# The FLO Consensus: Author's Cut

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## About the Author

I remember standing in the doorway of my bedroom and feeling the type of expansive, all-encompassing stress that can only exist in the mind of someone who hadn't lived long enough to recognize the ups and downs of life. There were so many scenarios playing in my head I couldn't even muster the mental energy to decide whether or not to walk into my room. I was 12 years old and I knew I had to transform my life or I'd go crazy. Then inspiration hit me. All my stress was rooted in guilt and all my guilt was rooted in my own lies. If I could stop lying to myself, to my family and to my friends, then I'd have nothing to feel guilty about, and thus no longer have any reason to be stressed. At that moment I decided to tell the truth, the whole truth, and nothing but the truth to any and everyone, for the rest of my life.

At that moment I became an activist.

## Context within the Occupy Movement

Within the Occupy Movement and, from what I understand, in many of the social movements

that preceded it, there has always been a conflict between the "revolutionaries" that want to create a crisis to first disrupt, and then destroy, the existing social order; and the "reformers" who want to take control of existing power structures and change society from "the inside". Within the occupy landscape, the "revolutionaries" gravitate towards the language of "occupy" and "direct action" while the "reformers" gravitate towards the language of "99%" and "protest."

This essay is concerned with a third group within the occupy movement – a group rarely mentioned by the media and often discounted by the activists who spend their time doing the type of self-promotion that gets them on to panels. I'm referring to the "providers": activists who invest their time and resources into providing services to individuals and groups within "the movement". These people are often vocal advocates for "mutual aid" (leftist terminology) or "free aid" (rightist terminology). Since occupy originated more from the left than the right, the term "mutual aid" is most popular, defined on Wikipedia as "voluntary reciprocal exchange of resources and services for mutual benefit." Within the context of OWS, mutual aid is probably more accurately described as "the revolutionary act of helping people for free."

During the occupation of Liberty Square, there were 17 "operations working groups" which were defined by the "spokes council" as groups that supported the logistical operation of the park. About a dozen of them provided mutual aid-style services. A few examples of such groups were the OWS library, which maintained a reading space and made books accessible to the community, the "occupied kitchen", which fed up to 5000 people a day, the street medics, who did their best to keep folks healthy, and the "comfort" group, which handed out clothes and other items to the park's inhabitants. I'm involved with a group that came to be known as the Technology Operations Group, or TechOps for short. This group manages NYCGA.net, a free/libre/opensource social network with nearly 10,000 users that became the main communications organ of the OWS community; stared the Occupy.net suite of free/libre/opensource software services such as the wiki, map, notepad and a dozen other services; manages the CRM (constituent relationship management) system that sends out newsletters to tens of thousands of people; and runs a cloud hosting environment.

Depending on one's perspective, Occupy Wall Street's TechOps groups was either a disastrous failure or a brilliant success. It was a failure because Occupy's web presence is still wildly unorganized and people find it difficult to engage with the movement through the web. TechOps is a success because it has laid the foundation of a free/libre/opensource technical infrastructure that will integrate elegantly with existing FLO systems to provide a framework through which social movements can transform the economic landscape by "producing their way out of oppression."

## An Introduction to FLO

There is a global movement consisting of millions of the world's most highly skilled people, a substantial portion of which believe they have the solution to all the world's problems: free

information. Before discounting this simplistic idea, consider that this movement's participants have produced some of the world's most significant technological innovations: the world-wide-web, Linux, LibreOffice, Wordpress and Wikipedia, to name just a few of the thousands of software projects that identify as free, libre and/or opensource (FLO). When people attempt to estimate the value of FLO software to the economy, estimates are in the ten to hundreds of billions of dollars. In reality, the FLO movement contribution is invaluable: without it, the information technology revolution we have been experiencing over the last 50 years would not have been possible.

The origins of what some people are calling the FLO movement could begin millenia ago with the transition from oral histories to written ones. The basic idea that information should be free from restriction is an old one. However, stories have to start somewhere and the community at Wikipedia who wrote the page on the "history of free and open source software" is most qualified to tell the narrative. They begin with the Motor Vehicle Manufacturing Association of 1911.

