



Table of Contents

Anarchism and Platform Cooperatism.....	2
Introduction to the Introduction.....	2
Thank You.....	2
Let's Go.....	2
Definition.....	3
Examples.....	4
Platforms.....	4
What is Fairmondo?.....	4
The Cooperative.....	5
SWOT Analysis.....	7
Strengths.....	7
Weaknesses.....	7
Opportunities.....	8
Threats.....	9
What's Anarchy Got to Do With It?.....	10
APIs, Protocols and Standardisation.....	11
Some Conclusions.....	13



Anarchism and Platform Cooperatism

Introduction to the Introduction

There's a lot of footnotes in here, mainly references to the web. However, the obsessive footnoting is nothing to do with 'looking academic', it's more to try and provide a sourcebook and starting point to investigate some of the ideas and techniques mentioned in this talk. I'm aware that there's a fair amount of technical talk, so I hope some of the links will unpack some of the 'worst of it'. This may not be the last iteration of the document either.

I've made additions and corrections since the presentation on the 25th November 2017. The corrections are minor factual ones and the additions are within the SWOT analysis, in both opportunities and threats.

Thank You

Quite a few people have commented now, some not wanting to be named. So, currently, thank you to everyone and if you wish to be acknowledged specifically, tell me and I'll do that in the next iteration of the text.

Let's Go

There are probably a few major bits in this talk, so let's signpost:

- Platforms, some technical definitions, examples and explanations
- Cooperatives in the context of platforms
- SWOT analysis, strengths, weaknesses, opportunities and threats
- How do platform coops 'fit' into anarchism, into what kind of anarchism?

There's quite a lot of technical stuff in the talk, so we can have questions at any time. With the current length, there should be solid discussion time afterwards. A great deal of this talk stems from or is inspired by the Goldsmith's conference on Platform Cooperatives earlier this year ¹.

The additional bit is the last one, a bit of speculation about the relation to anarchist thought and praxis. These are my own views, of course, and do not engage anyone else, for I am (at times) a good individualist anarchist, when I deliver this, but by the end of talk I may become a Bookchinite confederalist as opposed to a federalist anarchist²

OK, as Joe Cabot did not say to his colour-coded partners in crime 'Ad labōrem eāmus!'

1 <https://2017.open.coop/programme/>

2 <https://libcom.org/forums/theory/are-anarchists-advocates-federalism-or-confederalism-31072013>



Definition

Let's start with a definition of the 'whole thing' provided by the NY New School³ who are the (academic) vanguard of this concept:

Platform cooperativism is a growing international movement that builds a fairer future of work. It's about social justice and the bottom line. Rooted in democratic ownership, co-op members, technologists, unionists, and freelancers create a concrete near-future alternative to the extractive sharing economy.

Making good on the early promise of the Web to decentralize the power of apps, protocols, and websites, platform co-ops allow households with low and volatile income to benefit from the shift of labor markets to the Internet. Steering clear of the belief in one-click fixes of social problems, the model is poised to vitalize people-centered innovation by joining the rich heritage and values of co-ops with emerging Internet technologies⁴.

Last, quote from a recent email on the platform coop discuss email list⁵: *The concept of the 'platform cooperative' was born out of of the backlash against the tech giants, in particular FB, Amazon, Uber, Airbnb who, under the guise of the so-called sharing economy, are in fact practising highly extractive hyper-capitalism.*

So there are two bits, a technology bit and a societal bit. As we'll see in a while, the technology bit is also subdivided. Probably the central person in the New School is Trebor Scholz⁶.

Let's take another definition from Wikipedia:

*A **platform cooperative**, or platform co-op, is a cooperatively-owned, democratically-governed business that uses a protocol, website or mobile app to facilitate the sale of goods and services. Platform cooperatives are an alternative to **venture capital** funded platforms insofar as they are owned and governed by those who depend on them most—workers, users, and other relevant stakeholders. Proponents of platform cooperativism claim that, by ensuring the financial and social value of a platform circulate among these participants, platform cooperatives will bring about a more equitable and fair digitally-mediated economy in contrast with the extractive models of corporate intermediaries. Platform cooperatives differ from traditional cooperatives not only due to their use of digital technologies, but also by their contribution to the commons for the purpose of fostering an equitable social and economic landscape.*

