



## Part one – the story so far

### Richard Stallman

**O**penDemocracy: You're well-known around the world for starting the 'Free Software' movement, which has now developed into a serious competitor to Microsoft and other proprietary software. We've called you as the first witness in *The People v. Copyright* because you're now arguing against the copyright system as a whole. Why?

**Richard Stallman:** In the early 1990s, I was going around telling people about the ethical and practical benefits of Free Software – software that can be freely copied, modified and distributed. They started asking me whether these ideas could apply to anything else.

Sometimes they did this in a shallow, derisive fashion. They'd say, "What about hardware, should hardware be free too?"

Well, consider this sandwich. Are you free to copy and redistribute it? That would be hard. We don't have copiers for sandwiches today. You could make another sandwich like that one, but you'll have to get the ingredients and assemble them. You can't just say, "Food copier, copy this sandwich".

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technology. Automatic, convenient copiers exist for information, not for physical objects. So the issues of Free Software don't translate to physical objects; they only make sense for published information (the ethical issues around personal information, like medical records, are totally different).

The question is: once you've got a copy of published information, say a music album, a book, or a software programme, what should you be allowed to do with it?

If I said now, "You are not allowed to copy sandwiches", it would be an irrelevant decree. There are no sandwich copiers. But one hundred years from now, if sandwich copiers are invented, my old ban could become an extremely important political issue. It might have billions of people up in arms.

And this is what is happening today with copyright. New technologies have altered the consequences of the copyright bargain we struck three centuries ago. People are now technically able to copy, modify and redistribute information themselves, without having to rely on publishers.

As the technological context changes, the proper



policy changes. A different copyright bargain would be better, one that learns the lessons of the history of copyright development.

### **The birth of copyright: industrial regulation**

**open:** Do you view copyright as inseparable from the technology used to copy or distribute goods?

**RS:** As your timeline shows, the history of copyright connects intimately with the history of copying technology. In the ancient world copying a book was done with a pen and ink. Anybody who was reasonably literate could copy books pretty much as easily as anybody else. Nothing insisted that the copies had to be identical: there was a continuum between copying a book and writing a book.

Technology advanced, and the printing press made copying easier and more efficient – but not uniformly so. It was a lot of work to set type, and much easier then to make each copy. Only a few people had printing presses and type; only they could do efficient copying. Large numbers of identical books were made at presses and distributed. Publishing began because of this economy of scale.

Handmade copies continued to be made, right up to around 1900, sometimes by rich people to show off, sometimes by poor people who couldn't afford books. There was no attempt to enforce copyright on them – copyright was understood as an industrial regulation, restricting a few publishers, rather than readers in general.

Eventually, around 1900, printing got so cheap that hardly anybody, not even poor people, bothered to write out copies by hand. And so we came to think that copies were always made by printing presses. Copying became synonymous with publishing.

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When the US constitution was being drawn up, there was a proposal that authors should have a monopoly on printing their writings, but it was rejected. Instead Congress was given the power (not the obligation) to promote progress by adopting copyright.

How is copyright supposed to do this? It provides an incentive – if copyright makes it easier for authors to make a living, we expect they will write more books, and all of us will benefit. There will be more books for us to read, more books available in the bookstore, more discussion of ideas to help society advance.

So the purpose was social benefit, to modify the behaviour of copyright holders. It doesn't mean that they are somehow more important than other people or deserving of special privilege. It's an attempt to motivate them.

It could be that this copyright bargain was a good one in the age of the printing press, because the public was trading away a freedom it could not exercise. If you didn't have a printing press you couldn't make copies efficiently, you couldn't *do* what copyright restricted. A freedom to copy was an irrelevancy for readers then – as the freedom to use a sandwich-copier would be for people who eat sandwiches today. When you have something that is of no use to you and someone offers to take it off your hands for a non-zero price, that's probably a good deal.