"The concept of free sharing of technological information existed long before computers. For example, cooking recipes have been shared since the beginning of human culture. Open source can pertain to businesses and to computers, software and technology.
In the early years of automobile development, a group of capital monopolists owned the rights to a 2-cycle gasoline engine patent originally filed by George B. Selden.[1] By controlling this patent, they were able to monopolize the industry and force car manufacturers to adhere to their demands, or risk a lawsuit. In 1911, independent automaker Henry Ford won a challenge to the Selden patent. The result was that the Selden patent became virtually worthless and a new association (which would eventually become the Motor Vehicle Manufacturers Association) was formed.[1] The new association instituted a cross-licensing agreement among all US auto manufacturers: although each company would develop technology and file patents, these patents were shared openly and without the exchange of money between all the manufacturers.[1] By the time the US entered World War 2, 92 Ford patents and 515 patents from other companies were being shared between these manufacturers, without any exchange of money (or lawsuits).[1][*improper synthesis?*]"
Software communities that can now be compared with today's free-software community existed for a long time before the free-software movement and the term "free software".[2] According to Richard Stallman, the software-sharing community at MIT existed for "many years" before he got involved in 1971.[3] In the 1950s and into the 1960s almost all software was produced by computer science academics and corporate researchers working in collaboration. As such, it was generally distributed under the principles of openness and co-operation long established in the fields of academia, and was not seen as a commodity in itself. At this time, source code, the human-readable form of software, was generally distributed with the software itself because users frequently modified the software themselves, because it would not run on different hardware or OS without modification, and also to fix bugs or add new functionality.[4] - Wikipedia:
http://en.wikipedia.org/wiki/History_of_free_and_open-source_software#Early_information_sharing

To fully grasp the concept behind the "free software movement' and the reason this author has chosen the term "FLO" we must look at how the word "free" is used in the English language. Free has two distinct meanings: free of charge (gratis) and free of restrictions (libre.) The free software movement is much more concerned with the latter freedom, not the former. While most in the movement envision a world where everyone has the software solutions they need to do the things they want, it's the intellectual property restrictions that motivate them to organize, because it's those restrictions that hamper innovation – and the act of innovation is the act of transforming problems into solutions. While free/gratis software can be used by consumers to temporarily satisfy a need, it's free/libre software that can be used, edited, modified and resold by producers to develop transformative innovation.

While the "free software movement" advanced the philosophy of free/libre, the "open source movement" organized itself to implement FLO solutions for others. "Open source" was coined by a group of people who made their living by implementing free software solutions for clients. They found that the gratis definition of free confused people. If the software was "free", then why did people who implemented it charge money? If anyone could download the software's code, wouldn't it be easy for hackers to exploit it? If my competitors can run the same software, then don't I lose my advantage? If a community of volunteers maintain the software, how could I be sure that it would continue to be developed? Since most clients were not interested in the revolutionary potential of free/libre software, the "open source movement" chose to focus its attention on building the business case for FLO: its accessibility, the diversity of support options, limited vendor lock-in issues, etc. This approach has been very successful, but the "free software movement" saw it as a co-option of the core values of information activism – and thus resist using the term and encourage their communities to do the same.

Despite the naming wars and lack of community and brand cohesion within the FLO movement(s), FLO software has gained rapid adoption over the last few decades, and that adoption continues to accelerate. While the mainstream media focuses on the financial success of Facebook and Twitter, the technology community recognizes that the popular FLO content management systems (CMS) such as Wordpress, Drupal and Joomla have transformed people's capacity to build highly functional technology systems for themselves and their communities. It's because of these CMS platforms that writers, video producers, schools, hospitals, governments and people of all types have access to increasingly sophisticated technology tools. Indeed, technical solutions that cost $50,000 5 years ago cost $5,000 now, and will cost $500 in the not-too-distant future. This isn't because of Moore's law, which states that microchip prices will naturally go down by 50% every 18 months. It's because the FLO software community produces solutions to common challenges everyday, and in aggregate those solutions create a FLO technology commons that makes it easier and easier for people to create the solutions they want. This process has – and continues to – fundamentally transformed the technology sector – and beyond.