*Platform cooperativism draws upon other (**earlier but continuing!**) attempts at digital disintermediation, including the peer-to-peer production movement, led by Michel Bauwens⁷ and the P2P Foundation⁸, which advocates for “new kinds of democratic and economic participation that rest “upon the free participation of equal partners, engaged in the production of common resources,” as well as the radically-distributed, non-market mechanisms of networked peer-production promoted by Yochai Benkler. Marjorie Kelly's book *Owning Our Future* contributed the distinction between democratic and extractive ownership design to this discussion.*

3 <https://www.newschool.edu/>

4 <https://platform.coop/about>

5 <https://lists.riseup.net/www/info/platformcoop-discuss>

6 <https://www.newschool.edu/lang/faculty/Trebor-Scholz/>

7 <https://p2pfoundation.net/the-p2p-foundation/who-we-are>

8 <https://p2pfoundation.net/>



Examples

Let's finish this bit with some quick examples. Taken directly from <http://platformcoop.net/about>:

In 2005, cab drivers for [Cotabo](#)⁹ in Bologna joined a consortium of taxi cooperatives that now unites some 5000 cabbies all over Italy. With their app, [TaxiClick](#), clients can order a car knowing not only that the price is right but also that drivers are treated fairly.

In Queens, New York, an app connects a childcare cooperative with clients through the [Coopify](#) app and platform co-ops like [Fairmondo](#), [Stocksy](#) and [Loconomics](#) are taking the co-op model to the Internet. This is what platform cooperativism is about.

Platforms

This area is a little more complex than it appears. Later on I'd like to talk about 'full stack', protocols and possible technical threats to development. But for the moment, let's deal with the obvious and the visible.

My example is Fairmondo, since I know some of the people behind it and have worked a little with them. This is the description from Fairmondo UK¹⁰, so far, to my knowledge, in development as a multistakeholder co-op:

What is Fairmondo?

Fairmondo began life in Germany in 2012 as a cooperatively owned marketplace that would promote fair goods and services and “responsible consumption”. It is owned and run democratically by its members.

Fairmondo UK is a next step in building a global network of cooperative platforms for trading goods and services. The UK platform is currently (2016 Novmber) being built as a multistakeholder cooperative (see acknowledgements for this update).

It could do with technical help as well! So, please contact, if interested.

So behind Fairmondo is a fairly complex web application that includes product descriptions, subscribers, ways to pay, newsletters etc. It is very similar to a commercial web shop or to ebay/amazon for example. However in the case of Fairmondo, the software is Open Source¹¹ and available on github¹² <https://github.com/fairmondo/fairmondo> :

9 <http://www.cotabo.it/servizi/taxi-click/?lang=en>

10 <https://fairmondo.uk/>

11 https://en.wikipedia.org/wiki/Open-source_software

12 <https://github.com/>



So, a little diversion on Open Source, that we may need later. From Wikipedia:

Open-source software (OSS) is [computer software](#) with its [source code](#) made available with a [license](#) in which the [copyright](#) holder provides the rights to study, change, and distribute the software to anyone and for any purpose. Open-source software may be developed in a [collaborative public manner](#). According to scientists who studied it, open-source software is a prominent example of [open collaboration](#). The term is often written without a hyphen as "open source software".

For the TL:DR version of this, *you can go and get Fairmondo capable software from github, put it on a computer, change it, run it etc.* The licences for this kind of software vary¹³, but often, if you make changes and republish you will need to republish the source so that others can make further changes too. See also, the distinction of *free as in speech* and *free as in beer*. There are quite a few different licences from the very permissive (for example allowing embedding of the software, commercial use etc.) to (what I'd call) social restrictive. There are also Creative Commons¹⁴ licences for words and pictures, why, this document uses one!

The Cooperative

This, of course, is the other bit. For example, there's nothing to prevent me using Fairmondo software to run a for-profit, conventional business, the two bits are (what we call in the business) orthogonal, they are (usually) independent.

There's actually a whole deeper discussion here about connections (or not) made in the software design and set of possible uses. Software isn't neutral, but that's another huge talk. One simple example, we might want ethical supply chain audit trails in 'our' software, for Walmart/ASDA that probably wouldn't be on the list or high on the list. There's also no reason not to buy commercial software and use it within a platform cooperative, but, because of the ethos, that's likely to be a less favoured solution, since that is funds already 'leaking' into the enemy sector.