### **Copyright in the digital age**

**open:** What was the next significant development?

**RS:** Digital information technology has started to replace the printing press. This transition is not complete, but it is already empowering the public. When it started, people began to notice that there was a conflict between the capabilities that digital technology gives to the public and the desires of the publishers to hold their



monopoly on copying. The publishers tended to dominate the debate, saying that “digital technology creates problems for copyright”. But copyright is a means, not an end in itself. The way I would put it is that copyright creates problems for users of digital technology.

Copyright in the age of the computer network is a restriction on the general public, not just an industrial regulation. The economies of scale are vanishing – anybody who can use the material can copy it about as well as anybody else. There is no reason why copies have to be made centrally and shipped in physical form. It’s not necessary or useful anymore, except to those who want to funnel all the copying through their tollgate.

As a result, copyright’s role has been completely reversed. It was set up to let authors restrict publishers for the sake of the general public. Digital technology has transformed it into a system to let publishers restrict the public in the name of the authors.

Copyright used to be easy to enforce, because it only had to be enforced on publishers, who by their nature are advertising to the public, hence easy to find. Now it’s hard to enforce. It requires intruding into everybody’s life, restricting what they are allowed to do with their computers, prohibiting useful software.

Now, thanks to digital technology, the public can exercise the freedom to copy. What do you do when you have been producing a by-product and selling it to somebody who wanted to take it off your hands, and now you have a use for it? Maybe you still sell some of it, but keep what is useful to you. The public interest is to reduce the size of the copyright bargain: sell only part of those freedoms. As your capacity to exercise these rights grows, keep more of them.

That’s what makes sense from the point of view of the public. But the publishers, through politicians, have controlled developments thus far. And their ultimate goal is that you should be made to pay every time you read or listen to anything.

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E-books are a prime example. I think the campaign to launch e-books is aimed at squeezing out traditional freedoms, like the option to sell or buy a book through a used bookstore, lend it to a friend, borrow it from a public library, keep it for a few years and read it again, or buy it anonymously, without putting your name into a database that records everything you’ve read.

If publishers proposed a law taking away these freedoms for printed books, they probably couldn’t get that through. There would be too much uproar. So they worked on a two-step plan. First they would take away these freedoms for e-books. (The DMCA does this.) No one would oppose them, because there were no e-books. Then, switch people from printed books to e-books: “It’s progress!” They will come to e-books thinking that e-books of course are restricted like this, they always have been, how else would it ever be?

### **Crackdowns on samizdat**

**open:** What do you think of attempts, in the USA and beyond, to update the current framework for copyright in response to these technological changes?

**RS:** The Digital Millennium Copyright Act (DMCA) in the US essentially allows publishers to write their own copyright law, by implementing it in software. If the publishers publish the data, the text, the movie, the music, whatever, in some kind of restricted format, and set it up so that it is hard to access the data, the DMCA prohibits bypassing those restrictions.

The publishers can set their own copyright terms, which have the force of law, as long as they implement them technologically. If they used just technology to restrict the public, people would find their way around it. It takes the power of government force to stop them.

Jon Johansen, one of the European programmers who worked out how to watch DVD movies he had bought on his free GNU/Linux operating system, has recently been



charged with a crime in Norway at the behest of the US government. Protests are starting in Norway.

Last summer Dimitri Sklyarov, a Russian programmer, was arrested before he could leave the US and charged with helping to write, *in Russia*, a programme that converted restricted e-books into an open format that Free Software could access, that you could copy and use flexibly. This programme was legal in Russia, but illegal in the US, so they arrested him at a conference. Protests began weekly in several cities, against his arrest and the DCMA. Eventually Sklyarov was released and allowed to return to Russia, in exchange for agreement to testify.

It used to be US citizens who had to be afraid of visiting Russia. It used to be the Soviet Union that made strenuous attempts to crush *samizdat*, forbidden copying. Now it's the US which Russians fear to visit, which takes the lead in crushing forbidden copying. And the EU is following in its path.