# FLO and the Physical World

In the last few years, FLO has made the leap to the physical world. One of the centers of FLO hardware culture is Marcin Jacobowski's *Factor e Farm* in Missouri. Marcin was a high energy physicist turned rural homesteader who has spent the last few years coordinating the development of a series of 50 tools that he calls the "Global Village Construction Set" - or GVCS for short. The organizing principle behind the GVCS is Marcin's claim that these tools could be built on-site from readily available materials and that, once built, these tools could be used to produce all the comforts of "modern" living: everything from food, clothing and shelter to tractors, solar concentrators and batteries.

The distinguishing feature of Marcin's GVCS project isn't its ambition – the internet is awash with dreamers describing their dreams. Nor is it its technical sophistication – there are myriad other high-tech open hardware projects out there. The GVCS became the darling of the Free/Libre/Open Source Everything community because its instigator took the virtual conversations taking place about a FLO world and turned them into a livable reality for people brave enough to come out to Missouri, live in a yurt and work non-stop toward building FLO hardware tools.

The most difficult part of FLO hardware development is the production of the documentation people need to recreate the tools. One reason this is so difficult is that it often takes one very specific type of intelligence to solve a hardware engineering problem and a completely different type of intelligence to document how that solution works in a way that's useful to other people who want to build, edit, modify and contribute their own innovations to the project. Over time, best practices have developed for doing this type of documentation within the FLO software community. Their solution set involves writing "read me" pages that orient people to the project, placing comments into the code, writing guides for developers and users in a wiki, having highly structured project management systems and providing venues for public discussion. The GVCS project incorporated a lot of these practices into their work with great success, but also discovered the limitations of employing software practices for real world applications – limitations that Occupy Wall Street would begin to experience as it attempted to employ open source principles in the pursuit of global revolution.

# FLO Solutions at Occupy Wall Street

When I came to Occupy Wall Street on September 17th, I had an agenda: bring the free/libre/opensource movement's message to the "demonstrators". This is something I had experience doing with "liberty" activists surrounding the Ron Paul campaign, and I was eager to see how the message translated to "leftists". Within the first week of the Occupation, I had created the "Free/Libre/Opensource Solutions Working Group" and was making daily mic

checks at the General Assembly about the importance of Free/Libre/Opensource movement.

"Mic Check!"
"Mic Check."
"I'm from the Free/Libre/Opensource Solutions Working Group!"
"I'm from the Free/Libre/Opensource Solutions Working Group."
"Free/libre/opensource solutions!"
"Free/libre/opensource soltuions."
"give you the right"
"give you the right"
to use
to use
to edit
to edit
to modify
to modify
to sell
to sell
solutions people need
solutions people need
to create the world they want
to create the world they want.

I also handed out hundreds of fliers explaining Marcin Jacobowski's GVCS project. To many people in the those early days, I was known as the open source tractor guy. For a small fraction of those people who were actually FLO activists themselves, I became someone worth connecting with because I was working on the same revolution as they were.

To FLOers, the peer-to-peer, networked, FLO information revolution is *the* revolution. Not only is the FLO revolution democratizing communications, making it easier than ever for people to organize themselves outside the framework of a corporation or state to state a political revolution, but FLO technologies are also making information accessible to facilitate a productivity revolution. In the productivity revolution, individuals and communities are empowered to produce their own goods and services. While this might sound fanciful, think about the GVCS. What if high quality, production ready plans existed for all the technologies people need to create a "modern" community – from food and shelter technologies to the financial services ones that Wall Street uses to move capital around the world at breakneck speeds? Is there any doubt the world would be a wealthier place, and that this wealth would be available to more people than ever before?

The vision of a world in which material scarcity is vanquished by improved productivity is often called "abundance". Abundance has been the topic of a number of books in recent decades, but surprisingly few of them point to the FLO movement as the vehicle through which an abundance

revolution is made possible. Instead, they look more at abundance from the perspective of the self – in which people go through a transformation where they lose their fear of being without food, shelter, and social affirmation and embrace the reality of an abundant world in which all their needs will be met as long as they follow a certain set of practices that often involve being nice to other people and being open to new opportunities

Abundance is an increasingly popular vision among all types of people, but only the FLO movement has a practical strategy for achieving it: give people the tools and techniques they need to create the things they want. When people are empowered to produce for themselves, they are much less easy to exploit. For this reason, abundance is, in this author's opinion, the only modality in which a truly non-coercive, anarchist society is possible – and FLO solutions are the only way we'll be able to achieve such a revolution.

