemy.

"By associating the notion of rights with intellectual property (turning IP into IPR), the ownership and infringement of "rights" has come to dominate discussions on intellectual property. IPR has become an ethical issue, and so any IPR-related question can be given a simple yes or no answer. We know that IPR is so commercially, politically, and culturally determined that we can afford no universal position to come to a packaged understanding.

BitTorrent movie piracy, which concerns young educated netizens' desires for entertainment and identity, and developing countries' access to medicine, which concerns uneven distribution of wealth and the capitalisation of medicine, are very different issues embedded in very different socio-cultural-political contexts. Situating them back to their own contexts is an effective way to challenge the current global IPR regime that focuses so much on "rights" and so little on "intellectual property".

We need to unify the too many agendas of the anti-IP movement with a common position, but there is the risk of going from "I support IPRs" to "I don't support IPRs" types of statements, which might elude the more important task of deconstructing the IPRs. So to answer the two questions, I would say that it's more urgent, at least academically, to complicate the different components and issues that are oversimplified by the current IPR discourse."

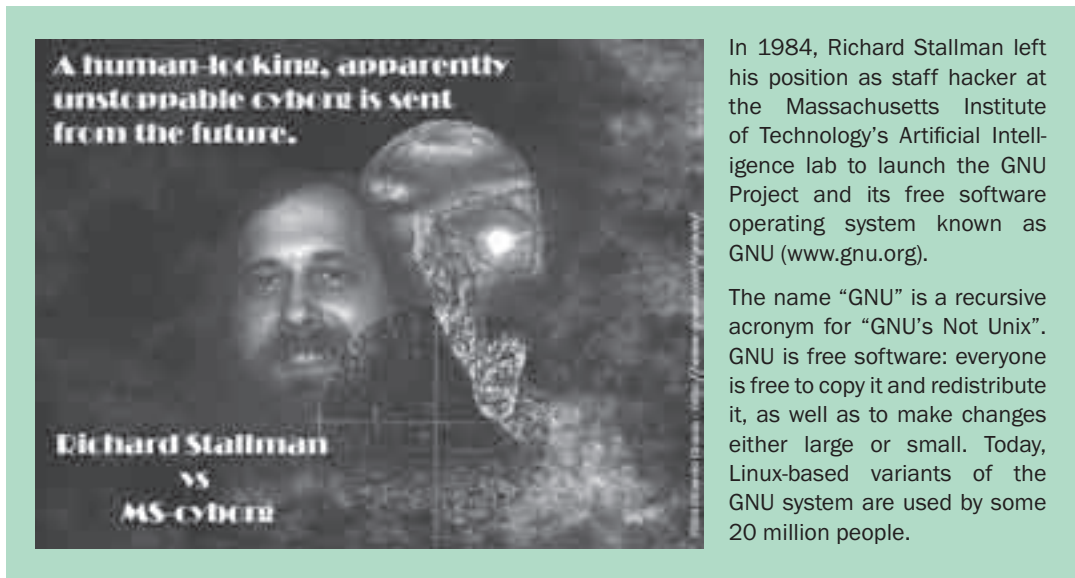


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9



In 1984, Richard Stallman left his position as staff hacker at the Massachusetts Institute of Technology's Artificial Intelligence lab to launch the GNU Project and its free software operating system known as GNU (www.gnu.org).

The name "GNU" is a recursive acronym for "GNU's Not Unix". GNU is free software: everyone is free to copy it and redistribute it, as well as to make changes either large or small. Today, Linux-based variants of the GNU system are used by some 20 million people.

Richard Stallman

1 Links?

"The various movements are dealing with issues that have little in common. Look at the issue of patents in the different fields. With medicines the issue is simply one of price – a simple issue, but one that means life or death for millions of people. With patents on seeds, the issue is not mainly about price. It is about taking away farmers' traditional freedom to save and exchange their seeds and breed their crops, which is an injustice even if the price were right. When you look at patents on software techniques, it's not an issue of price; it's an issue of freedom, but a different freedom – the freedom to do what's necessary in order to develop software. The development of non-trivial software involves combining thousands of specific, different techniques into one large programme. Any one of those techniques could be patented, so any large programme surely infringes hundreds of patents.

Plant breeding is not much like software development. You can't just take an idea and implement it in a new plant – breeding is not that simple. Yet the issues for seeds and free software are similar, in that we are talking about being able to copy and adapt things. Although seeds generally copy themselves imperfectly, while copying software is perfect, they are similar if you ignore this difference. For example, people carry out copying and adaptation for both software and seeds through cooperation. But I don't know how this translates into movements for political change.

2 Convergence?

At a broader, more general level, all these movements have something in common with many other movements. They all oppose laws being made to give business more power. Business has too much power. Democracy is broken, and we are all fighting against the power of business, whether it's over patents, or copyright, or water privatisation.

But beyond that very basic similarity, patents, trademarks and copyright are unrelated issues, and trying to treat them as a single issue is going to lead to confusion – what you think you understand about them will be false. Once we jointly reject the broad idea of giving business so much power, we must move to the specifics in order to think about what these disparate laws really ought to say."



1 Links?

José Bové

“After the privatisation of land and other natural resources, the appropriation of the world by private interests has entered a new phase that is even more dangerous to our freedom. This time, it’s nothing less than human intelligence which is being subjected to a new campaign of enclosures. Just like in the 18th century, when the army chased peasants off their farms, the state and its military apparatus are once again using force and violence to protect the rights of a few transnational corporations. Since the mid-1980s, farmers in France have been fighting every day against this rampant expropriation. Together with consumers and environmentalists, they have been going into fields to destroy test plots of transgenic plants because they reject the patenting of seeds. They reject the notion that genes, which express life, can be the property of a private company. Life is simply not for sale.

Other sectors are also being subjected to this aggressive privatisation. The struggle led by free software developers is very similar to our struggle for free seeds. Some scientists, especially those involved in medical research, used to consider us stubborn enemies of progress. But they’re starting to understand how patents on gene sequences, held by some companies, are blocking them from freely doing their research. This is making them realise what is really at stake: the freedom to create, without paying royalties to a small group of transnational corporations. In other words: the freedom of science itself to not be totally dependent on private companies.

2 Convergence?

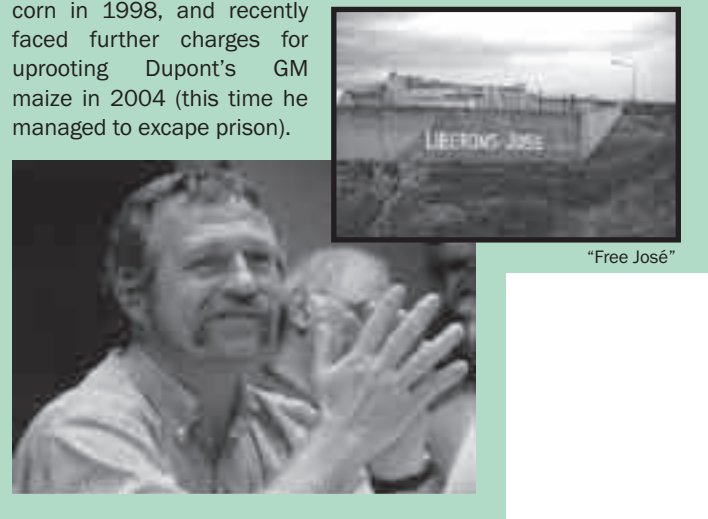
I think the movements questioning intellectual property rights have a common ideal: the freedom to create. With each of our specialities, we have developed different forms of struggle. I am impressed by the movement around the development of Creative Commons licenses because it respects the rights of authors while it allows for free and open circulation of creative works.

Today, farmer-breeders who for generations have been developing and sharing free seeds are being dispossessed by companies like Monsanto and Pioneer [DuPont]. We should sit down with the legal people who drew up the Creative Commons licenses and see whether farmers could use a similar approach with seeds. Also, as farmers, we should



take advantage of computers and the internet, especially to counter-attack and promote free seeds adapted to peasant agriculture as an alternative to Monsanto’s monopoly agriculture. The freeware Firefox browser is a serious challenge to Microsoft’s Bill Gates today. Farmers should follow this example and undermine the hybrid maize seed market through the spread of open-pollinated varieties.”

José Bové is a sheep herder and farmer of Roquefort cheese. While fighting to prevent the expansion of a French military base that would take over sheep herding land in 1976, Bové began to organise small farmers in the Larzac region where he lived. This resulted in the formation of Confédération Paysanne, a small-farmers union, in 1987. Since then, Bové has led numerous international rallies and protests against market consolidation, globalisation and the Americanisation of agriculture. Bové originally gained international recognition for his role in dismantling a McDonald’s restaurant in his home town in 1999. He served time in prison for uprooting 5 tonnes of Novartis’ GM corn in 1998, and recently faced further charges for uprooting Dupont’s GM maize in 2004 (this time he managed to escape prison).



“Free José”





Peter Drahos

1 Links?

One effective way to fight the powerful without getting caught up in their games is to turn to the deeper principle of simple rules. We can learn from the free software movement about simply saying no. We need to learn to walk away from deals and strengthen the capacity to say no. We need to look for ways to say no in which you can't be compromised or betrayed. So much of the game of international negotiations depends on local betrayal – officials signing off on things that they don't really understand. The way to stop that is to stick to very simple rules. These may be different for different groups, but they are simple rules that we can unite behind, and they will trigger an evolutionary sequence that will allow us to win the struggle.

One key to the success of US negotiators is making the pace so fast that no-one can keep up. In Geneva there are developing country negotiators with responsibility for 12 different sectors. That's ludicrous – anyone knows you can barely keep up with one sector, let alone 12. Of course people suffer from negotiating fatigue. That's why the capacity to say no is so important. Local NGOs have to say to their negotiators, "Walk away: do not open up yet another negotiation, do not say yes to this offer of a bilateral negotiation". Pick a few negotiations and target all your resources on them, because that way you can gain strength and unity.

Another key to fighting power that we can all unite behind is civil disobedience. When a country is negotiating with the US behind closed doors, and there are huge riots in the country, the weak negotiator can turn to the US and say, "I would love to give you those patent terms, but my hands are tied – this is just politically unsaleable in my country". But if there is no riot and the negotiation takes place behind closed doors, the negotiator is going to cave in. Civil disobedience is one of the few tools left for weaker parties to work with, and it can be very effective. Look at the anti-war movement during the Vietnam War in the US. Things change when people get out on the streets.