The Soviet Union employed a range of methods to stamp out forbidden copying. First, they had guards standing by to watch what you copied. Second, those who they caught were punished harshly, imprisoned for years or sent to Siberia. Third, to help catch people, they asked for informers. Fourth, they used collective responsibility: "You! You're going to watch that group! If I catch any of them doing forbidden copying *you're* going to prison." Fifth, propaganda from childhood, to convince people that only a vicious enemy of the people would ever do forbidden copying.

The US today is using all of these methods. Guards on copying equipment: the DMCA opens up the path for robot guards in your computer. Harsh punishments: ten years ago, in the US, if you made copies and handed them out to your

neighbours to be helpful that was not a crime. Now it's a felony. You could be put in prison for years for sharing published information with your neighbours. In the UK, an MP has proposed a sentence of ten years for unauthorised sharing.

Soliciting informers: there are ads in the subways and on television, asking people to rat on their co-workers to the information police, officially known in the US as the Business Software Alliance. They send really nasty letters.

In Argentina the letters sent by their group threatened people with being raped in prison if they had forbidden copies of software.

Collective responsibility: they have conscripted Internet Service Providers by making them responsible for what their customers post. And propaganda since childhood: that's what they use the word "pirate" for. To describe a forbidden copy as pirate is a

perversion of morality. It's designed to convince everyone that sharing with your neighbour is the moral equivalent of attacking a ship.

It's no accident, this similarity. The motive for stopping people from copying and sharing in the US today is different from the motives in the Soviet Union twenty years ago. It's a form of tyranny on behalf of the publishers. But the methods have to be the same. The EU Copyright Directive, supposed to be incorporated into national law by the end of 2002, imposes similar requirements. It must be repealed, and it must be defied.

## **Part two – the way forward**

### **Free software: where it all began**

**openDemocracy:** You say that new laws on copyright must be defied and repealed, yet you have headed a movement which chose another path: avoiding the system's restrictions. Perhaps

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you could explain the principles behind 'Free Software', and how it fits in?

**Richard Stallman:** In the 1970s I was part of a community of programmers, and we shared the software we wrote. In the lab where I worked, if someone came over and asked us for a programme, we'd say, "Yeah, take a copy. Do something good with it." We were working to advance human knowledge.

But this community died in the early 1980s. And then I got to see what the alternative, proprietary software, was like. All operating systems then, including Unix, were proprietary. To get them, you had to sign a non-disclosure agreement.

A non-disclosure agreement is a promise not to teach others. For people who believe in advancing human knowledge, there can be nothing more vicious. It attacks the very root of learning and human knowledge. This was the way most computer users had been living for years. And I thought: "This is morally ugly. I refuse to live this way."

But what else could I do?

I realised that the only way I could work with computers and not be part of that closed and ugly world was to build another operating system, one that would be free software, and allow its users to be free. And as soon as I realised that, I also realised I had been elected by circumstances to do this job.

I was an operating systems developer: I had exactly the right skills. That didn't mean I knew I would succeed, but at least I could try. Nobody else was looking at this as a serious problem that *needed* to be solved. If I didn't solve this problem, chances were nobody else would.

I realised this was the most important thing that I could do with my life. So I decided I would write a free software operating system, or die trying (of old age, presumably). I called it GNU.

Like UNIX, GNU consisted of many separate components. So as people joined to work on it,

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it was easy to run it as a worldwide, distributed project: each hacker around the globe could write a different piece.

Through the '80s we were adding pieces, and by the early '90s GNU was almost complete enough to run, except for one essential piece, the kernel. (The kernel is the program that allocates the computer's resources to the other programs you are running.) Before we could get our kernel to work, Linus Torvalds wrote a free kernel called Linux. Other people then fitted Linux into GNU, and the GNU/Linux system was born.

This was a tremendous milestone: the goal we had set out to achieve in 1984 had been reached. But at the same time the great confusion arose: the idea that the whole system was Linux.