Since so many people at Occupy Wall Street identify themselves as anarchists, one would imagine that this message would be very appealing to occupiers – and it is. In fact, people within Occupy Wall Street are more than happy to declare themselves aligned with the FLO movement. Indeed, the three major statements of Occupy Wall Street all contain endorsements of the FLO movement – and that wasn't an accident. FLO solutions were vigorously advocated within the movement – not just by me, but by nearly every technologist that showed up to do the work of providing technical solutions to the budding movement.

After starting the FLO Solutions group with a number of friends, it became very clear to many of us that advocating FLO approaches was the easy part. Implementing them would be another story. The Internet Working Group, which maintained NYCGA.net – the General Assembly's communication platform – was feuding with OccupyWallSt.org, the movement's most popular website, over control of the online brand. Meanwhile, a number of groups and individuals emerged claiming to be PR. Press, OWSPR, etc. Wealthy liberals came out of the woodwork to offer us free websites that they would build and of which they would have undefined levels of control. In short, distributing a coherent message through strategically aligned online platforms wasn't something the technologists in Zuccotti had the ability to accomplish. Therefore, our collective focus shifted from outward facing communication platforms to empowering the myriad individuals and groups within the movement with good FLO solutions.

To achieve this goal, the FLO Solutions Group began working with the Internet Working Group to transform the NYCGA.net website from a standard Wordpress into a social network activists could use to communicate with each other. Collaboration around this task and others made it clear that the Internet and FLO Solutions Groups were one in the same. The lines between the two faded away: FLO Solutions gave its radical FLO activism philosophy to Internet and Internet gave its responsibility for managing the NYCGA's technology infrastructure to FLO Solutions. The synthesis of the groups, however, wasn't made official until the formation of the Spokes Council required working groups to officially register. Since the distinction was being made between "operations" groups that worked on supporting the Zuccotti occupation and "movement" groups that were interested in policy, we decided to name ourselves "Technology Operations

Group" - TechOps for short.

By this time, the general consensus within TechOps was that we would focus on developing internal communications tools and supporting activists through technology, letting the various PR and Media groups and OccupyWallSt.org take responsibility for public facing content. Instead of focusing on fans and followers, TechOps spent its time developing enterprise grade FLO systems that would enhance activist work. We deployed a constituent relationship management (CRM) system that can send millions of emails to constituents, a wiki that uses the semantic technology we need to develop a globally accessible shared knowledge resource, a directory of all the occupations around the world, news aggregators, campaign websites and literally dozens of other solutions. We also continued to maintain NYCGA.net, which was becoming an increasingly important tools for the emerging OWS bureaucracy.

Occupy Wall Street was organized through a "working groups" model in which people would join a group of people with similar interests, attend "open meetings" and give report backs to the General Assembly. Benefits of group membership was affiliation with "Occupy Wall Street" and the ability to solicit funds, which had hundreds of thousands of dollars at its disposal. Since each group was given a presence on NYCGA.net, defining a group became the responsibility of TechOps. Guidelines were written up by a team that required groups to conduct regular meetings in the NYC area, take notes at each of those meetings, and have up-to-date contact information on their group page. These rules were followed by many of the larger groups, but were untenable for smaller ones – making the policy difficult to enforce.


Once groups were accepted, they were required to pick administrators who then became the only people with the ability to post official events to the site. Group admins could also promote and delete users, edit comments and create a "group blog" at an NYCGA subdomain. The myriad of permissions and clumsiness with which they were set up created a variety of problems that slowly turned NYCGA.net from a no-nonsense communications and documentation platform into a venue for some of the movement's most vitriolic conversations. While we outlined a variety of administrative guidelines for positive and responsible community management, we found it very difficult to enforce them with any type of regularity. The need for enforcement was becoming increasingly important as the disruptive behavior that was ruining the productivity of General Assemblies and Spokes Councils was transferring over to the NYCGA.net online community. It wasn't long before each of the most disruptive people at OWS also had NYCGA.net personas. Some of them had multiple personas to increase their capacity to disrupt. Many people suspected this type of activity was taking place when they would see two personas using similarly structured language to agree with each other or echo criticism, and it was confirmed when site system administrators discovered those personas had the same IP addresses. Whether this was an indication that these people were "provocateurs" hired to disrupt the OWS community from making forward progress or just off-kilter people who enjoyed a conflict was a question TechOps never fully tackled. But these situations were rare. More problematic was that there were "normal" trolls within many group forums on NYCGA.net, that

lots of Occupy activists have bad internet manners and that, quite simply, there were many conflicting personalities within Occupy Wall Street – and forums were a popular place for clashes amongst such personalities to take place. The aggregate effect was that NYCGA.net became an "unsafe space" that people didn't want to use to communicate, and which they instead used only to comply with the demands of the OWS bureaucracy.