There's a list of cooperative types here¹⁵ to simplify, we could say worker coops, consumer coops, producer coops, financial (credit unions, for example) and hybrids. I've separated worker and producer, somewhat artificially, but can be thought of as the separation of 'goods' and 'services', these often require a different approach. Producer coops, traditionally have been farms, fisheries etc. but it may be time to broaden this.

So what kind of coops can 'work' as platform coops? Are there coops that will not benefit from this kind of approach? To take something obvious, heavy engineering industry would obviously benefit from computing and informatics support, but any online part might not make a huge difference in its business model. It might be supplied by some kind of smaller producer coop though. This paragraph is speculation and hopefully part of discussion towards the end of the session.

13 <https://opensource.org/licenses>

14 <https://creativecommons.org/licenses/>

15 http://cultivate.coop/wiki/Types_of_Cooperatives



One thing that came up in discussion is 'does a platform coop have a single binary definition'. Can a co-op be a 'platform supported coop'? Yes, certainly, perhaps most of the technology is internal to the coop working. Conclusion, either way, as long as it's a healthy co-op, it's all good, but see the API discussion section towards the end of the document.

What kind of cooperative is Fairmondo in operation? It is a multistakeholder cooperative in that the members access the platform to sell things, currently (and as far as I know) only goods in the same way as eBay. The buyers are other stakeholders and the 'general public' with no necessary affiliation to Fairmondo. Of course, a seller on Fairmondo can also be a customer and this circular sort of activity is beneficial.

I think the Uber-style operations are clearly worker cooperatives, there are no physical 'goods' produced but the service of 'moving people' around is offered to the general public who are not affiliated to, for example, Cotabo. Note here, also, that the public platform is the 'app' (although I hate those, another long talk for another day)

Here let's take a small diversion to ask the question "what types of platform cooperatives do we 'need'?". This bit will reappear in the discussion of the possibly relationship to anarchist thought too. The simplest answer is 'think of an internet for-profit' and reproduce it. There are a number of 'ifs' and 'buts' that also deserve discussion here too. Secondly, this is usually an area for derision and 'disappointment' especially from the status-quo, for example 'oh look, those hippies can't think up anything of their own', but this is almost certainly a partially mistaken analysis.

Incidentally, this is a problem in the 'core' in the software that is usually used as platforms and underlying mechanisms too. We could make this a huge diversion by discussing the genesis of some of the tools low down in the internet, ARPA which become DARPA¹⁶ etc. etc. but that's for another day.

Incidentally, at time of writing, some feeling that it may be 'better' to classify coops by membership and type rather than activity, "As a couple of people said in NYC last weekend, it may be better to describe a "platform co-op" in terms of its membership (producer, consumer, worker, multistakeholder etc.) than its platform."

16 <https://en.wikipedia.org/wiki/DARPA>



SWOT Analysis

SWOT¹⁷ is a mainstream management analysis acronym and tool, standing for Strengths, Weaknesses, Opportunities and Threats. There are one or two recent and probably quite valid criticisms of the method, some that turn up at the end of the Wikipedia article. However, I'm not proposing to do anything deep here, just to use the (rather useful) headings as part of the general discussion. Also, clearly, anything I put under a heading *is not* the result of months of exhaustive research. Using discussion material from the first presentation of this talk on the 25th November 2017, I have altered and (hopefully) improved this bit.

Strengths

- All strengths inherited from cooperative structures, solidarity, democracy etc.
- Benefits from scale and access provided by technology and networks, cheap amplification
- Low cost startups, software often free and web hosting low cost, simplicity of LAMP¹⁸
- As with Uber etc. models that can be identified and 'copied' by socially-oriented initiatives (aware that this is controversial, can note this for discussion)
- Web and internet based coops appeal to younger people, hence continuity and resilience

Weaknesses

- Technology not a solution to 'everything' easy to get seduced by technological answers to things that are societal questions. Also relationships at human scale and contact, some possible answers later on in the discussion about scale and federation.
- Possible extra barrier to face to face social relationships. Actually this is an extra reason to deal in human size and municipal scale, see the later part of the talk.
- Will not suit some cooperative enterprises, there may be something to be done in 'support'
- Daily Mail Anarchy! Everyone of these is probably slightly different, that's anarchy, both good and bad. But, for example, could turn into a barrier for use for older, less tech savvy people. See the discussion on federation and APIs, later on.
- Scale and funding. Actually maybe this should be under advantages too. Nicholas Albery¹⁹ wrote, in the Encyclopedia of Social Inventions about a 'law of scale', big organisations and small organisations. So thinking that many platform cooperatives are underfunded and small scale is not necessarily a bad thing, especially within a federated model. In principle and somewhat optimistically, this will lead to subsidiarity²⁰ in the total (dis)organisation.
- Price point. How to make people move from cheaper for-profits to (participants are more equitably rewarded) more expensive co-ops. Part of answer may be multi-stakeholder and conventional loyalty mechanisms, so 'consumers' become members and loyal supporters.