Peter Drahos is Professor of Law and Head of Program of the Regulatory Institutions at the Australian National University. His publications include *A Philosophy of Intellectual Property* (1996), *Information Feudalism: Who owns the knowledge economy* (2002, with John Braithwaite, reviewed in *Seedling*, see www.grain.org/seedling/?id=265), and *Global Intellectual Property Rights: Knowledge, access and development* (2002, with Ruth Mayne).

2 Convergence?

There is such massive diversity in the world and such different moral views that you have to find a common framework. That framework is human rights. It's institutionalised and on certain issues – like health and education – there is massive cross-cultural agreement. Other rights – like the right to food security – are not so widely shared, but that doesn't matter. The strength of human rights is that it recognises diversity, and has a common conceptual framework. You can try and invent your own language and globalise that language, but it's going to take a long time to get anywhere. Human rights have been institutionalised in our world and a lot of people have given up a lot to get those rights on the table. That counts for a lot. Every country is going to come up with the same fundamental rights – like education and health. Other rights are much more contestable, but that doesn't matter, because some rights may be more important to some countries than others. Every country has to practice the principle of toleration (which is implicit in human rights) and unite around that vocabulary. The vocabulary gives them the tools to look at intellectual property rights and ask what do these monopoly rights do to meet their objectives. So I think it is possible for all these groups to unite around human rights, using its vocabulary, to form a more global community.

You might not like the idea of rights, but that's all you have to work with. When I went to the Philippines doing some work on access to medicines, a lot of groups there told me that they found the language of human rights – 'the right to health' – very helpful. You've got to use it. You have to think of ways of bringing that language to life. There is so much moral diversity in the world, you need abstract ideas to unite around.

If you don't want to call it a right, call it a 'fundamental claim'. I'm not saying that we shouldn't be trying to look at alternative solutions and creating new languages, but you can't turn your back on the things previous generations have fought for; it doesn't make sense. You have to use the language of human rights because it is institutionalised into a common framework and so many countries accept it, even though their practices may not be consistent with what the language says.

In many countries, control over information has become a big issue. An underlying aspect of this control has been the use – or threat of use – of force to establish control. The aim is often to prevent information from being freely exchanged, creating an artificial scarcity that keeps information prices high. The fight to protect such freedoms is being fought out in many different arenas. *Roberto Verzola* explores the synergies, similarities and differences between those trying to protect the freedom of innovators in the worlds of software and seeds.



Software and seeds

Lessons in community sharing

ROBERTO VERZOLA

Among our most fundamental freedoms is the freedom from violence – or threat of violence – when we decide to withhold information. It is a human right that lies in the same category as freedom of thought. In commerce, this freedom takes the form of trade secrets. When someone attains a competitive advantage in commerce through a unique insight, idea or knowledge, nobody else should be allowed to use force to extract their secrets. Patents were initially conceived to coax trade secrets out of the people who would otherwise have taken these secrets to their graves. If society deemed the secrets important enough, it was willing to extend a special monopoly privilege, called a patent, in exchange for the disclosure of these secrets. The patent gave inventors an exclusive right to commercially exploit their inventions for a number of years, after which the invention then passed on to the public domain.

Today, patents have gone way beyond their original purpose. Even genetic sequences and algorithms are being patented, even if they are in no danger of being lost to society should their discoverers pass away tomorrow. Patents have instead become monopolistic instruments for keeping out competition and extracting the highest profit margins from the public – ironically using public institutions to do so. This teaches us a lesson we must learn by heart: relying on statutory monopolies to encourage intellectual activity is a pact with the devil.

In a free society, keeping secrets (i.e. information) is an act of freedom, and sharing it with others is another act of freedom – as long as neither is done under compulsion. While a piece of information stays in somebody's mind (or private notes), their freedom to keep it secret should be respected. But once that person releases the information – by



distributing a printed version or posting it on the Internet – they surrender that freedom, and the freedom of others to share the information should be respected. The use of copyrights, patents and other statutory means of restricting the use or exchange of information is a restriction of such freedom, because enforcing copyrights and patents requires the use, or threat of use, of force.

Another option exists for those who want to keep secrets: technology. These days there are many examples of people taking this approach: we see it in copy-protection schemes, withholding software source code, hybrid seed varieties, and so on. People who use technology to guard their secrets should not be forced to abandon such measures. But by the same token, force should not be used against those who use similar technological means to pry secrets open. This is often the engine that drives technological progress forward, as methods for locking information or opening it up battle it out in a technological contest. Prohibiting technologies that pry out information locked up by technological means is as much a restriction of people's freedom to pursue knowledge and invention as prohibiting technologies that lock up information.

Seed and software freedoms and privations

In the world of free and open software, different levels of technological 'freedom' can be identified. The software that uses the least force to compel behaviour is the 'freer' software. From this perspective, "freeware" (software released to the public domain with no conditions and therefore no need to enforce any license at all) is the freest software of all. This is followed by free software variants that impose fewer conditions (such as the BSD License condition for attribution). GPL and similar licenses come next, and then variations of the "shareware" concept. Least free are the commercial programs whose executables can neither be copied nor modified without risking legal action and whose sources are carefully kept under lock and key.

Can these concepts of information freedoms be applied to other knowledge systems? Many ancient tribes have developed their indigenous systems of knowledge (a form of "software") which are often the basis for their cropping systems, healing arts, rites of passage, seasonal celebrations, religious practices, artefacts of cultural identity, and other aspects of culture. Their seeds, herbs, weapons, dances, music, chants, epics, weaving styles, costumes and religious icons are all parts of this indigenous knowledge system. Increasingly, in a shrinking networked world where information can

circulate globally within seconds, such knowledge systems find themselves being drawn into various forms of interaction with the rest of the world, and similar issues of use and access, of inclusion and exclusion, likewise emerge.

Seeds, medicinal herbs and other genetic resources, for instance, have variously been considered "a common heritage of humankind", "national patrimony", and "community resource". In the hands of corporations, they have also been exploited, commercialised, appropriated as private property, and eventually monopolised under intellectual property regimes such as patent systems.

Seeds, in particular, appear to be subject to the same considerations as free software. Farmers share them freely; improved varieties are developed by farmers through selection and breeding, and then returned to the common pool of seeds. Some seed developers try to retain control over the seeds by releasing only first generation or F1 hybrid seeds, which are in effect "copy-protected" because they do not breed true. The language is even similar: Varieties that breed true, whose desirable characteristics reappear from generation to generation and are therefore not copy-protected, are called *open* pollinated varieties, just as software that can be freely shared and easily modified are called *open* source software. It even seems entirely appropriate to refer simply to free seeds or to open seeds.

The most controversial issue with seeds today are issues of privatisation and monopoly, as the whole system of free and open sharing of seeds within the community is continually being undermined and threatened through corporate efforts.

The farmers' age-old system of seed exchange is being undermined by hybrid varieties, which are useless for exchange because they do not breed true. Prevented from maintaining their own seeds from generation to generation, farmers will be forced to rely on corporate suppliers for seeds, losing their control over this essential element of food production, cropping systems and agriculture. If it were a simple matter of choice, farmers could just stick with their traditional varieties and breeding methods, and simply refuse to use hybrids at all. This is how copy-protected software was rejected by users: they simply did not buy it. But governments often collude with corporations to wrench control over seeds away from the hands of farmers by making traditional varieties and open seed exchange illegal, and by using public funds mainly or even exclusively for hybrid seed development and hybrid seed subsidies. The



future of seed “copy-protection” systems includes “terminator” technologies and their variants, which simply terminate the biological cycle of seeds sprouting into seedlings that mature into plants which bear new seeds that will continue the same cycle, generation after generation (see box).

Going beyond technological copy-protection, corporations are staking private ownership claims over modified seeds, which enable them to call on state enforcement mechanisms to stop others from sharing or exchanging seeds. Just as software developers use copyright, seed companies use plant breeders’ rights and, increasingly, patents. The result is the growth of private seed monopolies.

Private monopolies and technological copy-protection cannot succeed without backing from the enforcement arms of the government. It is only through force, or the threat to employ force, that can keep farmers from freely engaging in their age-old practice of seed sharing and seed exchange. Even then, many farmers will surely defy the authorities and put their lives on the line, rather than surrender this age-old practice.

Selling and sharing: can they coexist?

Similar debates simmer amongst farmers and software developers over how ‘free’ their products should be. Some farmers’ groups oppose any selling of seed, taking the position that seeds should only be shared. They fear that once the practice of selling and buying seeds is established, seeds will become targets of privatisation and monopoly. Other groups believe that the decision to share or to sell seeds, or even to do both on a case-to-case basis, should be left to each farmer. Farmers have often found the need to buy seed, or to sell it, but as long as every farmers’ freedom to save and share seeds freely is respected, and seed saving and sharing can go on side by side with seed selling, seed monopolies cannot take over.

Among many tribes today, the commercial sale of cultural artefacts is also a matter of intense debate. Indigenous advocates have often pointed out that such artefacts – carvings and sculptures, religious icons, costumes, music, etc. – represent the very essence of the tribe. To allow crass commercialism to dictate their production and practice can only do deep damage to the tribe’s culture and soul. Others have pointed out that as tribe members come into contact with modern society, they inevitably acquire a taste, if not need, for some modern artefacts themselves, just as modern society takes interest in their traditional artefacts. A market therefore invariably grows out of this exchange.

Without this exchange, the tribe’s younger members, influenced by modern society’s intrusive media, might abandon tribal life altogether. When the young stop reproducing the culture of their tribe, the tribe may disappear within a generation. By undertaking commercial production of their cultural artefacts, as long as a certain separation can be managed between the commercial and the cultural aspects, a tribe might manage to retain its culture and identity within modern society. What is “best practice” in this case is probably still a matter of debate among and within the tribes themselves.

Two of a kind: GURTs and DRM

Genetic Use Restriction Technologies (GURTs), better known as Terminator technology, are a group of technologies that provide a mechanism to switch previously introduced genes on or off, using external inducers like chemicals or physical stimuli (e.g. heat shock). This mechanism allows for restricted use or performance of transgenes. There are two main categories of GURTs, namely trait-related or T-GURTs and variety-related or V-GURTs. While T-GURTs aims to control the use of traits such as insect resistance, stress tolerance or production of nutrients, V-GURTs aims to control reproductive processes that will result in seed sterility, thus affecting the viability of the whole variety. The ability to switch the GURTs mechanism on or off externally enables the producer to exercise control over traits and/or the viability of seeds.