As NYCGA.net struggled as both a community site and a platform with severe technical limitations, it became clear to many in TechOps that we should shift our focus away from NYCGA.net and into Occupy.net.

Occupy.net was secured in the early days of the occupation by a member of FLO Solutions. We began to use its subdomains to host various software services that we thought OWS activists would need to conduct a successful social movement. Our decisions to deploy certain tools were very much informed by our experiences working with other FLO projects – especially the experiences of the GVCS project. We deployed MediaWiki, the software used by Wikipedia, as a knowledge management solution at wiki.occupy.net; CiviCRM, the world's most popular FLO constituent relationship management tool up at crm.occupy.net; a directory of all the movement's occupy websites at directory.occupy.net; a news aggregator at newswire.occupy.net; a mapping solution at map.occupy.net; and much more. At this moment, we have 8 "launched" software services and about 30 more in evaluation phases.

Unlike NYCGA.net, which was a utility for Occupy Wall Street in New York managed by a NYC based group of techies, Occupy.net is a set of tools, each of which is maintained by a different team, many of whom aren't located in the New York area. In some ways it's the software equivalent to the GVCS: all of the FLO software tools our community needs to build a robust social movement. The intention behind the toolkit is to do more than simply provide the Occupy movement with useful tools; it's to provide an FLO alternative to the world's largest web application provider – Google. That isn't as crazy as it might sound: there is an FLO alternative for nearly every Google application, but no one has tied all these FLO alternatives together with a unified design language, single user sign-on, comprehensive documentation and community support network to create something that feels competitive. Our ability to frame Occupy.net as an alternative to corporate software is what attracts activist technologists to maintain services under the Occupy.net name. Unfortunately, it doesn't seem to attract the attention of the mainstream media, who are looking for stories about social media flash mobs organized on corporate social networks like Facebook and Twitter, not how a bunch of technologists are designing, deploying and maintaining enterprise grade FLO software solutions that will be able to enhance the movement's growth over the long term and chart how to create software infrastructure for the new, emergent, FLO economy.

## Where's the Marketing Department?

Deploying dozens of technical solutions at Occupy.net has been much easier than getting

activists to use the tools. When Occupy Wall Street first started, I assumed, like many techies did, that Outreach, Info and various other working groups would want to build email lists so they could develop deeper relationships with people who were inspired by the Occupation. To my surprise, I found it extremely difficult to find anyone interested in taking responsibility for collecting email addresses and producing a newsletter. By the 2nd month of the occupation, we had a CRM solution together for use by "Outreach"– but it took them another 3 months to begin to use it.

To what could we attribute this failure in community adoption, observable not just in the CRM but in the Occupy wiki, the mapping application, and the other dozen or so tools made available through the Occupy.net project? First of all, the very nature of Occupy's decentralized, autonomous organizing is that few groups exist to serve the others. The corollary of this truth is that groups quickly began to assume that they would have to rely on their own [communications] tools and resources to meet all of their organizing needs. When TechOps came forward with the tools that we saw a need for and were in some instances even requested to produce, few came to us as a resource, and fewer still followed through with our recommendations.

This speaks to a problem familiar to those in the technology world: highly useful tools are produced but users don't adopt them. It was one thing for us to produce the tools that were necessary—it was an entirely different challenge to actually communicate these services outward, a task people within the media community are more qualified to tackle than those in the technology one.