17 https://en.wikipedia.org/wiki/SWOT_analysis

18 [https://en.wikipedia.org/wiki/LAMP_\(software_bundle\)](https://en.wikipedia.org/wiki/LAMP_(software_bundle))

19 https://en.wikipedia.org/wiki/Nicholas_Albery

20 <https://en.wikipedia.org/wiki/Subsidiarity>



Opportunities

- In general disintermediation, that's what on-line is best at. For example, farmer's markets that can process orders and deliver them on 'market day'.
- Disruption, as with the conventional technology organisations. Provision, as with Occupy Sandy of 'unusual' and local infrastructural services that align well with citizen autonomy. Open source blog software WordPress²¹ was used, but also Facebook and Amazon which are (obviously) commercial, so opportunities here, for our version of 'import substitution'²².
- Open academic publishing. This is currently a conundrum because, reviewing, referring, collating and publishing requires resources but most of the current 'industry' (Elsevier, Springer etc.) is abusively extractive. This may be one way towards a virtuous compromise. Also freeing up, producing and disseminating 'knowledge' also contributes to autonomy.
- Ecological benefits, such as waste reduction, see above, the produce that comes to town is pre-ordered rather than supply-led.
- Ethical concordance, solid supply chain audits for example. Big subject and technology can probably help here too (reluctant to say 'blockchain' because of, for one thing, proof of work atrocities).
- Equitable transactions (though this could mean more expensive food) since the producers are not being constantly squeezed by the larger supermarkets
- Following the idea of equitable transactions, better resilience for the producers since stuff is actually at something near a natural market price.
- Common APIs²³, see the last part of this talk
- Possible local infrastructures, see threats too. For example mesh networks in places where commercial networks decide are 'unprofitable'.²⁴

21 <https://wordpress.org/>

22 https://en.wikipedia.org/wiki/Import_substitution_industrialization

23 https://en.wikipedia.org/wiki/Application_programming_interface

24 https://motherboard.vice.com/en_us/article/kz3xyz/detroit-mesh-network



Threats

I moved demutualisation from 'weaknesses' to 'threats' in the second draft of this. However it's a threat to any coop or mutual organisation.

- Demutualisation²⁵ in one form or another. One of the main reasons, for example parts of the The Coop Group (in the UK) including the bank, is bad governance/management leaving the coop in a vulnerable position. This is a problem of coops, not simply platform coops. One solution, as with the conventional economy, may be some kind of 'poison pill' in the aims of association.
- Regulatory capture by bigger organisations. For example, 'extra' onerous food safety regulations that don't actually improve safety but do increase costs etc. for smaller organisations
- Network neutrality, a way of squeezing the small off the web by unequal treatment of web presences. Attacks on network neutrality (see Portugal currently²⁶) will disfavour small suppliers.
- Stack dependence. This is a technical thing that only applies to platform coops, bear with me a moment. The platform, for example, the software that expresses and runs Fairmondo is the top part of the stack. Underneath, one can find a technical data transfer protocols and finally physical wire or wireless towers etc. These all belong, with a few honourable exceptions (my broadband is supplied by the telephone coop) to the world of the conventional economy. For example, consumer broadband is supplied by (say) Virgin Media and BT Openreach (or whatever they're called now) deals with most of the wires. So the underneath can be yanked out by vested interests.
- Search engine manipulation. This already happens to a large extent. Google favours its own advertisers and large corporates over 'people like us'. Also, large corporates usually have more resources to game the search algorithms, see SEO²⁷.
- Planning and information asymmetry. This will sound a tad paranoid, but. When you (we, I) use *gmail*, *hotmail*, *Facebook* and public forums for planning, *we are sharing with the corporates*. I'm not sure how much this matters at the moment, but *it would matter if co-op part of the economy became a larger threat to the corporate part*. See also the 'stack dependence' entry above.