In the digital world the GURTs parallel is the DRM (Digital Rights Management). DRM is an umbrella term referring to any of several technical methods used to control or restrict the use of digital media content on electronic devices with such technologies installed. The media most often restricted by DRM techniques include music, visual artwork, computer and video games, and movies. The parallels with GURTs is not lost on those working on DRM. “The funny thing is that we were thinking of using the term DURTs (Digital Use Restriction Technologies) before we knew what was going on in the biotechnology arena” says British hacker and free software developer MJ Ray. DURT is technically a more accurate term, because the “rights” that a content owner grants are actually technical capabilities, and are different from the legal rights of a content consumer.

Some digital media content publishers claim DRM technologies are necessary to prevent revenue loss due to illegal duplication of their copyrighted works. But many others argue that transferring control of the use of media from consumers to a consolidated media industry will lead to loss of existing user rights and stifle innovation in software and cultural productions. No current DRM technology includes a mechanism to enable ‘fair use’ rights *per se*; the content publisher may choose to allow some acts of copying, which may (or may not) align with legal use rights.

Although technical control measures on the reproduction and use of application software have been common since the 1980s, the term DRM usually refers to the increasing use of similar measures for artistic works/content. Beyond the existing legal restrictions which copyright law imposes on the owner of the physical copy of a work, most DRM schemes can and do enforce additional restrictions at the sole discretion of the media distributor (which may or may not be the same entity as the copyright holder).



In the case of seeds, the discussions are continuing. Both sides agree that seed sharing is the “best practice”. The question is: should this best practice be merely encouraged or enforced?

This arises with free software, where releasing source code is considered “best practice”, but some licenses not only encourage but also enforce this best practice. When a clan or even a family considers a particular knowledge too sensitive for common access, they probably try to retain control over its spread by keeping it secret. Thus, certain preparations of medicinal herbs may be kept within a clan or a family of healers. It would certainly be unacceptable to extract this information through force. Of course, the burden of keeping the knowledge secret lies on the shoulders of those who keep it. Should the information leak out, control and access then passes on to the community. Perhaps a similar approach, which requires no resort to copyright law enforcement, will work with free software source code.

It is interesting to note that in the case of free/open source software (FOSS), the situation is developing in the direction of a gradually growing island of free source code emerging in a sea of closed proprietary systems. In the case of seeds, it is the other way around, with islands of proprietary varieties and gene sequences emerging in a sea of free, open seeds. Depending on which way things eventually go, we can actually see in one the future of the other. Perhaps FOSS advocates can learn from the millennia of farmers’ experience in varietal development, seed sharing and exchange and how these practices can be strengthened or undermined.



Perhaps software developers can learn from the way in which traditional healers release or withhold information.

Farmers might learn lessons from the FOSS movement and how it has managed to go against the tide of expansion of closed proprietary systems and to create a counter-current of support for free, open source software. Is it the existence of a strong and dynamic community of developers sharing their knowledge freely that farmers lack? Or is the erosion of farmers’ rights to share and exchange seeds due mainly to corporate seed suppliers having captured regulatory agencies, whose policies have been invariably friendly to further privatisation in the seed industry? When the big software houses get better at regulatory capture, can they get the State to adopt measures against FOSS too?

A matter of balance?

The language of FOSS is expressed in terms of individual freedoms: the freedom to use, to copy, to study, and to modify software. Debate revolves around balancing the freedoms of the user over the freedoms of the developer, or the freedom of one developer versus the freedom of another developer. Such an approach is perhaps consistent with the US heritage based on the libertarian struggle for individual freedoms. In such a context, where individual freedoms clash and the assertion of one set of rights conflicts with another set of rights, one needs recourse to a superior body such as the state to ensure proper balancing or enforcement. Unfortunately, when the state is captured by monopolistic forces, its apparatus is turned from a mechanism of balancing conflicting rights to one of enforcing statutory monopolies.

The language of indigenous knowledge systems is expressed more in terms of individual responsibility to the community. The word that probably expresses this best is the word “sharing” – when an individual work merges with the community storehouse of knowledge. The focus is on the individual’s contribution to the common good. From this perspective, “shareware” was, in a way, onto the right idea: software that was meant to be shared. Unfortunately, instead of simply appealing for voluntary payments for their intellectual work, shareware authors tended to cripple their work with time- or feature-limitations unless payment is received, giving shareware – despite some excellent exceptions – its distinctive feature.

Likewise, FOSS approaches closely the concept of contributing to the community’s storehouse by sharing one’s knowledge (i.e. source code), though it uses the unfortunate language of rights and the threat of copyright enforcement to realise source code-sharing. In the process, it sacrifices the ideal of voluntary, culture-driven sharing with



the more immediately effective but double-edged, rights-based approach predicated on copyright enforcement. Its advocates should perhaps consider source-code sharing as “best practice” but leave the final decision to the individuals who contribute to the software pool. This is consistent with both concepts of individual freedom and community sharing. Still, the transition to this approach from its current threat-based approach based on copyrights laws needs to be well thought out.

For knowledge systems that take multiple generations to develop and are an accumulation of countless of individual contributions, it is perhaps understandable that individualist thinking gives way to collective perspectives. Software development has shorter life cycles, and individual contributions may form a significant part of a software system. The relationship between the individual and the community for modern systems like software compared to traditional resources like seeds may find their balance at different points.

In addition to the issues of freedom and responsibility and of enforcement and encouragement, another major area where balancing is needed is in the tension between commerce and culture. Most traditional knowledge systems evolved outside the context of markets. In fact, the emergence of markets often signals the beginning of the end for free sharing and the culture that surrounds it, and its replacement by the culture of commerce and competition. When competition becomes paramount and some become more successful than others, can monopoly be far behind?

The debate around the commercialisation of indigenous cultural artefacts and practices reveals a deep concern that merging indigenous cultures with modern commerce will eventually undermine the very basis of indigenous cultures, which are founded on concepts of community sharing.

So it is valid to ask if, instead of asking traditional systems to cross over to modern commercial practices, we can instead ask modern systems to embrace age-old and time-tested practices of free sharing. Because information, knowledge and culture are non-material and intangible, and sharing them does not mean losing them, this is an area where the economics of scarcity, including current concepts of property ownership based on material wealth, break down. Perhaps, we should be looking for a balance between commerce and culture, between individual pursuit and collective sharing of wealth, not only among indigenous societies but also in modern society.



Roberto Verzola is an engineer by training, and a long-time social activist. He introduced many Philippine and Asian NGOs to computers and the Internet, as Chair of People’s Access and Interdoc in the late 1980s and early 1990s. He set up the first email service for NGOs in the Philippines in 1992 and in 1994 published an analysis of the social impact of new information and communications technologies called *Towards a Political Economy of Information*. Verzola helped found the Philippine Greens in 1996 and is now its sustainable agriculture campaigner. He also serves as Adviser on Sustainable Technologies for the Philippine Rural Reconstruction Movement and is a member of the board of Pabinhi, and sustainable agriculture network in the Philippines.

Conclusion

In the fields of information, knowledge and culture, exclusionary and monopolistic approaches which rely on state enforcement mechanisms to implement exclusionary provisions should be considered “worst practice”. Our long-term goal should be to phase them out in favor of non-monopolistic rewards for intellectual work. On the opposite side of the spectrum, free sharing of source code, seeds, knowledge and culture are “best practice”. Copyrights and patents are doubly-bad not only because they create monopolies through force or the threat to use force, but also because they ban the “best practice” activity of free sharing.

A rich selection of policy options is available to society for discouraging bad practices and encouraging good ones. The challenge is to find the policy option that is most appropriate for each practice, balancing the considerations of freedom and responsibility, enforcement and encouragement, and commerce and culture, while ensuring that each policy option works in harmony with the intangible, non-material, non-rivalrous nature of information.



Jack Kloppenborg

GRAIN: Nearly 20 years ago you wrote "First the Seed". What did you see emerging in plant biotech that led you to write a book about it?

JK: I'd been in the Peace Corps in Botswana for a few years in the late 1970s working with peasant farming communities. I'm a city boy, and it was there that I learned that I enjoyed working with farmers and liked growing my own food. I came back to the US and went to graduate school at Cornell University and kept working on my own garden and found that the issues that I'd engaged in the Peace Corps, regarding inequality and the problematic situation that farmers were faced with, appeared in the US as well. In particular, there was the concentration of power in agribusiness. A friend at Cornell suggested that I look at seeds for my thesis. It turned out to be great advice. Biotechnology was just emerging at that point and there was a controversy at Cornell over bovine growth hormone. When I started looking at what was happening in the seed industry I found biotechnology was important there as well. Small seed companies were being purchased by big companies like Shell Oil and even the Greyhound Bus Company. Obviously something strange was going on and it had to do with the promise of the new biotechnologies.

The best way to anticipate the future is to try and understand what's already happened. So in trying to understand where biotechnology might take agriculture, I needed to know where the seed industry had already been and what trajectory it was on. Pat Mooney's book *Seeds of the Earth* was an initial frame of reference for me. But, when it came to the seed industry in the US, there wasn't

much information available. Most of the history dealing with seed was on the Green Revolution in Asia. We'd had a Green Revolution in the US too, but there was very little information available about what shape that revolution had taken and what its effects had been.

In looking at the history of plant breeding in the US, I was able to identify three features that have informed the direction that the political economy of plant breeding has taken from 1850 onwards in the US. The first is "commodification". It's hard to own the seed as property because it's a biological organism that wants to reproduce under all kinds of different circumstances. So industry pursued two routes of commodification – the social route, which has to do with legislation making the seed ownable, and the technological route, which is hybridisation.

The second feature is the division of labour between public science and private science. Public labs generated much of the basic knowledge that was needed to develop plant breeding as an applied discipline, and public breeding programmes offered new varieties for farmers at low cost, sometimes free, and farmers regularly reproduced seed for themselves. This left no room for private industry to get involved. To build a seed industry, public breeders had to be moved out of the way in an interesting *coup d'état*, in which industry said, "You do one thing and we'll do another. You do the basic science, the developmental science. We'll take care of the product end; we'll be the ones selling the seeds to farmers."