### **It's about freedom, not utility**

**open:** You often cite liberty as the justification for your actions. Yet, isn't free copyright simply a more efficient way of producing and distributing something?

**RS:** Your question illustrates one of our community's problems. When freedom is at stake, efficiency is a side issue. But many users have imbibed the Linux/Open Source philosophy: 'It's fun to have software that you can share and change', it leads to more reliable software, it's purely a technical issue. The Open Source movement *recommends* allowing people to study, change and redistribute the software because that gives better technical results, it allows us to develop more powerful software faster. But that's as deep as they go.

We in the Free Software movement recognise these practical benefits, and they are nice, but they are not the most important issue. More important are the ethical and political aspects. To be able to live in an upright way, treating your friends decently, sharing, helping them when they ask you for help. Living as part of a society, instead of a dog-eat-dog jungle.

'Free' in Free Software is free as in "free speech", not free as in "free beer". You're allowed to charge for copies of free software.



But you're not allowed to stop other people from modifying or distributing it further.

The philosophy of Free Software is that you are entitled to certain freedoms in using software. Freedom to study what a programme really does. To change it – if it doesn't do what you want, to change it so that it does. And to redistribute copies of it, to share knowledge with the rest of humanity.

That's why we created a new kind of software license, called the GNU Global Public License (GNU GPL). The GPL uses existing copyright and patent law to prevent anyone from turning free software back into proprietary software. Software licensed by its developers under the GPL must remain free, so proprietary software companies can't pillage the commons we have created.

We are fighting for freedom here. Non-free programmes don't respect your freedom, they trample your freedom. They are *not* inferior solutions to be accepted until something better arrives. They are problems, to be solved by replacing them with free software.

**open:** When it comes to the principles behind copyright reform, is freedom still more important than usefulness for you?

**RS:** The distinction itself isn't really useful! We need to think in terms of 'the freedom to do something socially useful' – to produce and share creative artefacts. The freedom of an individual aligns with social usefulness. The two are too often opposed.

### **A new copyright bargain**

**open:** So how do you think we should change our copyright systems to make them appropriate to the age of computer networks?

**RS:** Well, clearly we should reduce the extent of

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copyright, now that freedoms to copy are not useless to the public. One dimension of copyright is time. Copyright used to last up to twenty-eight years. Until 1998, it was seventy-five years. Now it extends to seventy years after the author dies.

Companies in the US said they needed that extension of copyright to make their business profitable. I challenged them to supply projected balance sheets for seventy-six years in the future. None of them attempted it. Of

course, they wanted this extension simply because some popular works they owned were written about seventy-four years ago and they didn't want these works to go into the public domain, now or ever.

The US constitution says that copyright has to last for "a limited time", so they can't pass a law that says that copyright is perpetual. Instead they came up with perpetual copyright on the installment plan.

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Every twenty years they extend the length of copyright by another twenty years, so no copyright will ever expire again. In particular, Disney didn't want the copyright on Mickey Mouse to expire. This is why the Sonny Bono Copyright Act is often called the Mickey Mouse Copyright Act.

Meanwhile, the UK has legislated a perpetual copyright on Winnie the Pooh. This was made to seem palatable because the royalties go to charity; but it can serve as a precedent for perpetual copyright on other works. I am sure the publishers want that.

So, time is one copyright dimension, and it's been stretching. I think the duration of copyright should be as long as is necessary in the particular industry to provide an incentive – but no longer.

Another dimension is which activities are



covered by copyright. In some cases, it could make sense for it to cover commercial distribution but not non-commercial distribution. Then there's verbatim distribution versus publishing modified versions.

We should not aim for the simplest and most uniform copyright laws, because that gives us a small number of extreme choices. It's as if you were shopping, and you agreed you would pay either one dollar, or one thousand dollars for any item, nothing in between.

Music is already treated very differently under copyright, but all literary works are treated the same. Why? Publishers want uniformity because they can pick an area where they claim they need a lot of copyright power, and use uniformity to extend it across the board. Once you reject uniformity, you can tailor the amount of copyright, keeping in mind the social uses of different kinds of works.

