Giving What You Don't Have
Cornelia Sollfrank In Conversation

Telekommunisten, Dmytri Kleiner

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[00:12]
My name is Dmytri Kleiner. I work with Telekommunisten, which is an art collective based in Berlin that investigates the social relations in bettering communication technologies.

[00:24]
Peer-To-Peer Communism

[00:29]
Cornelia Sollfrank: I would like to start with the theory, which I think is very strong, and which actually informs the practice that you are doing. For me it's like the background where the practice comes from. And I think the most important and well-known book or paper you've written is The Telekommunist Manifesto. *This is something that you authored personally, Dmytri Kleiner. It's not written by the Telekommunisten. And I would like to ask you what the main ideas and the main principles are that you explain, and maybe you come up with a few things, and I have some bullet points here, and then we can discuss.*

[01:14]
The book has two sections. The first section is called "Peer-To-Peer Communism Vs. The Client-Server Capitalist State," and that actually explains – using the history of the Internet as a sort of a basis – it explains the relationship between modes of production on one hand, like capitalism and communism, with network topologies on the other hand, mesh networks and star networks. [01:39] And it explains why the original design of the Internet, which was supposed to be a decentralised system where everybody could communicate with everybody without any kind of mediation, or control or censorship – why that has been replaced with centralised, privatised platforms, from an economic basis.
[02:00] So that the need for capitalist capture of user data, and user interaction, in order to allow investors to recoup profits, is the driving force behind centralisation, and so it explains that.

[02:15]
Copyright Myth

[02:19]
C.S.: The framework of these whole interviews is the relation between cultural production, artistic production in particular, and copyright, as a regulatory mechanism. In one of your presentations, you mention, or you made the assumption or the claim, that the fact that copyright is there to protect, or to foster or enable artistic cultural production

is a myth. Could you please elaborate a bit on that?

[02:57]
Sure. That's the second part of the manifesto. The second part of the manifesto is called "A Contribution to the Critique of Free Culture." And in that title I don't mean to be critiquing the practice of free culture, which I actively support and participate in. [03:13] I am critiquing the theory around free culture, and particularly as it's found in the Creative Commons community. [03:20] And this is one of the myths that you often see in that community: that copyright somehow was created in order to empower artists, but it's gone wrong somehow, at some point it's got wrong. [03:34] It went in the wrong direction and now it needs to be corrected. This is a kind of a plotline, so to speak, in a lot of creative commons oriented community discussion about copyright. [03:46] But actually, of course, the history of copyright is the same as the history of labour and capital and markets in every other field. So just like the kind of Lockean idea of property attributes the product of the worker's labour to the worker, so that the capitalist can appropriate it, so it commodifies the products of labour, copyright was created for exactly the same reasons, at exactly the same time, as part of exactly the same process, in order to create a commodity form of knowledge, so that knowledge could play in markets. [04:21] That's why copyright was invented. That was the social reason why it needed to exist. Because as industrial capitalism was manifesting, they required a way to commodify knowledge work in the same way they commodified other kinds of labour. [04:37] So the artist was only given the authorship of their work in exactly the same way as the factory worker supposedly owns the product of their labour. [04:51] Because the artist doesn't have the means of production, so the artist has to give away that product, and actually legitimizes the appropriation of the product of labour from the labourer, whether it's a cultural labourer or a physical labourer.

[05:07]
(Intellectual) Labour

[05:10]
C.S.: And why do you think that this myth is so persistent? Or, who created it, and for what reasons?

[05:18]
I think that a lot of kind of liberal criticism sort of starts that way. I mean, I haven't really researched this, so that's kind of an open question that you are asking, I don't really have a specific position. [05:30] But my impression is always that people that come at things from a liberal critique, not a critical critique, sort of assume that things were once good and now they're bad. That's kind of a common sort of assumption. [05:42] So instead of looking at the core structural origin of something, they sort of have an assumption that at some point this must have served a useful function or it wouldn't exist. And so therefore it must have been good and now it's bad. [05:57] And also because of the rhetoric, of course, just like the Lockean rhetoric of property: give the ownership of the product of labour to the worker. Ideologically speaking, it's been framed this way since the beginning. [06:14] But of course, everybody understands that in the market system the worker is only given the rights to own their labour if they can sell it.