The third feature has to do with germplasm, the genetic raw material of plant breeding. Most agricultural diversity exists in the geopolitical South and there is a long history of asymmetrical flow of this material from South to North.

These three features provided the historical trajectories along which it looked to me like biotechnology was going to be deployed. And unless there are some real shifts in social organisation, it's very likely that biotechnology is going to continue to be deployed along those trajectories.

How have these trajectories played out since the publication of your book?

Farmers have continued to lose power. In the US, most are trapped on a technological treadmill and embedded in inputs and commodities markets over which they have less and less control. They often find themselves with few opportunities but

Ferida
Akhbar

Benny
Haerlin

Carlos
Correa

David
Quist

Johnson
Espere

Francisca
Rodriguez

German
Velez

Hope
Shand

Ibrahim
Ouedraogo



to purchase the seeds offered by the corporate gene merchants. Plant breeding has continued to show an intensifying division of labour. Public breeders continue to be emasculated. The centre of gravity in breeding is certainly within the private companies now. The public has lost its role in determining the kind of varieties available to farmers, and farmers have few choices but to go to the industry for seed. This set up just reinforces existing, unsustainable patterns of monoculture production.

The genetic resource issue has not moved very far since the book was published almost twenty years ago. Companies maintain pretty much free access. Generally speaking they get what they want at the price that they want, even though a number of restrictions have been put in by national governments and a variety of communities and indigenous peoples have tried to introduce various forms of farmers' or traditional resource rights. What we have seen over the past 18 years is an intensification of problematic patterns established much earlier.

But at the same time there has been tremendous growth of popular resistance. Is this resistance being effective?

When "First the Seed" came out there was relatively little organised public opposition. Today there is substantial public opposition that is globally distributed. "Biopiracy" and "Terminator technology" were not in the lexicon. "Bio-pollution" was not discussed. Now people are familiar with these phrases. There has been an exciting emergence of opposition – not just to biotechnology or genetic engineering *per se*, but to the whole range of corporate activity in agriculture. Biotechnology is recognised as just one piece in the whole fabric of corporate globalisation. And that's a very hopeful sign indeed.

An essential part of the resistance is the emergence of food sovereignty movements in the South and the local food movements in the North. People around the world increasingly understand that they are not locked into a single, capital- and energy-intensive trajectory of agricultural development and that one can eat well, pleasurably and sustainably by improving the technologies we already have and looking towards agro-ecology and organic agriculture. What people need is not simply something to oppose but also something to replace what you are opposing, and to find a new paradigm for agriculture and for eating. I think that the food sovereignty and local food movements are providing that kind of concrete alternative.

It's also positive to see that public breeders and public scientists in the US and elsewhere are getting, if not radicalised, then at least cognisant of the situation in which they find themselves. Their own freedom to operate, to do their own science, has been greatly constrained by the fact that the corporate Gene Giants own the enabling technologies that are used to do the work that they would like to be undertaking. There is an emerging movement among public breeders to get together and revitalise and rebuild public science and public plant breeding in our universities. In the US, two "Seeds and Breeds" summits have been held, in which public breeders came together with various NGOs for the first time to explore possibilities of collaboration.

Is there reason to be pessimistic about intergovernmental processes dealing with biodiversity?

The Seed Treaty (see p21) doesn't seem to provide much movement ahead or protection for biodiversity, nor does it really concretise farmers' rights. On the other hand, the biosafety protocol has helped slow down industry quite a bit. But



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these are all contested terrains. Industry knows what it would like to do and works very hard in public and private fora to reduce the impact of local, national, and international regulation. This is, of course, what we've seen in the history of the seed industry. For example, industry has been pushing patent right on plants since the 1890s. They didn't get what they wanted immediately, but they came back again and again until 1985 when plants became patentable subject matter in the US. And this is surely going to be true for whatever social or administrative arrangements are put in place for seeds or biosafety protocols or just about anything else. We need to have the same staying power that industry does.

A few years ago there were articles in *Seedling* by Camilla Montecinos¹ and Erna Bennett² questioning whether the whole farmers' rights orientation was the proper way to go and whether there simply weren't too many contradictions embedded in trying to use the master's tools to dismantle the master's house. I'm really sympathetic to that point of view. I think that the types of so-called alternative or community or traditional resource rights that have so far been developed are really derivatives of Western intellectual property. I haven't seen any frameworks or mechanisms that effectively protect the interests of indigenous peoples or of villages or regions from the depredations of biopirates from the North. That presents a fundamental contradiction. On the other hand, I don't know what else can be done. We must resist wherever we can, but I can hardly criticise the accommodations that get made.

In any case, it seems to me that it is impossible to predict precisely the particular constellation of actions or arrangements of actions that are going to best serve the larger global public interest. We have to participate on as many levels as we can and in as many places as we can. We have to try out just about anything, just about anywhere. What's exciting is that this creative opposition is occurring nearly everywhere and that we are doing as well as we are with far fewer resources, both political, economic and even cultural, than industry has available to it.

A new edition of "First the Seed" has come out with a new chapter. What's the main message, nearly 20 years later?

The new chapter called "Still the Seed" reviews what's happened over the last 18 years. What it says is that the trajectories I identified in the book are still operating powerfully. The commodification has continued and accelerated. The division of labour is more starkly defined than it was. Biodiversity is being used even more asymmetrically. That's not to say that there hasn't been the emergence of strong opposition, which has yet to come to full fruition. If we look ahead, it is the emergence of that opposition that is the great good news of the last 18 years. But what's most important, I think, is the placement of the issue of biotechnology and the seed industry in the larger context of resistance to corporate globalisation.

Seed is the alpha and the omega, the beginning and the end of the agricultural production process. The genetic characteristics that can be embedded in the seed shape the production process through which that seed is going to pass. The seed is a critical nexus for capital, but it's not the only one. We see corporate globalisation not just in the seed industry but in animal production, pesticide production, pharmaceuticals and health sciences, energy, and the media. The great social problem of our time is the increasing concentration of economic power, and therefore cultural power and political power, in the hands of an increasingly narrow set of companies. Seed is one piece of the puzzle. It's a particularly accessible piece because people can understand where their food is coming from and that makes it particularly powerful. But concentration is occurring right across the industry, not just in seeds.

Since the opposition has to be to corporate globalisation and not to one feature of it, it's going to take some time for the whole *gestalt* to mature. We have little choice but to do what we can and to pay attention to what is going on. The contradictions are going to make themselves manifest. Eventually we will have the opportunity to turn things around.



¹ Camilla Montecinos (1996), "Sui Generis – a dead end alley?", *Seedling*, December 1998, p 19, www.grain.org/seedling/?id=143

² Erna Bennett (2002), "The Summit-to-Summit Merry-go-Round", *Seedling*, July 2002, p 3, www.grain.org/seedling/?id=196

The International Treaty on Plant Genetic Resources for Food and Agriculture – sometimes called the ‘seed treaty’ – was adopted by UN Food and Agriculture (FAO) member states in 2001 and came into force in 2004. Governments that signed on are now working out implementation details. Far from its roots in the struggle to assert farmers’ rights as a counterforce to breeders’ rights, the Treaty has ended up being mainly about granting new privileges to industry. It will give seed companies free access to most of the world’s public genebanks without any obligation to share their own materials in return.

The FAO seed treaty

From farmers’ rights to breeders’ privileges

GRAIN

How farmers stand to be affected by the new FAO ‘seed treaty’ is a question on the minds of numerous groups around the world today. When governments started talking about “farmers’ rights” in relation to seeds at the FAO some 25 years ago, the key issues driving the debate were the rapid extinction of farmers’ seeds, often called genetic erosion, and the increasing privatisation of the planting material for the world’s food supply through patents and plant breeders’ rights. Over the stormy debates, governments came to a consensus that farmers should be recognised for their historic and ongoing role as developers of the incredible diversity of potatoes, tomatoes, barley, maize and bananas that plant breeders rely on today. In practical terms, this meant safeguarding the rights of farmers to work with, and live from, farming systems based on diversity, in the face of expanding monocultures and uniform seeds. It also meant trying to channel some of the profits of the seed industry into conservation of the resource base that it exploits.

During the eight-year negotiation of the Treaty, both of these issues remained on the table. But in the final text, only some poetic language about farmers’ rights remains, without any real obligations. The drafting went from a strong commitment to farmers’ rights as “the right to use, exchange, and in the case of landraces and varieties that are no longer registered, market farm-saved seed” to merely saying that the Treaty will not take away those rights in countries where farmers still have them. The idea of getting industry to share benefits with farming communities fared only slightly better. The final language is a weak phrase that says benefits should flow “primarily, directly and indirectly” to farmers. To dispel any remaining doubts, a provision was added to state that the responsibility for realising farmers’ rights rests with national governments. In other words, if governments feel like it and if their patent or plant variety rights laws don’t already preclude it. In many countries, seeds marketing regulations and implementation of the World Trade Organisation rules on intellectual property make it illegal, if not



highly difficult, for farmers to use, exchange and market farm-saved seed.

This does not mean that all discussion on farmers' rights is dead and buried at the FAO. The Treaty's Governing Body, which meets for the first time in 2006, could decide to look into how national governments are dealing with it. But to be realistic, things will not go further. The Treaty in its final form is not intended to further farmers' rights.

The biased rules of the game

As governments now start wrestling with how to implement the Treaty, in preparation for the first meeting of the Governing Body in June 2006,

just how little this system will support farmers – especially farmer breeders – is becoming increasingly evident.

The main issues being looked into are the nitty-gritty of how to facilitate access to the genetic materials in the system and the drafting of a standard material transfer agreement (MTA) that has to faithfully respect all the rights and obligations outlined in the Treaty. The implications for farmers stem from key principles of the Treaty itself (see box). It is obvious that this system is turning into a dream come true for the corporate seed industry, led by such giants as Monsanto, Syngenta, Dupont and Bayer. These companies get guaranteed access to all the material in the system, most of which came from farmers. They are free to use any material from the system to develop commercial products and make as much profit as they can on them without any obligation to pay back, on the only condition that others can use their final, commercialised products for further breeding. At the same time, they never have to share any of their own materials, except the finished varieties they put on the market. They keep exclusive control over “material under development”, their private collections (regardless of origin), discarded rejects from the breeding process and everything else. Compare this with the detailed requirements imposed on the CGIAR centres which join the system. They are explicitly required to make their own materials available in order to join, and they must even allow the secretary of the Treaty to inspect their facilities at any time.