### **Three new models of copyright**

**open:** Is your 'Free Software' model a viable way of developing and distributing other types of creative material? It might work for software, but surely it would be different for poetry or music?

**RS:** I've identified three broad categories of works. First there are functional works: works that you use to get a job done. Second, works that represent someone's thoughts: what certain people thought, or saw, want, or believe. The third category is aesthetic or entertaining work, where the sensation you get from looking at the work is the whole point. I believe each category needs to be considered separately.

Functional works: software, recipes, dictionaries, text-books.

For functional works, it's vital that people should have the freedom to publish a modified version, to improve the works and develop human knowledge. We have to allow that publication to be commercial, to make the modified works widely and conveniently available.

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Perhaps there should be no copyright for functional works. (We would need to ensure that End User License Agreements cannot be used to obtain the same effect.) Or, as a compromise, copyright for functional works could last for three years – any software company not on its last legs is producing new product versions in that time. You have to measure the period by the timescales of the business.

Representative works: essays, memoirs, scientific papers.

For works that represent someone's views or experiences, modified versions would simply misrepresent where the person stood, and that's not socially useful. So we should only allow these to be copied verbatim, and there's no social reason why other people should have a right to commercially publish verbatim copies.

Aesthetic or entertaining works: music, novels, films.

Aesthetic or entertaining works are the hardest category. There are strong arguments on both sides about whether you should be able to modify them, but I'm starting to think that you should. Taking other people's stories and modifying them was often Shakespeare's approach, and look at the wonderful results.

Perhaps for these works one could set up an automatic system to apportion money for modified versions. Perhaps people generally won't combine their work in too complicated ways in these areas. If Person A wrote an original novel – Person B writes a modified version... you won't often get to a third generation, Person C modifying it again. If so, an automated system of apportionment among A and B might be workable. Of course, if only verbatim copying is allowed, you could ensure that the original author gets the commercial benefit.

(In software we do often get hundreds of people contributing to a single program over time. No automatic system for dividing money among



authors could possibly work for software.)

I think the term of copyright should be around ten years after publication for novels, and maybe twenty years for feature films, to provide sufficient incentive. Nowadays, most books are remaindered soon, and out of print in three years. Very few books remain in print for ten years, and those that do have already been big successes. So a ten-year copyright term would be enough to keep the publishing business going and to keep authors getting paid.

Napster: public and private copying.

There's a further dimension to non-commercial copying: is it public or private? Are you just handing out copies to people you meet, or are you making them available to everyone on the Internet? I used to think private non-commercial copying might be enough freedom for some kinds of work, but Napster taught me differently. Napster is so useful that it must be permitted: you can't tolerate giving up the freedom to do something so useful.

So the right place to draw the line for fair use is between commercial and non-commercial, not between public and private. For representative and aesthetic works, a limited system covering just commercial copying is strong enough to provide an incentive for authors. For functional works, where this would be too restrictive, fortunately we have found that people will develop them even without the artificial copyright incentive.

### **The future of music – hype-free?**

The music industry churns out hits in factories; it makes them out of hype. They take the hype and press it into a shape. They succeed by raising a gigantic amount of money to spend on publicity, that gets everybody to want the hype product. But if you removed the industry from

the equation, musicians would get their publicity by fans talking to fans. We would get rid of the distortion of hype, and we would have better music.

The music industry is obsessed with the idea that copying among the public is the enemy of musicians. But musicians, who (except for a rich few) make a living mainly through their concerts anyway, can get better publicity if they are friendly towards their fans. Unless they're obsessed with the unlikely possibility of fabulous wealth, they should say: 'Please copy my music. Play it for other people'. It worked for the Grateful Dead.

We can make the computer network the musician's ally. Imagine a convenient way to send somebody a dollar anonymously through the Internet: some sort of digital cash. Imagine that, every time you read a book or listen to a recording, it displays a box on the side of the screen, which

says "click here to send a dollar to the writer, or to the band". If you like the band or the book you will send that dollar sometimes.