[06:22]
Author Function

[06:26]
C.S.: Based on this assumption, developed a certain function of the author. Could you please elaborate on this a bit more? The invention of the individual author.

[06:39]
The author – in a certain point of history, in line of the development of, you know, as modern society – capitalist industrial society – began to emerge, so did with it the author. [06:53] Previous to this, the concept of the author was not nearly so engrained. So the author hasn't always existed in this static sense, as unique source of new creativity and new knowledge, creating work *ex nihilo* from their imagination. [07:10] Previous to this there was always a more social understanding of authorship, where authors were in a continuous cultural dialogue with previous authors, contemporary authors, later authors. [07:20] And authors would frequently reuse themes, plots, characters, from other authors. For instance, Goethe's *Faust* is a good example that has been used by authors before and after Goethe, in their own stories. And just like the Homeric traditions of ancient literature. [07:42] Culture was always seen to be much about dialogue, where each generation of authors would contribute to a common creative stock of characters, plots, ideas. But that, of course, is not conducive to making knowledge into a commodity that can be sold in the market. [08:00] So as we got into a market-based society, in order to create this idea of intellectual property, of copyright, creating something that can be sold on the market, the artist and the author had to become individuals all of a sudden. [08:16] Because this kind of iterative social dialogue doesn't work well in a commodity form, because how do you properly buy it and sell it?

[08:28]
Anti-Copyright

[08:33]
C.S.: The Next concept I would like to talk about is the anti-copyright. Could you please explain a little bit what it actually is, and where it comes from?

[08:46]
From the very beginning of copyright many artists and authors rejected it from ideological grounds, right from the beginning. [08:35] Because, of course, what was now plagiarism, what was now illegal, and a violation of intellectual property had been in many cases traditional practices that writers took for granted forever. [09:09] The ability to reuse characters; the ability to take plots, themes and ideas from other authors and reuse them. [09:16] So many artists rejected this idea from the beginning. And this was the idea of copyright. But, of course, because the dominant system that was emerging – the market capitalist system – required the commodity form to make a living, this was always a marginal community. [09:37] So it was radical artists, like the Situationist International, or artists that had strong political beliefs, the American folk musicians like Woody Guthrie – another famous example. [09:47] And all of this people were not only against intellectual property. They were not only against the commodification of cultural work. They were against the commodification of work, period. [09:57] There was a proletarian movement. They were very much against capitalism as well as intellectual

property.

[10:04]
Examples of Anti-Copyright

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C.S.: Could you give also some examples in the artworld for this anti-copyright, or in the cultural world?

[10:15]
DK: Well, you know Lautréamont's famous text, "plagiarism is necessary: it takes a wrong idea and replaces it with the right idea." [10:29] And Lautréamont was a huge influence on a bunch of radical French artists including, most famously, the Situationist International, who published their journal with no copyright, denying copyright. [10:44] I guess that Woody Guthrie has a famous thing that I quote in some article or other, maybe even in the [Telekommunist] Manifesto, I don't remember if it made it in – where he expressly says, he openly supports people performing, copying, modifying his songs. That was a note that he made in a song book of his. [11:11] And many others – the whole practice is associated with communises, from Dada to Neoism. [11:18] Much later, up to the mid-1990s, this was the dominant form. So from the birth of copyright, up to the mid-1990s, the intellectual property was being questioned on the radical fringes of artists. [11:34] For me personally, as an artist, I started to become involved with artists like Negativland and Plunderpalooza – sorry, Plunderpalooza was an act we did; Plunderphonics is an album by John Oswald – the newest movements and the festival of plagiarism. [11:51] This was the area that I personally experienced in the 1990s, but it has a long history going back to Lautréamont, if not earlier.