Ideally, this would have been a function performed by the Media Working Group—a group which specialized in the production and promotion of documentary content. Unfortunately, instead of documenting how activists can use tools to enhance their work, their attention was more focused on conflicts between "protesters and police" —known inside the movement as "riot porn." This isn't surprising as mainstream media outlets would often evaluate whether or not to cover an "action" by asking the self-identified occupy PR people how many arrests they thought would be taking place. Violence gets views, and media people produce content so people can view it, so it's not surprising they gravitate towards the sensational instead of the functional, brutality instead of kindness, actions over mutual aid. This highlights, once again, the conflicting interests of those who create crisis through disruptive actions and those who develop solutions through sharing productivity tools and techniques. Activist movements have traditionally found it difficult bringing these groups to the same table where they can align their interests around a single vision and set of strategies. It helps if that table has lots of delicious, regionally appropriate, organic food grown by mutual friends.

## Food at Occupy Wall Street

Food is the foundation of our society, our economy and our culture. Everyone eats, and most people like to talk about their eating experiences. It's safe to say food is one of humanity's most

shared interests. Food has played a central role in the Occupy Wall Street experience. While the marches and actions captured the attention of the mainstream media, it was the occupied kitchen that captured the attention of those who came to Zuccotti Park. At its height, the occupied kitchen was serving over 5,000 free meals a day. It was so successful at feeding people that many OWS activists blame it for the "failure" of the occupation. In the first week of the occupation, before it became a national news item, nearly all of Zuccotti's inhabitants were activists who came out for Occupy Wall Street. As the mainstream became aware of the occupation, word spread that there was food available for all who showed up. At first non-activist groups that showed up were homeless people who found park life more comfortable and exciting than life on the streets. As time went on, all types of street people found a home and hot meal at Zuccotti Park – including the mentally unstable, drug dealers and other "unsavory characters" that made the park feel increasingly dangerous. By the time of the eviction, things had deteriorated substantially and the park's culture had turned from an activist center to something more akin to a refugee camp. The Daily Show's now-famous piece describing the divide between the east side of the park, which was filled with more mainstream activists, and the west side of the park, which was filled with "street people", was accurate but missed the critical importance of food in explaining why both communities continued to inhabit the space.

The food narrative is central in the story of Occupy Wall Street. If the media, mainstream or otherwise, had followed the narrative thread of food, they would have encountered OWS's truly radical narrative that explains how people can voluntarily organize themselves to produce services for an inclusive community within the confines of a militarized American metropolis. The articulation of such a narrative, and it's popular distribution is an important goal of for many people involved in Occupy Wall Street, but as members of the mutual aid community, we know that talking about providing services is much easier than actually providing them. While Zuccotti was in operation, we had an opportunity to make the case for a mutual aid revolution because we had an example to point to, but the eviction destroyed that example. We need to produce another, more resilient one. Fortunately, we've spent 9 months setting up the FLO technology infrastructure to make that possible.

## FLO Farms, FLO Food

A popular phrase within food activist communities is "no farms – no food." Within the context of occupy, that phrase could very well mean "if we don't organize farms, we won't be able to organize the distribution of food." From the unlabeled genetically modified organisms (GMO) in mainstream food to the predatory practices of agro-business, the inhumane treatment of livestock to our food system's dependency on fossil fuels, there's more than enough opportunities to criticize our existing industrial-captialist food system. So, when Occupy Farms was chartered as a working group within the NYCGA, no one would have been surprised if it had developed into another criticism-oriented group - but it didn't. Instead, Occupy Farms started building relationships between rural farmers and urban occupiers and helping occupy activists get out of the city and onto some farmland. By approaching its work from the perspective of a

service provider, Occupy Farms established itself as a mutual aid group — compelling myself and others in TechOps to join and bring all of our tools to this effort. In doing so, we switched roles from being tool providers to users, allowing us to see things from a different perspective and better understand the type of documentation we need to produce to make these tools accessible to the OWS community.

Like most groups, Occupy Farms needed a website through which to communicate its intentions, share logistical information with its community and collect information about individuals interested in its work. In response to that need, we deployed a Wordpress website with the necessary functionality, organized our information on the wiki, used our CiviCRM to match occupiers and began sending out a regular newsletter to our community. We also created a Google Docs collection to share information among Occupy Farms core team members. While Google Docs certainly isn't free/libre, its usefulness is difficult to exaggerate.