It's only a dollar. It's as much as the musician is likely to get if you buy their CD now – record companies pay only four per cent of their sales totals to artists. But it's much less than you would have to spend to buy the CD now, so little that it's not going to discourage you. You'd probably get into the habit of paying a dollar to some musician a couple of times a week.

I love music. I don't want my music to be manufactured in a factory by industry. I want it to be made by artisans who love what they're doing.

**open:** Don't the people working in music companies to create public identities and brands add value, by making musicians and their music identifiable and helping people to get to know about them?

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**RS:** The phrase ‘adding value’ models life in terms of business, and I don’t think we should do that. I see no reason why brands ought to play a major role in society. It would be no tragedy if they disappeared. A commercial brand is often cynically manipulative. What’s good about that?

**open:** Is there really no intangible value in creating identities – not just in economic terms, but for human processes of recognition, sharing and trust? Isn’t recognition, sharing and trust even more important for Shakespeare or GNU than for Warner Music or Britney Spears?

**RS:** GNU is not a brand. GNU is an operating system. Maybe I’m old-fashioned, but I think of names as serving to name things. They’re only important to the extent that the things they name are important.

When names take on a life of their own, it means people are being foolish. Brands are a way of manipulating people. I sympathise very much with Naomi Klein’s arguments in *No Logo*. Simply by caring about brands less, you disempower them – people caring is what gives them power. There is no brand I can think of that I care about.

### **How the future could look**

**open:** What effect do you think your new system of copyright – shorter time periods, more freedom to modify and share – will have on the industries and people concerned?

**RS:** Well, I think the creators will see more of the proceeds, and it will release a new wave of creativity. With the ‘send-a-dollar’ scheme, you’d be doing as much to support musicians as you are doing now under the copyright system, but it would cost you a lot less. One side benefit would be that we would have better music and better writing – because we’d have less hype.

As for the industries, let’s just look at software. Only about ten per cent of employment in the software industry relates to creating published and licensed software – most of it is custom software or support. So at worst, a total switch  
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to free software would result in a ten per cent drop in employment. But that worst case will not happen. It presumes we find no way to fund the development of free software (in reality we already have), and also ignores the growth in other sectors of the industry that would result from the change.

At the end of the day, keeping specific people employed doing what they are currently doing is not a tremendous social imperative. Particularly when what they are currently doing, like producing CDs, is wasteful. You can distribute music much more efficiently over the Internet.

People can learn a different trade, find a different job. I am for a guaranteed minimum income system which doesn’t stop you from doing productive unpaid work or helping your friends. It’s a lot better than paying people to do wasteful things.

**open:** The popular movement for copyright reform is not broad-based yet. Can your ideas move beyond special interest communities to the ordinary people listening to their CDs and reading their books?

**RS:** There are different motivations for different communities. Programmers want to modify software, and they’re capable of doing so. That’s their motivation. With music, modification is only possible in the context of sampling or techno – I prefer real instruments! But we can share music, via the post-Napster file-sharing networks. That’s the angle for music-listeners.

**open:** Do we need a new, global Berne Convention based on the principles you advocate?

**RS:** We shouldn’t insist on one particular vehicle. People should work to reform copyright wherever there is the possibility. Not enough governments have listened and understood the issues – they’re going in the opposite direction to the right one. So in this age of globalisation, any country that can take a stand and reform their system should do so.

Let’s start right here. The EU Copyright



Directive should not be implemented this year.  
It should be torn up.

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**Richard Stallman** is generally acknowledged as the founder of Free Software. He started the GNU project, launched in 1984, to develop the free operating system GNU—now the basis of all GNU/Linux systems. Currently President of the Free Software Foundation, he speaks around the world on software and copyright issues. The principal author of the GNU Compiler and the GNU Emacs, he previously worked at the MIT Artificial Intelligence Lab.