[12:01]
On the Fringe

[12:05]
C.S.: But you already mentioned the term fringe, so this kind of anti-copyright attitude automatically implied that it could only happen on the fringe, not in the actual cultural world.

[12:15]
Exactly. It is fundamentally incompatible with capitalism, because it denies the value-form of culture. [12:22] And without the commodity form, it can't make a living, it has nothing to sell in the market. Because it's not allowed to sell on the market, it's necessarily marginal. [12:34] So it's necessarily people who support themselves through "non-art" income, by other kinds of work, or the small percentage of artists that can be supported by cultural funding or universities, which is, you know, a relatively small group compared to the proper cultural industries that are supported by copyright licensing. [12:54] That includes the major movie houses, the major record labels, the major publishing houses. Which is, you know, in orders of magnitude, a larger number of artists.

[13:05]
Anti-Copyright Attitude

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C.S.: So what would you say are the two, three, main characteristics of the anti-copyright attitude?

[13:16]
Well, it completely rejects copyright as being legitimate. That's a complete denial of copyright. And usually it's a denial of the existence of a unique author as well. [13:28] So one of the things that is very characteristic is the blurring of the distinction between producer and consumer. [13:37] So that art is considered to be a dialogue, an interactive process where every producer is also a consumer of art. So everybody is an artist in that sense, everybody potentially can be. And it's an ongoing process. [13:52] There's no distinction between producer and consumer. It's just a transient role that one plays in a process.

[13:59] *C.S.: And in that sense it relates back to the earlier ideas of cultural production.*

[14:04] Exactly, to the pre-commodity form of culture.

[14:11]
Copyleft

[14:15]
C.S.: Could you please explain what copyleft is, where it comes from.

[14:20]
Copyleft comes out of the software community, the hacker community. It doesn't come out of artistic practice per se. And it comes out of the need to share software. [14:30] Famously, Richard Stallman and the Free Software Foundation started this project called GNU (GNU's Not Unix), which is the, kind of, very famous and important project. [14:44] And they publish the license called the GPL, which sort of defined the copyleft idea. And copyleft is a very clever kind of a hack, as they say in the hacker community. [14:53] What it does is that it asserts copyright, full copyright, in order to provide a public license, a free license. And it requires that any derivative work also carries the same license. That's what is different about it to anti-copyright. It's that, rather than denying copyright outright, copyleft is a copyright license – it is a copyright – but then the claim is used in order to publicly make the work available to anybody that wants it under very open terms. [15:28] The key requirement, the distinctive requirement, is that any derivative work must also be licenced under the same terms, under the copyleft terms. [15:38] This is what we call viral, in that it perpetuates license. This is very clever, because it takes copyright law, and it uses copyright law to create intellectual property freedom, within a certain context. [15:55] But the difference is, of course, that we are talking about software. And software, economically speaking, from the point of view of the way software developers actually make a living, is very different. [16:11] Because within the productive cycle – the productive cycle can be said to have two phases, sometimes called "department one" and "department two" in Marxian language or in classical political economics. Producer's goods and consumer's goods; or capital's

goods and consumer's goods models. [16:17] The idea is that some goods are produced not for consumers but for producers. And these goods are called capital. So they are goods that are used in production. And because they are used in production, it's not as important for capitalists to make a profit on their circulation because they are input to production. [16:47] They make their profits up stream, by actually using those goods in production, and then creating goods that can be sold to the masses, circulated to the masses. [16:56] And so because culture – art and culture – is normally a "department two" good, consumer's good, it's completely, fundamentally incompatible with capitalism because capitalism requires the capture of profits and the circulation of consumer's goods. But because software is largely a "department one" good, producer's good, it has no incompatibility with capitalism at all. [17:18] In fact, capitalists very much like having their capital costs reduced, because the vast majority of capitalists do not make commercial software – license it. That's only a very small class of capitalists. For the vast majority of capitalists, the availability of free software as an input to their production is a wonderful thing. [17:39] So this creates a sort of a paradox, where under capitalism, only capital can be free. And because software is capital, free software, and the GNU project, the Linux and the vanilla projects exploded and became huge. [17:39] So, unlike the marginal-by-necessity anti-copyright, free software became a mass movement, that has a billion dollar industry, that has conferences all over the world that are attended by tens of thousands of people. And everybody is for it. It's this really great big thing. [18:26] So it's been rather different than anti-copyright in term of its place in society. It's become very prominent, very successful. But, unfortunately – and I guess this is where we have to go next – the reason why it is successful is because software is a producer's good, not a consumer's good.