I'm sure there are others? To be discussed and incorporated in a further version of this talk.

25 <https://en.wikipedia.org/wiki/Demutualization>

26 <http://www.iflscience.com/technology/country-net-neutrality/>

27 https://en.wikipedia.org/wiki/Search_engine_optimization



What's Anarchy Got to Do With It?

How does any of this fit into an anarchist project or narrative? Are there differences of 'fit' for anarchy between platform cooperatives and 'normal cooperatives'?

Here, we turn to the Institute for Social Ecology²⁸, an organisation that can be (this is my take, by the way) classed as early Bookchinite. The essay there starts fairly ominously, for any project of marriage, (what my granny used to call) a 'walking out' or even a mild flirtation:

Anybody who tries to talk politics within the cooperative movement realizes one thing pretty quickly: a lot of people in the co-op scene don't like ideologies and are uncomfortable discussing political worldviews. Most of us grew up in an intensely de-politicized culture;

The rest of the essay, is, in my opinion, excellent too. Maybe I should just acknowledge and recite it, to finish the talk? However I have a few opinions left and there's some 'technical consequence' stuff I'd like to cover too.

So, first point, the established cooperative movement will not come with a bunch of flowers, to court the anarchists. Logically, and perhaps somewhat amusingly (anarchism is usually much less miserable than mainstream left) (especially) individualist anarchists will have to decide for themselves what they think of cooperatives.

For me, anarchism is not a binary state of affairs ranging from *thinking* (rather than doing, even) 'I'm not going to be told to do that', to the fabled anarchist Utopia with purple unicorns and fountains that gush chocolate of an excellent quality (as opposed to Charles Fourier's lemonade seas²⁹, apart from that he's worth investigation though). It's a non-binary, spectrum affair. So 'temporary autonomous zones', prefigurations and other pieces of temporary freedom are part of the 'long march'. In the essay that I have quoted, coops are called a 'counterinstitution', a pretty good word, although I often use (like a Nepalese Maoist, as someone told me, a while back) parallel structures.

Bookchin towards the end of his life was a libertarian municipality person who accepted the idea of nation state but retained the subsidiary of organisation that is currently being used by the Kurds³⁰. Possibly, 'purer' anarchies that don't include nation state are a further development of structures that do. I'm a believer in 'without adjectives'³¹ and therefore working with what we have towards what we want.

So, I am more interested in platforms that are dedicated to a particular municipal or regional model. This does not prevent them being used outside the region, but their core audience is focused into a smaller area. The taxi companies and infrastructure used for municipal mesh networks and telephone networks (think of Hull as a prefiguration of local telephony) are good examples of this.

28 <http://social-ecology.org/wp/1997/09/anarchism-and-the-cooperative-ideal/>

29 http://www.autodidactproject.org/quote/fourier_lemonade.html

30 https://en.wikipedia.org/wiki/Abdullah_%C3%96calan

31 https://en.wikipedia.org/wiki/Anarchism_without_adjectives



However, there is an immediate and obvious difficulty, food production. That is, for the most part food is produced outside urban areas (or, worse, imported from afar) and imported/sold into urban areas. So immediately, there is an organisation that spans a municipal or local area model. One (good) answer to this, is “don't be inflexible”. The second answer is hybrid coops with consumer and producer membership, more based like some credit unions on common interest (I am not going to say 'common purpose' for obvious reasons!) rather than geographical area. So, although, I'm personally in favour of locality and (subsidiarity is actually part of the EU, but it's been conveniently 'forgotten') subsidiarity, the notion that the thing is best done at the lowest possible level.

OK, some of that is a digression. So, in my view there are lots of smallish to medium platform cooperatives rather than large corporate monoliths like Uber, Amazon. That was lies resilience, responsiveness (subsidiarity, again) and support for local economies too. For example, a couple of organisations can disappear and the whole will heal. Compare the disaster of the Coop Bank mismanagement and overreach. However, in a modern society, after a while a lot of these things will need to mesh.

So we have something of a paradox or a zen riddle, they need to be separate and they need to be not-separate at the same time. Happily there are two examples or models for this a) any living organism, a great big thing made up of small, well bounded cells and b) the title from David Weinberger³² 'small pieces loosely joined'. I believe the contents has proved to be over-optimistic (currently, we have 'large pieces with garden walls') however, but the concept is still very valuable.