The treatment of the seed industry makes a complete mockery of the notion of benefit sharing. The main benefits to be shared in the Treaty are access to genetic resources for food and agriculture and a portion of the monetary gains. Yet the industry has no obligation to provide either, so benefits will only flow in one direction. Farming communities all over the world will continue to carry the responsibility of sustaining the genetic diversity of crop plants, without sufficient rights or recognition. And governments will continue to bear the cost of genebanks. Seed companies, according to the Treaty, will be able to order what it needs at “minimal cost” and demand it delivered “expeditiously”.

And as materials from their working collections and breeding processes become obsolete, they can donate them to government genebanks for safekeeping and save themselves that cost (common practice already) while tactically hanging on to anything that could potentially be of future interest

The main thrust of the Treaty

The FAO Treaty is basically an agreement on how to implement the access and benefit-sharing rules of the Convention on Biological Diversity (CBD) in the field of food and agriculture. Under the CBD, nation states have the sovereign right to control all access to biodiversity within their jurisdiction, and to get a share of the benefits generated from the biodiversity they have granted access to. This means that governments have to negotiate individual bilateral contracts for each and every transaction, including the exact rate and form of benefit-sharing. This model is a catastrophe not only because it promotes the wholesale commodification of resources previously shared within and among communities or in the public domain, but also because it does not work. Privatisation through intellectual property rights is the only result. Benefit-sharing is not happening.¹

The FAO Treaty takes a different approach. The idea is that parties to the agreement can use their national sovereignty not to individually regulate every transfer of genetic material, but jointly create a multilateral system that gives everyone access on equal terms to the whole set of resources covered. This has two advantages. First, it recognises that access itself is the main benefit to be shared, and aims to facilitate it rather than limit it by exclusive contracts and patents. Second, any monetary benefits generated through the system are to be pooled and used to support conservation and sustainable use efforts, rather than enrich any single provider.

But by the time governments finished negotiating the Treaty, the original plan had been severely crippled by the same forces that made the CBD a vehicle for commodification instead of conservation. On the one side, developed country governments fiercely resisted anything that would limit the right of corporations to continue privatising genetic resources, in particular their right to patent them. On the other side, a number of developing countries were equally eager to limit the scope and coverage of the Treaty in order to preserve their perceived business opportunities as providers of individual genes on the global market.

What remains is very far from a generalised system of mutual access to all plant genetic resources for food and agriculture, contrary to the rhetoric flowing from FAO and many governments. But it does provide an alternative route to CBD implementation that doesn't lock all international seed exchanges into a tangle of bilateral contracts.

¹For a detailed account of why, see the recent GRAIN analysis in *Seedling*, April 2005, “Re-situating the benefits from biodiversity”. Available online at www.grain.org/seedling/?id=327



to themselves or useful for their competitors. Altogether, this constitutes not benefit sharing but a massive subsidy to the global seed industry both from farmers and from taxpayers.

The implementation discussions

The implementation discussions now underway will not change any of this. There is a provision in the Treaty which says that any changes to the Treaty text must be decided by consensus, which means that for all practical purposes, the text is written in stone and will not change.

Nonetheless, some of the implementation issues are important. Most attention has been focused on the drafting of the standard MTA. This is the contract between the provider and the recipient of a seed sample, in which the recipient promises to respect the conditions of use laid down in the Treaty. A first draft of this MTA was discussed between member governments in a small closed “contact group” in Tunisia in July 2005. No observers were allowed, although the seed industry sent several representatives as participants in European government delegations. The group is scheduled to meet again in April 2006 in order for the final draft MTA text to be adopted by the first meeting of the Governing Body in June.

The hottest issue in the MTA discussion concerns the exact level and calculation of the mandatory payment to be applied on patented products. The Treaty only says that the level should be “in line with commercial practice”. This is not very helpful, since commercial practice is to always charge whatever you can get away with and this varies widely from country to country. The FAO has commissioned a background study which establishes that much. Industrialised countries predictably want to calculate a low percentage on the basis of net sales, while developing countries want it to be a high percentage on the basis of gross sales. The result will probably end up somewhere in the middle.

Another issue is what to do in the case of disputes. Formally, the MTA is a business contract between two legal persons. What happens if there is disagreement between them? Say Syngenta takes out a patent on some Laotian rice germplasm it got from the International Rice Research Institute despite the interdiction in the MTA. The default option is that the parties go to court to resolve it. An alternative is to offer a dispute resolution mechanism inside the Treaty itself. This was discussed in depth at the July meeting.

Nuts and bolts of the Treaty

The Treaty only covers a limited list of crops. It does include most of the major food crops, but it excludes many minor food crops and forages important to tropical regions.

- Access will only be facilitated for conservation, research and breeding. And access only applies to food and feed uses of a crop, not to industrial or other uses, probably not even fibre use.
- Access will only be provided to materials held by government institutions or in the public domain, plus most of the materials held by the research centers of the Consultative Groups on International Agricultural Research if they decide to join (most of them likely will). No private holders, be they corporations like Monsanto or individual farmers, are obliged to provide access to their seed collections.
- Materials held under *in situ* conditions, such as crops in the field or wild materials in the forests, are excluded from the scope of the Treaty. This means that governments remain free to regulate access under their own national legislation.
- Also excluded from the Treaty are materials considered “under development”.

In terms of rights and obligations, the biases toward the seed industry become quite pronounced:

- Even though they have no obligation to *provide* access, private companies (as well as individuals) have unlimited rights to *get* access to the materials in the system.
- While recipients of plant samples are *not* allowed to patent any part of the material they receive from the system “in the form received”, they *are* allowed to do so when it is no longer in that same form. Some governments have already made clear that a very minimal technical intervention, such as isolating a gene from a seed sample, is all that is needed for the material to be perfectly patentable under the terms of the Treaty, even though the gene was there from the beginning.
- Monetary benefit-sharing must occur when a product incorporating material from the system – a new plant variety, for example – is commercialised. But it is only mandatory for products that are not considered “available without restriction to others for further research and breeding”. This means there is no mandatory benefit-sharing from the marketing of varieties held under plant breeders’ rights schemes, like that of the Union for the Protection of New Plant Varieties. Only patented materials, and possibly hybrids or similar seeds for which the breeding lines are kept proprietary, will be considered triggers of benefit sharing. Some European governments even claim that *European* patents should not trigger benefit-sharing because the European Union’s life patenting directive opens the door to compulsory licensing. In other words, since compulsory licenses on patented seeds are now a possibility, this would theoretically make all seeds patented in Europe “available without restriction” and therefore excluded from the benefit sharing scheme.



What about farmers?

While the implementation discussions have gone into great detail in matters like this, mesmerised by the legal and economic consequences for governments and private companies, there is virtually no discussion of the effects on farmers. What will the Treaty mean in practice if a farmer breeder, a seed saver group or a community seed security initiative want to access genebank materials? What does it hold in store for their own collections? Is there a risk that zero action on farmers' rights, which the Treaty leaves to the whim of governments, will also translate into further restricted access for farmers?

Judging from experience, the importance of the Treaty should probably not be overestimated in these respects. The history of FAO's seeds work shows that national governments rarely have allowed themselves to be much influenced by international instruments. Practical experience also indicates that the relations between the formal genebank system and the informal breeding and seed-saving sector vary enormously both between countries and over time. There are examples of very friendly cooperation as well as of direct conflict. Sometimes these experiences stem from political issues or a lack of any legal recognition of farmers' rights, but simple things like personal relations have also been known to come into play. So it is very difficult to say anything general either about the present situation or how it might change due to the Treaty.

But taking the text as it stands, the following observations can be made:

- Communities, associations and individual farmers, have the right to request seed samples from the system, just like corporations, as long as they are in the jurisdiction of a government that is a party to the Treaty.
- There is no obligation for the seed collections held by seed savers networks, community-based initiatives or individual farmer-breeders to provide materials to this new system. Again, these people have the same status as the seed companies.
- Individuals or private organisations involved in selection and breeding work are not obligated

to put material "under development" into the system. This is one of the few places in the Treaty where farmers are explicitly mentioned. However, the provision regarding *in situ* material partly contradicts this, as it recognises a right of governments to regulate access to *in situ* materials under national legislation. Farmer breeding usually take place in the field, so the materials are both *in situ* and under development. This is a possible point of conflict where national governments could try to use the Treaty to restrict farmers' rights.

- Because there is no right of access for direct use – only for conservation, research and breeding – both farmers and scientists have questioned whether this will become a new restriction on access. A reasonable interpretation is that this should not be a problem. When someone accesses material from a collection, it is almost never for direct use without passing through some form of conservation, research or breeding. Access always means getting a small sample of seeds. These seeds have to be multiplied and the plants are almost invariably evaluated and/or selected in the process. This could be considered research or breeding already. But if a genebank is looking for a reason to restrict access, this clause could provide it.

Overall, the conclusion is that implementation of the Treaty will probably change very little at all for farm-based breeding. It will more significantly give guaranteed access to corporations, who will probably not share much in return but get private property rights over the results. 2

Going further

- All official documents regarding the Treaty are on the FAO website at www.fao.org/ag/cgrfa, including the report from the latest meeting in Tunisia in July 2005.
- For a good introduction to the Treaty, including negotiation history, see David Cooper (2002), "The International Treaty of Plant Genetic Resources for Food and Agriculture", *RECIEL* 11 (1).
- GRAIN's baseline analysis of the Treaty remains unchanged from the day it was adopted. See our *Seedling* editorial of December 2001, "A Disappointing Compromise", available at www.grain.org/seedling/?id=174.





At the same time as Asia's fisherfolk are urging their governments to help re-establish artisanal fisheries after last year's tsunami, an international 'tsunami-recovery' consortium is suggesting that they should abandon their livelihoods and find employment elsewhere. The fisherfolk also face other challenges - from growing pressures to switch over to industrial aquaculture and fishing, and the introduction of genetically modified fish.