[18:38]
Copyleft Criticism

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C.S.: So what is your basic criticism of copyleft?

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I have no criticism of copyleft, except for the fact that some people think that the model can be expanded into culture. It can't be, and that's the problem. It's that a lot people from the arts community then kind of came back to this original idea of questioning copyright through free software. [19:12] So they maybe had some relationship with the original anti-copyright tradition, or sometimes not at all. They are fresh out of design school, and they never had any relationship with the radical tradition of anti-copyright. And they encounter free software – they are like, yeah, that's great. [19:29] And the spirit of sharing and cooperation inspires them. And they think that the model can be taken from free software and applied to art and artists as well, just like that. [19:41] But of course, there is a problem, because in a capitalist society there has to be some economic sustainability behind the practice, and because free culture modelled out of the GPL can't work, because the artists can't make a living that way. [20:02] While capital will fund free software, because they need free software – it's a producer's good, it's input to their production – capital has no need for free art. So they have also no need to finance free art. [20:15] So if they can't be financed by capital, that automatically gives them a very marginal role in today's society. [20:19] Because that means that it has to be funded by something other than capital. And those means are – back to the anti-

copyright model – those are either non-art income, meaning you do some other kind of work to self-finance your artistic production, or the relatively small amount of public cultural financing that is available – or now we have new things, like crowd funding – all these kinds of things that create some opportunities. But still marginally small compared to the size of the capitalist economy. [20:52] So the only criticism of copyleft is that it is inapplicable to cultural production.

[21:00]
Copy-left and cultural production

[21:04]
C.S.: Why this principle of free software production, GPL principles, cannot be applied to cultural production? Just again, to really point this out.

[21:20]
The difference is really the difference between “department one” goods, producer's goods, and “department two” goods, consumer’s goods. [21:27] It’s that capitalists, which obviously control the vast majority of investment in this economy – so the vast majority of money that is spent to allow people to realise projects of any kind. The source of this money is capital investment. [21:42] And capital is happy to invest in producer’s goods, even if they are free. Because they need these goods. So they have no requirement to seek these goods. [21:53] If you are running a company like Amazon, you are not making any money selling Linux, you are making money selling web services, books and other kinds of derivative products. You need free software to run your data centre, to run your computer. [22:08] So the cost of software to you is a cost, and so you're happy to have free software and support it. Because it makes a lot more sense for you to contribute to some project that it’s also used by five other companies. [22:21] And in the end all of you have this tool that you can run on your computer, and run your business with, than actually either buying a license from some company, which can be expensive, inflexible, and you can't control it, and if it doesn't work the way you want, you cannot change it. [22:36] So free software has a great utility for producers. That's why it's a capital good, a producer's good, a "department one" good. [22:45] But art and culture do not have the same economic role. Capital is not interested in developing free culture and free art. They don't need it, they don't do anything with it. And the capitalist that produces art and culture requires it to have a commodity form, which is what copyright is. [23:00] So they require a form that they can sell on the market, which requires it to have the exclusive, non-reproducible commodity form – that copyright was developed in order to commodify culture. [23:14] So that is why the copyleft tradition won't work for free culture – because even though free culture and anti-copyright predates it, it predates it as a radical fringe. And the radical fringe isn't supported by capital. It's supported, as we said, by outside income, non-art income, and other kind of things like small cultural funds.

[23:38]
Creative Commons

[23:42]
C.S.: In the last ten years we have seen new business models that very much depend

on free content as well. Could you please elaborate on this a bit?