APIs, Protocols and Standardisation

Ok, this is a technical part, we have the 'small pieces', our municipal and small to medium co-ops but how about 'loosely joined'?

If we decentralise or re-decentralise³³, *we will need to communicate amongst ourselves*. For example, moving produce or spare parts from one regional centre or municipality to another. But there needs to be flexibility in these arrangements and requests.

This is a domain where, currently (there may be 'better' in the future, but let's start with 'now') REST APIs provide the beginnings of simple answer.

First, what's an API? It's an acronym for Application Program Interface, a way of getting a program to do something from 'outside'. What's REST, that's a little more difficult, the Wikipedia entry is pretty good³⁴ though. At a risk of offending the whole of computer science academia, it's a simple and natural scheme for representing web resources.

32 <http://www.smallpieces.com/>

33 <http://redcentralize.org/>

34 https://en.wikipedia.org/wiki/Representational_state_transfer



So we have web 'addresses' that don't just retrieve pages, they 'do' things. In fact, we've always had this, but the previous schemes were much more messy and less intuitive, for example:

```
GET /cgi-bin/posthandler.pl?&walrus=Large&honey=sweet&silliness=on
```

Here are a couple of examples of REST calls:

To insert (create) a new customer in the system, we might use:

```
POST http://www.example.coop/customers
```

```
GET|PUT|DELETE http://www.example.coop/products/66432
```

for reading, updating, deleting product 66432, respectively.

There are two things here, one that came out of a side session in the Goldsmiths conference and one that is part of a current debate:

- It would be good for the (platform) cooperative movement *to standardise some of these*, that would permit federation, even if the federation took place later on
- There are, of course, problems connected with security and portable identity
- There are some problems and opportunities connected with alternative exchange value mechanisms (think of the local currencies³⁵ for example, incidentally, compare mutual credit³⁶ and complementary currency³⁷) In fact, federation was discussed in this context, four or five years ago, in this context the Web Payment API³⁸ may be useful for the coop movement.

I think these ideas need to form part of a wider discussion over the coming months and years with a view to a federated, decentralised platform cooperative infrastructure. This may be an area where we need 'trusted servants' in the form of specialised secondary coops³⁹ that are guardians of standardisation and interoperability, for example.

35 https://en.wikipedia.org/wiki/Local_currency

36 https://en.wikipedia.org/wiki/Mutual_credit

37 https://en.wikipedia.org/wiki/Complementary_currency

38 <https://www.w3.org/TR/payment-request/>

39 https://en.wikipedia.org/wiki/Cooperative_federation



Some Conclusions

These, of course, are 'my' conclusions, not anyone else's. Here, from the essay quoted earlier is what I would like to see:

In a further parallel to anarchist thought, the 19th and early 20th century cooperative pioneers had a grand vision of a “cooperative commonwealth” which they saw as eventually replacing the market economy. Basically this meant one big confederation of co-ops of every imaginable sort stretching across the land, uniting all people in a ‘commune of communes’.

There are a couple of things in this, unpacking it:

- The cooperative commonwealth of platforms needs the kind of technical discussion, I have sketched out above. Anarchists of all flavours should participate in these, my opinion, of course.
- It will probably also need efficient honest brokers and coordinators in the form of secondary coops
- This can be a gradual transformation, cyberspaces being recaptured and opened up. My private word is 'de-hedging'. Between 1220 and 1349, some land was 'de-enclosed'⁴⁰ that is a good thing to think about.

Finally to borrow and misquote Illich, these are or could be our 'tools for conviviality'⁴¹, part (but not all) of the way back onto the path to collaboration, not alienation. Having ended up with a couple of Marxist near-misses, I'll finish here, for no particular reason with a quote from one of my favourite science fiction books Thomas Disch's *Camp Concentration*⁴² “*Much that is terrible we do not know. Much that is beautiful we shall still discover. Let's sail till we come to the edge.*” . That's all folks, as they say.

40 <https://ira.le.ac.uk/bitstream/2381/1114/1/CONFLICT%20IN%20THE%20LANDSCAPE.pdf>

41 http://www.mom.arq.ufmg.br/mom/arq_interface/3a_aula/illich_tools_for_conviviality.pdf

42 https://en.wikipedia.org/wiki/Camp_Concentration