Blue fishers, blue genes

Fishy undercurrents in post-tsunami Asia

GRAIN

A new consortium is challenging the tsunami rehabilitation efforts to build boats for local fisherfolk to reclaim their lost livelihoods. In its recent policy brief¹, the Consortium to Restore Shattered Livelihoods in Tsunami-Devastated Nations (CONSRN) argues that replacing lost boats and fishing gear is oversimplistic and not a sustainable way of rebuilding devastated communities. It cites Indonesia's severely depleted coastal fisheries resources as the main impediment to successful rehabilitation efforts. The urgent need, it seems to the group, is not to reinstate the fishermen but create employment opportunities for them to do something else.

The consortium includes the Asia Pacific Fisheries Commission, the Bay of Bengal Program, the Network of Aquaculture Centers in Asia-Pacific, the SouthEast Asian Fisheries Development Centres, the WorldFish Center (formerly ICLARM) and the UN Food and Agriculture Organisation (FAO)

through its Regional Office for Asia-Pacific. The FAO was appointed as the technical lead in fisheries rehabilitation.

The call is seemingly well-heeded - except by the fisherfolk, who have other ideas. Several organisations of small-scale fisherfolk in Sri Lanka, India, Thailand and Indonesia are demanding that relief efforts should focus on re-establishing the artisanal fisheries sector as a priority. They are also urging their own governments, as well as donors, to accompany it with a change in approach and policies that will put a stop marginalising fisherfolk communities.

Shrinking diversity

In Asia and throughout the globe, marine biodiversity has shrunk considerably over the years. The question is whether driving fisherfolks away from their own communities will bring back that lost diversity. A recently published map² which looks at the hot spots of marine diversity



25

¹CONSRN (2005), "Rebuilding Boats May Not Equal rebuilding Livelihoods", *Policy Brief No. 1*, www.worldfishcenter.org/news/CONSRN_PolicyBrief1.pdf

²"Strange Fish", *The Economist*, July 26, 2005. A map of tuna and billfish diversity in the world's open oceans produced using Japanese longline fishing records. The authors say the pattern of diversity (with tuna and billfish) is likely to hold for many other marine species as well.



shows a 10-50% decline in diversity between the 1960s and the 1990s – with the largest reduction of species density in Atlantic and Indian oceans – corresponding to fishing pressures. As early as 1997, FAO has acknowledged major declines in wild fisheries due to overfishing and habitat destruction, but optimistically suggested that the projected shortfalls in fish supply “will be met by expansion within the aquaculture sector.”³

“The reason for the immense destruction of the coast was aquaculture, development and tourism”, according to Father Tom Kocherry, an Indian activist priest who leads the 10 million-strong National Fishworkers Forum.⁴ He was furious at the suggestion of some European development charities who, just a fortnight after the tsunami, were quick to suggest that it might not be sustainable for all fishermen to return to the sea. “I am speaking for the 10 million traditional fishermen who go out in small boats and who practise sustainable fishing, not the giant trawlers that ruin the fish and the environment. My people have carried out this livelihood for centuries. Where are they to go if not back to the sea?”

It is estimated that about 85% of the world’s fishers are in Asia, led by China, India, Vietnam, Indonesia, Bangladesh and the Philippines. With shrinking land for agriculture and continuing poverty in the cities, uprooting fisherfolk from the shore looks misplaced. But given the kind of post-tsunami rehabilitation that CONSRN wants for the affected communities, and with FAO and Worldfish Center at the helm, the answer to Kocherry’s question might well be inland aquaculture.

A gift of fish

Aquaculture production accounts for about 20% of the total world seafood supply. Asia contributes 25 million tonnes (valued at US\$35 billion), or 82% of world aquaculture production.⁵ To meet the expected global increase in demand for fish protein, more aquaculturists are needed, as are “improved strains of fish that are faster growing, resistant to disease, and suited to a variety of pond farming conditions.”⁶

The WorldFish Center is one of the leading research centres focusing on such research. From 1988 to 1997, it ran the Genetically Improved Farm Tilapia (GIFT) Project, with funding from the United Nations Development Programme and the Asian Development Bank. This collaborative project involving a Norwegian research institute and three national fisheries agencies in the Philippines worked on cross-breeding several different populations of wild African tilapia “to produce new strains designed to mature quickly and adapt easily to pond-farming conditions in Southeast Asia.”⁷

The project wrapped up with the establishment of the GIFT Foundation International whose mandate, among other things, is to “provide the GIFT system with brand development and marketing support.”⁸ WorldFish also gave birth



The fast-growing ‘Excel’ tilapia, an Egyptian-Kenyan tilapia hybrid, is being widely promoted in the Filipino aquaculture industry.

to the International Network on Genetics in Aquaculture (INGA) in 1993, a network of 13 countries in Asia-Pacific and Africa, 11 advanced scientific institutions, four regional or international organisations, and one private sector institution. The network facilitates transfer of genetic material among member countries and initiates regional research programmes for the genetic improvement of carps and tilapias.

Successes have been reported in Bangladesh, China, Sri Lanka and Philippines in using commercial strains of tilapia that came from the GIFT project. WorldFish and Malaysia’s Department of Fisheries are continuing with selective breeding work focusing on yield, flesh quality and growth rates.

The Blue Revolution begins

The application of biotechnology to aquaculture has sparked tremendous interest. “The use of fish hatcheries to supply farms and enhance wild stocks is now commonplace, and we are now well into the second stage of the revolution, namely the use of genetic engineering – including splicing genes from one fish strain or species into another – to produce desired characteristics” observe fisheries specialists Brian Greer and David Harvey.⁹

Close to 40 kinds of transgenic fish have been researched and developed in several laboratories

³ KJ Rana (1997), “Global overview of production and production trends 1984-1995”. In: *Review of the State of World Aquaculture*. FAO Fisheries Circular no. 886 FRI/C886 (Rev.1), www.fao.org/docrep/003/w7499e/w7499e05.htm

⁴ Mari Marcel Thekaekara (2005), “Corrupted defence”, *The Guardian* (UK), January 5.

⁵ *Review of the State of World Aquaculture* (1997), FAO Fisheries Circular no. 886 FRI/C886 (Rev.1), www.fao.org/documents/show_cdr.asp?url_file=/docrep/003/w7499e/w7499e02.htm

⁶ David Greer and Brian Harvey (2004), “Genetic Improvement of Farmed Tilapia: Lessons from the GIFT project”, in *Blue Genes: Sharing and conserving the world’s aquatic biodiversity*, IDRC, Canada, www.idrc.ca/en/ev-64749-201-1-DO_TOPIC.html

⁷ *Ibid.*

⁸ NAGA *Worldfish Center Quarterly* (2004), Vol 27 Nos. 3&4, Jul-Dec, p11.

⁹ David Greer and Brian Harvey (2004), *op cit.*

across the globe since the first transgenic fish was reported in China 20 years ago. Interests range from studying gene flows in fish to making novel aquarium fishes to rearing 'pharma-fish' useful to pharmaceutical industries. But most research focuses on speeding up the growth rate of commercially important species for the aquaculture industry, such as salmon, trout, catfish, carp and especially tilapia.¹⁰

Darwin in reverse

Introducing transgenic fish in aquaculture poses many risks. When the British government decided in 2001 to provide funding for the development of transgenic fish, some scientists immediately raised concerns about gene flow and the possibility that these fish would outcompete with wild species for food and other resources. They cautioned against the inevitability of novel traits from genetically modified (GM) fish spreading into wild populations and seriously harming the resilience of aquatic ecosystems.

Two scientists at Purdue University in the US went even further, indicating that transgenic fish might even put Charles Darwin's theory of evolution (which espouses the survival of the fittest) in reverse. William Muir and Richard Howard investigated a Japanese madaka fish that had been genetically engineered to produce human growth hormone so that it grows six times faster when it was released into the wild. They found out that the release of 60 of this transgenic fish into a wild population of 60,000 would be enough to extinguish the very species in 40 generations! "You have the very strange situation where the least fit individuals get all the matings", the researchers say. This is because the fast growth of the transgenic fish makes it reach the right size for mating in a short period of time without reaching sexual maturity. One result of this is an increased mortality in the GM fish's offspring. But because of their size, they get to compete more with the wild population as well as dominate the mating process. This enhances the passing of such increased mortality trait to the wild population. "Sexual selection drives the gene into the population and the reduced viability drives the population to extinction" the authors observe.

The shape of things to come

Whether it's the drive to uproot fisherfolk from their livelihood to pave the way for tourism and resort development, or to create a hostaged market for transgenic fish, one thing is clear. The future

Beware the aquatic chicken

Tilapia is a fish native to the lakes of East Africa, where more than than 100 sub-species have been identified. It is one of the most important species in aquaculture today, being cultivated in no less than 85 countries around the world, with world-wide production exceeding 300,000 tonnes per year.¹¹ Tilapia has been nicknamed "the aquatic chicken", reflecting its ability to grow quickly with poor-quality inputs.

The Tilapia species is highly carnivorous of the eggs and young of other species, particularly outside its natural ecological niche. Its continued large-scale introduction could contribute to the extinction of less aggressive, indigenous fish throughout the world. Aquaculturists recognise this and research universities and institutes like the Consultative Group on International Agricultural Research are experimenting with better techniques and hybrids, while development agencies such as the US Agency for International Development and the World Bank continue to push for the spread of tilapia throughout the world. But a lack of international and industry-wide regulation, coupled the pressure for increased production and implementing agencies' relative lack of concern over species loss does not inspire confidence. It could mean that the destructive fish wins out in a perhaps unnecessary trade-off between environmental, economic, and food production concerns.

Tilapia is now the subject of extensive GM research. In 2001, the government of Britain gave at least £2 million (\$US 3.6 million) to develop genetically modified carp and tilapia in India, Bangladesh, Vietnam, Thailand, Philippines and Africa.¹² There is even a Tilapia Genome Project now at the University of New Hampshire in the US to facilitate the improvement of strains with respect to traits of commercial importance, such as growth rate and flesh quality, through marker-assisted selection.



looks bleak for the communities affected by the tsunami. What the Consortium has might just be a policy brief, but it probably reflects the shape of things to come. Fisherfolk communities were marginalised before the tsunami, and rebuilding their lives after it is enormously challenging. Now they have another fight on their hands on top of everything else. It might just be a matter of time before another tsunami hits Asia. This time, it won't be nature's wrath, but the fisherfolks'.