[23:56]
Well, that's the thing. Now we have the kind of Web 2.0/Facebook world. [24:00] The entire copyright law – the so-called "good copyright" that protected artists – was all based on the idea of the mechanical copy. And the mechanical copy made a lot of sense in the printing press era where, if you had some intellectual property, you could license it through mechanical copies. So every time it was copied, somebody owed you a royalty. Very simple. [24:26] But in a Web 2.0 world, where we have YouTube, Facebook, Twitter and things like that, this doesn't really work very well. Because if you post something online and then you need to get paid a royalty every time it gets copied (and it gets copied millions of times), this becomes very impractical. [24:44] And so this is where the Creative Commons really comes in. Because the Creative Commons comes in just exactly at this time – as the Internet is kind of bursting out of its original military and NGO roots, and really hitting the general public. At the same time free software is something that is becoming better known, and inspiring more people – so the ideas of questioning copyright are becoming more prominent. [25:16] So Creative Commons seizes on this kind of principles approach that anti-copyright and copyleft take. And again, one of the single most important things about anti-copyright and copyleft is that in both cases the freedom that they are talking about – the free culture that *they* represent – is the freedom of the consumer to become the producer. It's the denial of the distinction between consumer and producer. [25:41] So even though the Creative Commons has a lot of different licenses, including some that are GPL compatible – they're approved for free cultural work, or whatever it's called – there is one license in particular that makes up the vast majority of the works in the Creative Commons, one license in particular which is like the signature license of the Creative Commons – it's the non-commercial license. And this is obviously... The utility of that is very clear because, as we said, artists can't make a living in a copyleft sense. [26:18] In order for artists to make a living in the capitalist system, they have to be able to negotiate non-free rights with their publishers. And if they can't do that, they simply can't make a living. At least, not in the mainstream community. There is a certain small place for artists to make a living in the alternative and fringe elements of the artworld. [26:42] But if you are talking about making a movie, a novel, a record, then you at some point are going to need to negotiate a contract with the publisher. Which means, you're going to have to be able negotiate non-free terms. [27:00] So what non-commercial [licensing] does, is that it allows people to share your stuff, making you more famous, getting more people to know you – building its value, so to speak. But they can't actually do anything commercial with it. And if they want to do anything commercial with it, they have to come back to you and they have to negotiate a non-free license. [27:19] So this is very practical, because it solves a lot of problems for artists that want to make work available online in order to get better known, but still want to eventually, at some point in the future, negotiate non-free terms with a publishing company. [27:34] But while it's very practical, it fundamentally violates the idea that copyleft and anti-copyright set out to challenge – and this is distinction between the producer and the consumer. Because of this, the consumer cannot become the producer. And that is the criticism of the Creative Commons. [27:52] That's why I want to talk about this thing, I often say, a tragedy in three parts. The first part is a tragedy because it has to remain fringe, because of its complete incompatibility with the dominant capitalism. [28:04] The second part, copyleft, is a tragedy because while it works great for software, it can't and it won't work for art. [28:10] And the third part is a tragedy because it actually undermines the whole idea and brings the author

back to the surface, back from the dead. But the author kind of remerges as a sort of useful idiot, because the "some rights reserved" are basically the rights to sell your intellectual property to the publisher in exactly the same way as the early industrial factory worker would have sold their labour to the factory.

[28:36] *C.S.: And that creates by no means a commons.*

[28:41] It by no means creative a commons, right. Because a primary function of a commons is that it would be available for use by others producers, and the Creative Commons isn't because you don't have any right to create your own work to make a living from the works in the commons – because of the non-commercial clause that covers a large percentage of the works there.

[29:09]
Peer Production License

[29:13]
C.S.: But you were thinking of an alternative. What is the alternative?

[29:19]
There is no easy alternative. The fact is that, so long as we have a cultural industry that is dominated by market capitalism, then the majority of artists working within it will have to work in that form. We can't arbitrarily, as artists, simply pretend that the industry as it is doesn't exist. [29:41] But at the same time we can hope that alternatives will develop – that alternative ways of producing and sharing cultural works will develop. So that the copyfarleft license... [29:52] I describe the Creative Commons as copyjustright. It's not copyright, it's copyjustright – you can tune it, you can tailor it to your specific interests or needs. But it is still copyright, just a more fine-tuneable copyright that is better for a Web 2.0 distribution model. [30:12] The alternative is what I call copyfarleft, which also starts off with the Creative Commons non-commercial model for the simple reason that, as we discussed, if you are an actually existing artist in the actually existing cultural industries of today, you are going to have to make a living, on the most part, by selling non-free works to publishers, non-free licenses to publishers. That's simply the way the industry works. [30:37] But in order not to close the door on another industry developing – a different kind of industry developing – after denying commercial works blankly (so it has a non-commercial clause), then it expressly allows commercial usage by non-capitalist organisations, independent cooperatives, non-profits – organisations that are not structured around investment capital and wage labour, and so forth; that are not for-profit organisations that are enriching private individuals and appropriating value from workers. [31:15] So this allows you to succeed, at least potentially succeed as a commercial artist in the commercial world as it is right now. But at the same time it doesn't close the door on another kind of community from developing, other kind of industry from developing. [31:35] And we have to understand that we are not going to be able to get rid of the cultural industries as they exist today, until we have another set of institutions that can play those same roles. They're not going to magically vanish, and be magically replaced. [31:52] We have to, at the same time as those exist, build up new kind of institutions. We have to think of new ways to produce and share cultural works. And only when we've done that, will the cultural institutions as they are today potentially go away. [32:09] So the copyfarleft license tries to bridge that gap by allowing the commons to grow, but at

the same time allowing the commons producers to make a living as they normally would within the regular cultural industry. [32:25] Some good examples where you can see something like this – might be clear – are some of the famous novelists like Wu Ming or Cory Doctorow, people that have done very well by publishing their works under Creative Commons non-commercial licenses. [32:42] Wu Ming's books, which are published, I believe, by Random House or some big publisher, are available under a Creative Commons non-commercial license. So if you want to download them for personal use, you can. But if you are Random House, and you want to publish them and put them on bookstores, and manufacture them in huge supply, you have to negotiate non-free terms with Wu Ming. And this allows Wu Ming to make a living by licensing their work to Random House. [33:10] But while it does do that, what it doesn't do is allow that book to be manufactured any other way. So that means that this capitalist form of production becomes the only form that you can commercially produce this book – except for independents, just for their own personal use. [33:25] Whereas if their book was instead under a copyfarleft license, what we call the "peer production" licence, then not only could they continue to work as they do, but also potentially their book could be made available through other means as well. Like, independent workers cooperatives could start manufacturing it, selling it and distributing it locally in their own areas, and make a commercial living out of it. And then perhaps if those were to actually succeed, then they could grow and start to provide some of the functions that capitalist institutions do now.

[34:00]
Miscommunication Technology

[34:05]
The artworks that we do are more related to the topologies side of the theory – the relationship between network topologies, communication topologies, and the social relations embedded in communication systems with the political economy and economic ideas, and people's relationships to each other. [34:24] The *Miscommunication Technologies* series has been going on for a quite a while now, I guess since 2006 or so. Most of the works were pretty obscure, but the more recent works are getting more attention and better known. And I guess that the ones that we're talking about and exhibiting the most are deadSwap, Thimbl and R15N, and these all attempt to explore some of the ideas.

[35:01]
deadSwap

[35:06]
deadSwap is a file sharing system. It's playing on the kind of circumventionist technologies that are coming out of the file sharing community, and this idea that technology can make us be able to evade the legal and economic structures. So deadSwap wants to question this by creating a very extreme parody of what it would actually mean to really be private. [35:40] It is a file sharing system, that in order to be private it only exists on one USB stick. And this USB stick is hidden in public space, and its user send text messages to an anonymous SMS gateway in order to tell other users where they've hidden the stick. When you have the stick you can upload and download files to it – it's a file sharing system. It has a Wiki and file space, essentially. Then you