¹⁰ Luke Anderson (2005), *Genetically Engineered Fish - New Threats to the Environment*, Greenpeace, Amsterdam, The Netherlands, www.greenpeace.org/international/press/reports/genetically-engineered-fish

¹¹ Cichlid Genome Resources, Hubbard Center for Genome Studies, <http://hcg.unh.edu/BAC/Tilapia>

¹² *Independent on Sunday* (UK), April 1, 2001.



Sprouting Up...

Tribal rights (f)or wrongs in India

GRAIN

The rights of traditional tribal communities have been at the centre of many a struggle with the State. But it's another story when within the State machinery itself there are disagreements on if and how communities ought to control forest resources. So it has been in India. The Government of India's Ministry of Tribal Affairs (MoTA) mooted a draft Scheduled Tribes (Recognition of Forest Rights) Bill 2005¹ that was cleared by the Law Ministry in April 2005. The bill has been stalled by opposition from the Ministry of Environment and Forests (MoEF) on the grounds that it will be detrimental to safeguarding the forests and wildlife that thrives in them.

The aim of the Bill is to undo the legacy of discounting the time-honoured use and preservation of forest resources by tribals that has pervaded since colonial times. By recognising the rights of the forest-dwelling tribals, the bill seeks to protect them from being branded as "encroachers" and safeguard them against forced evictions. The Bill acknowledges 12 specific heritable but not alienable non-transferable "forest rights" of tribals in forest villages for "bonafide livelihood needs". The conditions for vesting such rights include a limit of up to 2.5 hectares of land per family which must have been in occupation prior to 25 October, 1980 (the date on which the Forest [Conservation] Act came into force).

The list of rights include the:

- Right to live in the forest under the individual or common occupation for habitation or for self-cultivation for livelihood
- Right to access, use or dispose of minor forest produce
- Rights of entitlement such as grazing and traditional seasonal resource access
- Rights for conversion of leases or grants issued by any local authority or any state government on forest lands to titles
- Right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving.

Parliamentarians supporting the bill are being accused by some as pursuing vote-bank politics to appease tribals. Questions are also being asked as to why only "scheduled" tribes are to be granted forest rights? The simple answer is that MoTA was established as an independent ministry in 1999 to deal specifically with scheduled tribes. The criteria for designating a tribe as "scheduled" include having 'primitive' traits, dwelling in geographical isolation, having a distinct culture, being shy of contact with the outside world and being economically

'backward'. There are more than 600 officially listed scheduled tribes in the country, comprising less than 10% of the country's total population and with little over 2% believed to be dwelling in forests.

There is a view that once the Bill is passed, this itself would provide the basis for the extension of the rights to other forest dwellers.

The issue has turned into a battle for control between the MoTA and MoEF. There are also deep divisions between conservationists and tribal activists. The pro-tribals lobby argues that it is large developmental projects – such as large dams, power plants and mining activities – that need to be checked, rather than the forceful eviction of traditional forest-dependent communities to save the forests. Several groups contend that it is not tribals who are bringing in commercial activities into forests, but external commercial pressures that are degrading the forest resources and thereby eroding the traditional lifestyles of tribal communities. Meanwhile the more radical green groups warn against the land mafia misusing the provisions of the proposed law into conning unsuspecting tribals vested with land rights to part with their land in prime forest areas. They also fear that the proposed legal provision allowing for the "sale of forest-based products for their household needs", would translate into large-scale commercialisation of forest resources.

Apart from the practical problems in implementing the Bill and working out its relationship with other conservation laws, there are certain problems within the text that would need to be addressed. There are several measures built into the Bill for conservation, but there remains a lack of clarity on what prevails in the event of such "rights" causing loss of wildlife, forest or biodiversity. For instance, if the collection of a medicinal plant becomes threatened, would the law restrict it? There is a penalty for unsustainable use, but who and how determines what is "unsustainable"? And would such collections be permitted in national parks or sanctuaries?

The neglected issue of traditional knowledge warrants more attention. Amongst the "forest rights" that the Tribal Bill seeks to grant is the right to access to biodiversity, and community rights to intellectual property and traditional knowledge related to forest biodiversity and cultural diversity. The approach to these rights appears to be in harmony with the Government of India's official pro-IPR policy, and is supported rather than contested by the various Ministries involved. The pro-IPR approach is clear in the draft National Tribal Policy² which is currently being revised. It states that the preservation and promotion of traditional wisdom is recommended through documentation of such traditional knowledge and its "transfer" to non-tribal areas. In the context of health, the National Policy mandates:



- Strengthening the allopathic system of medicine in tribal areas.
- Validating identified tribal remedies (folk claims) used in different tribal areas
- Encouraging, documenting and patenting tribals' traditional medicines

Biodiversity-based traditional knowledge can not exist without the resources on which it is based. Such systems of knowledge would not grow from a document but by a symbiosis of people and plants. What needs to be protected is the collective intellectual heritage of communities. This is different from advocating for a community to be made a legal entity for grant of a patent or other IPR, which implies the commodification of their knowledge. Conservation by the people can be made possible only if communities are given a stake in conserving. But in the context of traditional knowledge, IPR is not a helpful incentive to conserve knowledge.

There is doubt about the Bill being cleared in its present form. The Prime Minister's Office has asked the MoTA to reword its original Bill to reflect conservation concerns, while asking the MoEF not to push its rival "alternative draft". Hopefully in the end the tribals in the forest who are largely oblivious to these ongoing discussions will be more righted than wronged.

The government in making such a law would be fulfilling its electoral promise only if it facilitates the control of people rather than effecting controls. Self-governance is a critical issue for indigenous peoples whose systems of self-rule pre-date the modern state. The state must recognise this, and rights must not be dependent on the mere efficacy of a law drawn up today, often without the very people it proposes to right.

Footnotes

¹ <http://tribal.nic.in/bill.pdf>

² <http://tribal.nic.in/index1.html>

Biosafety laws: co-opted by corporations

Across the world processes to draw-up national biosafety laws are increasingly disconnected from the people they are supposed to serve. Drafting typically takes place behind closed doors, between local elites and foreign "experts" of the GM lobby, with corporations close at hand to steer the discussion. Meanwhile, those with the most at stake from any introduction of GM crops, the rural communities, are completely marginalised from the processes.

In our latest *Against the grain*, GRAIN provides a global overview of how biosafety laws are being all-too-easily co-opted into tools for corporations hell-bent on imposing GM crops on the planet. In Africa, relentless pressure from the US Agency for International Development is breaking down the common commitment to precaution, as several governments, foolishly vying to become the continent's GM showcases, try to impress the GM industry with regulatory frameworks that open their countries up to GM crops. Ditto for Asia, where, despite strong public opposition to the introduction of GM crops, governments are caving-in to external pressure and opting for weak biosafety laws. In Latin America, people are so appalled that they've started calling them "Monsanto Laws".

Yet if governmental biosafety processes are generally doom and gloom these days, there is plenty of reason for optimism at the grassroots. Not only is resistance to GMOs increasing, but social movements are becoming more sophisticated in their efforts to oppose GM crops. Where national governments refuse to listen, people are localising their struggles where they can exert more democratic control, such as GM-free zones. Communities are also taking "risk assessment" into their own hands, conducting research, organising peoples' tribunals, and challenging the "experts". For example, had it not been for the documentation of the failure of Bt cotton in the Indian state of Andhra Pradesh by grassroots organisations, the state authorities would never have withdrawn the approval for Monsanto's Bt cotton varieties.

This GRAIN report argues that the fundamental problem is that biosafety laws are being created behind closed doors, far from grassroots realities.

GRAIN (2005), "Whither Biosafety? In these days of Monsanto Laws, hope for real biosafety lies at the grassroots", *Against the grain*, www.grain.org/articles/?id=9



The Corporation - psychopathic and immortal

The Corporation is a new book and film by Canadian Law Professor Joel Bakan. Both the book and film (DVD or VHS) are widely available. The book is very well written and easy to read. The film is long, but a joy to watch and includes subtitles in French and Spanish. Although the film is based on the book there is also supplementary information provided in interviews with a wide range of people. Overall the book provides the information in the most coherent manner.

The Corporation focuses solely on the Anglo-Saxon type of corporation, and nearly entirely on corporations within the US. This was a missed opportunity by Bakan to appeal to a wider international audience and show that corporate governance is not the same around the world. Indeed corporations around the world vary widely to the extent that there is no one homogeneous system of corporate structure or regulation.

In the past 20 or so years, the world has witnessed the extraordinary rise of the corporation. Even though corporations have been around for centuries, it is really only in the last few decades that their overpowering world domination makes sure that they are part of every day life for those living in industrialised countries. In the North, we eat their food, we read their news, they deliver our letters, we watch their films, we invest our money in them through banks and pensions, we use their household and office products, their fuel, their cosmetics, their seeds, their pesticides, their fertilisers, their water and the list goes on and on. Although in the South, particularly in rural areas, the corporation does not yet always dominate lives, you can be sure that it is coming, and coming very fast.

One of the main techniques to maximise profits is to reduce costs by 'externalising' costs – by getting someone else to pay for them, like the government, employees, the biosphere or even future generations. Costs that are often externalised include low pay to factory workers, intensive animal husbandry with little thought to animal welfare, unconcerned pollution of the biosphere and people losing their lives. Governments can often be persuaded to foot the bill for services that serve large corporations – like building roads or providing an army to quell social unrest and defend the interests of a corporation. As the CEO of a commercial carpet manufacturer points out, "*The pressure is on the corporation to deliver results now and to externalise any costs that this unwary or uncaring public will allow it to externalise*". Costs are being externalised at such a rate that the entire planet is now suffering. All aspects of the biosphere are degenerating from pollution and the extraction of natural resources.

Often a corporation is eager to externalise a cost, but is faced with the possibility of breaking a law. But this rarely presents much of an obstacle. As corporate governance advisor Robert Monks says, "*Again and again we have the problem of whether you obey the law or not is a matter of whether it's cost effective. If the chance of getting caught and the penalty are less than the cost to comply, our people just think of it as a business decision.*"

Furthermore, corporations are always keen to remove legislation that limits their freedom. They have been very effective at removing laws which tie them up through lobbying, political funding and sophisticated public relations campaigns. This strategy involves staggering amounts of money and provides corporations with a disproportionate influence over the political system. This means that corporations essentially regulate themselves.

If the corporation is legally a person, that person displays all the classic characteristics of a psychopath:

- Callous lack of concern for the feelings for others
- Incapacity to maintain enduring relationships
- Reckless disregard for the safety of others
- Deceitfulness

What is a corporation?

A legal person... A corporation can be defined as a company which is 'owned' by its shareholders. However, legally, a corporation is not treated as a group of people but is treated as a person - with 'rights'. Yet this legal 'person' does not have a moral conscience, and only has one legal aim - to make as much money as possible for its shareholders. Corporations are not interested in the environment, social welfare, fairness, suffering, illness or death, so long as these inconveniences don't get in the way of maximising profits.

...of limited liability... Shareholders are protected by what is known as "limited liability" in that only the amount they invest is liable, no more. Employees can be held liable, but only for specific issues related to the good of the corporation or for acts which are considered illegal by national law. But if the corporation does something illegal, the corporation – not the employees – is liable.

...and immortal: A corporation lives forever. Neither shareholders or employees are able to shut it down. Officially this is to allow for the 'stability of capital', but it also means that judges and juries find it nearly impossible to shut down a corporation for malpractice.



- Incapacity to experience guilt
- Failure to conform to social norms with respect to lawful behaviours

Even though a corporation is a psychopath, it has more rights than an individual. With the rise of the World Trade Organisation and other international bodies and regulations, corporations have inalienable rights to be a part of the global free market economy. This gives them right to set up in or leave any country at any time, with national governments powerless to stop them.

Interestingly, the employees and shareholders are not psychopaths, but 'normal' people who have families and friends, give to charity, and may even feel that are doing something positive for society. But neither shareholders nor employees have the power to make big changes in a corporation. Legally, employees (even the Chief Executive) are not allowed to divert funds away from shareholders to pay workers more money or reduce their impact on the environment, unless it means that shareholders will benefit from more money. The problem is not so much with the individuals who make up the corporation, but the laws that created and now enshrine it.



The corporation is a psychopath, a polluter and an exploiter. Yet most corporations manage to give a good impression to people, especially those who buy their product. So they invest heavily in advertising, marketing and in particular branding. Corporations will take extreme measures to ensure consumers are manipulated into buying their products. Having realised that 40% of sales of children's products come from nagging, they have aggressively targeted children directly via television, billboards and other child-focused media – to great effect.

Corporations also need to look as though they are being responsible and accountable. Go to any corporation website and they will have a section called 'corporate responsibility' or similar. Corporations are eager to show they are responsible, not because they want to be responsible but because they want to be *identified* as being responsible.

As global politics moves unswervingly towards ever-more-pervasive privatisation, the legal concept of the corporation grows stronger and stronger. Governments have lost control over corporations and corporations have become the new high priest. In the US, the

government now works for corporations, and this model is now rapidly spreading to other countries. Yet corporations are not nationalistic – anything but. Corporations will trade with any flag and with any political persuasion. In particular, corporations have had very close relationships with dictatorships as the one tends to support the other. Corporations also tend to have a strong relationship with destruction and devastation such as wars or even the loss of biodiversity – in destruction there is opportunity.

In the last issue of *Seedling* we saw how farmers in industrialised countries are often prohibited from freely saving and using their own seed. Behind the laws that tie their hands lie corporations eager to outlaw all seeds except their own to ensure that their profits keep growing. They push mercilessly for laws that move them closer to monopoly control. But simply placing more legal restrictions on farmers isn't usually enough. Corporations are always seeking new frontiers for increasing control. One important new frontier for agro-chemical corporations are gene-related technologies like genetically modified and terminator seeds. Ethically dubious and environmentally polluting maybe, but they provide a way for corporations to continue increasing their profits and dominate their market. Genetic engineering ensures that they can patent their crops and animals, and establishes

a compulsory connection between specific agro-chemicals and specific crops.

Corporations may have complete control of food from farm to fork in many industrialised countries, but they still have a lot of work to do to achieve this in many countries in the South. And although they are supported by eager-to-please governments with dollar signs in their eyes, there is a growing sense of unease amongst farmers and the general population of the undemocratic power that these monstrous corporations represent. Indeed, such is this unease that in many places resistance is turning to rebellion.

Book: *The Corporation: The pathological pursuit of profit and power* by Joel Bakan, 2004. Published by Constable and Robinson in the UK (£9.99) and Free Press in the US (\$11.20).

Film: *The Corporation*, A film by March Achbar, Jennifer Abbott and Joel Bakan, 2004 (\$25).

Email: dvd@thecorporation.com

Website for the film: www.thecorporation.com



Terminator Technology – “Suicide seeds” are back! Your action is needed

ETC Group is launching The Ban Terminator Campaign, which seeks to promote government bans on Terminator technology at the national and international levels. The reason for the campaign is that the international *de facto* moratorium on Terminator technology at the UN Convention on Biological Diversity (CBD) is under attack. Terminator technology refers to a group of technologies that can be engineered into plants to render sterile seeds at harvest (see p 15 for a more detailed discussion on GURTS, the technical name for Terminator).

Two upcoming meetings of the CBD where Terminator is on the agenda offer important opportunities to strengthen the moratorium. These are the Working Group on Article 8 (j) in Granada, Spain, on 23-27 January 2006, and the 8th Conference of the Parties (COP8) to the CBD in Curitiba, Parana, Brazil, on 20-31 March 2006. The build up to these meetings is also an important opportunity to encourage governments to establish national prohibitions on Terminator technology – just as Brazil and India have done. Corporations will not stop their efforts to commercialise Terminator until governments prohibit the technology.

ETC group (then RAFI) discovered Terminator patents in 1998. The following year, in response to the avalanche of public opposition that was generated in that time, two of the world's largest seed and agrochemical corporations, Monsanto and AstraZeneca (now Syngenta), publicly vowed not to commercialise Terminator seeds. In 2000, the CBD adopted a *de facto* moratorium on Terminator seeds. As a result, many people believed that the crisis had passed, and the issue faded from public view. Unfortunately, Terminator is still being developed and is now being heavily promoted.

Despite widespread opposition, in February 2005 the Canadian government attempted to overturn the CBD's international *de facto* moratorium on Terminator technology. The Ban Terminator Campaign was formed in response, following discussions initiated by Canadian-based civil society organisations (ETC group, Inter Pares, National Farmers Union, and USC Canada). GRAIN is one of the steering committee members for the campaign.

ETC Group is asking individuals, communities and groups across the world to take action locally, nationally, and internationally as part of the new global strategy. Many groups around the world working to secure Farmers' Rights, food sovereignty and the self-determination of your peoples and communities have successfully opposed Terminator in the past. Please add Terminator to your campaign work now - and please add your work and voices to the Ban Terminator Campaign.

- Groups and communities please “Endorse the Campaign” so we can show governments how strong the global opposition is www.banterminator.org/take_action/sign_on_to_ban_terminator
- Subscribe to receive Action Alerts and breaking news so that you can take immediate action when it is needed the most www.banterminator.org/take_action/subscribe
- Join with others in your area to pressure your government to ban Terminator nationally and at the UN. ETC Group can help provide materials and contacts.
- Organise events and actions - Become a Ban Terminator contact and organiser.
- Share information on Terminator in your community so that we can work together
- Pass a resolution in your group or community against Terminator to communicate your protest and reasons clearly for all to see
- Visit www.banterminator.org for action ideas, information and campaign materials.

Contact The Ban Terminator Campaign:

Web: www.banterminator.org
Email: contact@banterminator.org
431 Gilmour Street, Second Floor
Ottawa, Ontario
Canada K2P 0R5
Phone: +1 613 241 2267
Fax: +1 613 241 2506

ETC Group mailing list:
<http://lists.etcgroup.org/mailman/listinfo/etcgroup>

Your action is needed NOW



Four African proverbs and GRAIN's name change tale

1 One goat cannot carry another goat's tail

Everyone must accept their lot in life.

When you are born you are given a name, and sometimes it takes your whole life to get used to it. But you always have a chance to change it - which is what we have decided to do. We are officially changing our name from Genetic Resources Action International to GRAIN.

2 A bird is in the air but its mind is on the ground

Wherever you are it is important to remember where you come from and what is important.

Genetic Resources Action International was established at the beginning of the 1990s to launch a decade of popular action against one of the most pervasive threats to world food security: genetic erosion. The loss of biological diversity destroys options for the future and robs people of a key resource base for survival. Central to our approach is the conviction that the conservation and use of biodiversity is too important to leave to scientists, governments and industry alone. Farmers and community organisations have nurtured genetic diversity for millennia, and continue to do so. Any effort in this field should take their experience as a starting point.

3 A peasant does not wander far from where his corn is roasting

Keep an eye on what is important.

One of the outcomes of the external evaluation of our work in 2003 was a suggestion to consider a possible name change, because the term "genetic resources" reflects a narrow and utilitarian approach toward the issues GRAIN is working on. Some of our partners felt uncomfortable with this portrayal of GRAIN. Moreover, Board members contested that the word "resources" was inappropriate given its exploitative nature and the attitude this term implies towards the natural world. We felt we needed a name that more fully encompassed action research on biodiversity, rights and livelihoods in the globalising food system. After some discussion and recognising that it would be impossible to find a single word or short phrase that could encompass the scope of our work, we decided to keep it simple. We would continue to call ourselves 'GRAIN', but as a stand-alone name, not an acronym for Genetic Resources Action International'.

4 When you know who her friend is, you know who she is.

You can tell a lot about a person by the people around them

The foundations of our work lie in daily networking, communications and information activities. By changing our name we hope to enhance these activities, by giving people a more accurate picture of who we are and what we are about. We hope it will strengthen our capacities and those of our many partners the world over in mobilising popular concern and constructive action for safeguarding the world's biodiversity.



GRAIN's October 2004 *Against the grain* report entitled "Iraq's new patent law: a declaration of war against farmers" has been selected to be included in *Censored 2006*. This annual publication produced by Project Censored features the 25 most important news stories not covered by the corporate media in 2004-5. Other stories included in this year's book address government secrecy, media failures in Iraq, national voter fraud, citizen surveillance, and environmental disasters.

The Project Censored media research project based in Sonoma State University in the US publishes a list of 25 important news stories that the media sidelined or ignored.

Read the *Against the grain* at www.grain.org/articles/?id=6
See the book and find out more about Project Censored at www.projectcensored.org.