hide the stick somewhere, and you text the system and it forwards your message to the next person that is waiting to share data. And this continues like that, so then that person can share data on it, they hide it somewhere and send an SMS to the system which then it gets forwarded to the next person. [36:28] This work serves a few different functions at once. First, it starts to get people to understand networks and all the basic components. The participants in the artwork actually play a network node – you are passing on information as if you are part of a network. So this gets people to start thinking about how networks work, because they are playing the network. [36:52] But on the other hand, it also tries to get cross the idea that the behaviour of the user is much important than the technology, when it comes to security and privacy. So how difficult it is – the system is very private – how difficult it is to actually use it, not lose the stick, not to get discovered. [37:11] It's actually very difficult to actually use. Even though it seems so simple, normally people lose the USB key within like an hour or two of starting the system. It doesn't... All the secret agent manuals that say, be a secret agent spy – isn't easy, and it tries to get this across, that actually it's not nearly as easy to evade the economic and political dimensions of our society as it should be. [37:45] Maybe it's better that we politically fight to avoid having to share information only by hiding USB sticks in public space, sticking around and acting like spies.

[37:57]
Thimbl

[38:02]
Thimbl is another work, and it is completely online. This work in some ways has become a signature work for us, even though it doesn't really have any physical presence. It's a purely conceptual work. [38:15] One of the arguments that the Manifesto makes is that the Internet was a fully distributed social media platform – that's what the Internet was, and then it was replaced, because of capitalism and because of the economic logic of the market, with centralised communication platforms like Twitter and Facebook. [38:40] And despite that, within the free software community and the hacker community, there's the opposite myth, just like the copyright myth. There's this idea that we are moving towards decentralised software. [38:54] You see people like Eben Moglen making this point a lot, when he says, now we have Facebook, but because of FreedomBox, Diaspora and a laundry list of other projects, we're eventually going to reach a decentralised software. [39:07] But this makes two assumptions that are incorrect. The first is that we are starting with centralised media and we are going to decentralised media, which actually is incorrect. We started with a decentralised social media platform and we moved to a centralised one. [39:40] And the second thing that is incorrect is that we can move from a centralised platform to a decentralised platform if we just create the right technology, so the problem is technological. [39:34] With Thimbl we wanted to make the point that that wasn't true, that the problem was actually political. The technological problem is trivial. The computer sciences have been around forever. The problem is political. [39:43] The problem is that these systems will not be financed by capital, because capital requires profit in order to sustain itself. In order to capture profit it needs to have control of user interaction and user's data. [39:57] To illustrate this, we created a micro-blogging platform like Twitter, but using a protocol of the 1970s called Finger. So we've used the protocol that has been around since the 1970s and made a micro-blogging platform out of it – fully, totally distributed micro-blogging platform. And then promoted it as if it was a real thing, with videos and website, and stuff like that. But

of course, there is no way to sign up for it, because it's just a concept. [40:22] And then there are some scripts that other people wrote that actually made it to a certain degree real. For us it was just a concept, but then people actually took it and made working implementations of it, and there are several working implementations of Thimbl. [40:38] But the point remains that the problem is not technical, the problem is political. So we came up with this idea of the economic fiction, or the social fiction. [40:47] Because in science fiction you often have situations where something that eventually became a real technology was originally introduced in a fictional context as a science fiction. [40:59] The reason it's fictional is because science at the time was not able to create the thing, but as science transcends its limitations, what was once fictional technology became real technology. So we have this idea of a social or economic fiction. [41:15] Thimbl is not science fiction. Technologically speaking it demonstrably works – it's a demonstrably working concept. The problem is economic. [41:23] For Thimbl to become a reality, society has to transcend its economic limitations – it's social and economic limitations in order to find ways to create communication systems that are not simply funded by the capture of user data and information, which Thimbl can't do because it is a distributive system. You can't control the users, you can't know who is using it or what they are doing, because it's fully distributed.

[41:47]
R15N

[41:52]
The R15N has elements of both of those things. We wanted to create a system that was basically drawn a little from deadSwap, but I wanted to take out the secret agent element of it. Because I was really... [42:08] The first place it was commissioned to be in was actually in Tel Aviv, in Israel, the [Israeli] Center for Digital Art. And this kind of spy aesthetic that deadSwap had, I didn't think it would be an appropriate aesthetic in that context. [42:22] The idea that of trying to convince young people in a poor area in Tel Aviv to act like spies and hide USB sticks in public space didn't seem like a good idea. [42:34] So I wanted to go the other way, and I wanted to really emphasise the collaboration, and create a kind of system that is pretty much totally impossible to use, but only if you really cooperate you can make it work. [42:45] So I took another old approach called the telephone tree. I don't know if you remember telephone trees. Telephone trees existed for years before the Internet, when schools and army reserves needed to be quickly dispatched, and it worked with a very simple tree topology. [43:01] You had a few people that were the top nodes, that then called the list of two or three people, that then called the list of two or three people, that then called the list of two or three people... And the message can be sent through the community very rapidly through a telephone tree. [43:14] It is often used in Canada for announcing snow days at school, for instance. If the school was closed, they would call three parents, who would each call three parents, who would each call three parents, and so forth. So that all the parents knew that the school was closed. That's one aspect. [43:30] Another aspect of it is that telephones, especially mobile phones, are really advertised as a very freedom enabling kind of a thing. Things that you can go anywhere... [43:41] I don't know if you remember some of the early telephones ads where there are always businessmen on the beach. I remember this one where this woman's daughter wants to make an appointment with her because she only has time for her colleague appointments, and so it's this whole thing about spending more time with her daughter –

so she takes her daughter to the beach, which she is able to do because she can still conduct business on her mobile phone. So it's this freedom kind of a thing. [44:04] But in areas like the Jessi Cohen area in Tel Aviv where we were working, and other areas where the project has been exhibited, like Johannesburg – other places like that, the telephone has a very different role, because it's free to receive phone calls, but it costs much to make phone calls, in most parts of the world, especially in these poor areas. [44:25] So the telephone is a very asymmetric power relationship based on your availability of credit. So rather than being a freedom enabling thing, it's a control technology. So young people and poor people that carry them can't actually make any calls, they can't call anybody. They can only receive calls. [44:40] So it's used as a tedder, a control system from their parents, their teachers, their employers, so they can know where they are at any time and say, hey why aren't you at work, or where are you, what are you doing. It's actually a control technology. [44:54] We wanted to invert that too. So the way the phone tree system work is that, when you have a message you initiate a phone call, so you initiate a new tree, the system phones you... [45:05] And you can initiate a new tree in the modern versions by pushing a button in the gallery. There's a physical button in the gallery, you push the button, there's a phone beside it, it rings a random person, you tell them your message, and then it creates an ad hoc telephone tree. It takes all the subscribers and arranges them in a tree, just like in the old telephone tree, and each person calls each person, until your message, in theory, gets through the community. [45:28] But of course in reality nobody answers their phones, you get voicemail, and then you get voicemail talking to voicemail. Of course, voice from the Internet is fake to begin with, so calls fail. So it actually becomes this really frenetic system where people actually don’t know what's going on, and the message is constantly lost. [45:44] And of course, you have all of these missed phone calls, this high pressure of the always-on world. You are always getting these phone calls, and you're missing phone calls, and actually nobody ever knows what the message is. So it actually creates this kind of mass confusion. [46:00] This once again demonstrates that the users – what we call jokingly in the R15N literature, the diligence of the users, is so much required for these systems to work. Technologically, the system is actually more or less hindered. [46:21] But they also serve not only to make that message, which is a more general message – but also, like in the other ones, in R15N you are a node in the network. So when you don’t answer a call you know that a message is dropped. [46:36] So you can image how volatile information is in networks. When you pass your information through a third party, you realise that they can drop it, they can change it, they can introduce their own information. [46:50] And that is true in R15N, but is also true in Facebook, in Twitter, and in any time you send messages through some third party. That is one of the messages that is core to the series.