While documentation for all of the tools we deployed existed, it was mostly directed a technical audience who might want to help us support the tools, not an activist audience who simply wants to use them. This became very obvious to us as the Occupy Farmers ran into difficulties and had to come to us to resolve them because the documentation was insufficient for their purposes. Fortunately, in an act of mutual aid, some people in Occupy Farms offered to work with TechOps to write appropriate documentation so it's easier for more individuals and groups to adopt the tools. This activity will greatly benefit the entire Occupy Wall Street community and will also benefit Occupy Farms. When more people use FLO tools, more bugs are found and squashed, more features are defined and implemented, and more solutions are integrated together to create better products for all. Not only can our FLO systems support ten to a hundred times more users, but we can also easily package our solutions up and distribute them to affiliated groups for a near zero marginal cost. This doesn't just apply to Occupy Wall Street related groups - it applies to everything.

## The FLO Consensus

During Occupy Wall Street's brief history, the OWS community has asserted numerous times the importance it places on freely sharing information, defining itself as a FLO movement. The Declaration of the Occupation of New York instructs us to "generate solutions accessible to all"; the Principles of Solidarity requests we make "technologies, knowledge, and culture open to all to freely access, create, modify, and distribute"; and the Statement of Autonomy defines Occupy Wall Street by saying it "is not a business, a political party, an advertising campaign or a brand."

For people truly interested in transforming the world, solving the big problems and empowering each other to self-actualize, intellectual property is a nuisance that gets in the way of productive collaborations that generate solutions anyone can use. Common sense dictates that if we, the people, share a problem, we should work together to produce free (meaning both gratis, as in no cost; and libre, as in no restrictions) solutions to everyday challenges that are also openly

accessible so anyone can use, edit, modify and even sell to others. Yet the vast majority of the general public isn't even aware that such a possibility exist, much less that the FLO movement exists to do just that. For many activists and do-gooders who have not fully ingested the "FLO Everything pill", the idea of a free/libre/open source world in which abundant information technologies leads to an abundance of the material things sounds unbelievable at best and disillusion at worst. For those of us who have taken the pill, however, that world of abundance is an often experienced reality that motivates a type of distributed activism that's unique in the western world.

The easiest way to share that abundant reality is through the food system, and the food system is ready for an information revolution. If you ask any small farmer about the quality of their tools, they'll tell you that the big agricultural corporations are neglecting them. Monsanto, John Deere, Cargill and others have shifted their focus from small scale farmers to industrial farm operators. This leaves small farmers, those whom Jefferson considered the backbone of American democracy, with a poor selection of products and services from which to choose and the FLO community with a massive opportunity to break into the agricultural market.

Conventionally, large corporations have the advantage when it comes to industrial innovation because they have the capital necessary to support expensive research and development initiatives. FLO hardware can only be viable when information technologies are sophisticated enough to allow individuals to take responsibility for their own capital needs while aggregating their innovation with others to produce something that everyone can own. Innovations in FLO software make this possible. FLO computer aided design (CAD) technologies enable people to transfer production ready schematics in a single file and subversioning technologies like GIT enable people to track changes to keep file histories organized. 3D printers, torch tables and CNC machines are all emerging to make small scale, micro factories not only possible but profitable. Factor e Farm is producing FLO brick presses in Missouri that are cheaper than their industrial, mass produced competitors by a factor of three. As Marcin Jacobowski of Factor e Farm says in his TED talk:

"This is only the beginning. If this idea is truly sound, than the implications are significant. A greater distribution of the means of production, environmentally sound supply chain and a newly relevant DIY maker culture can hope to transcend artificial scarcity. We're exploring the limits of what we can all do to make a better world with open hardware technology."

In the digital realm, the troubleshooting process is relatively easy – you turn it on, it doesn't work, and you turn it off. In the physical realm, depending on what you're building, the cost of failure is real: both in time and resources. If, for example, someone tried a new tractor design feature and it failed, the cost is substantial in materials, capital and time. So substantial, in vast, that the vast majority of small farmers, hardware innovation is prohibitively expensive. Fortunately, land use innovation is not.

If there is any doubt that America is in need of dramatically improving the way its residents

manage land, consider that American farmers are paid by the government to destroy their crops. This isn't a conspiracy: it's an acknowledged practice and proof that we need widespread distribution of permacultural practices such as natural building, intensive agro-forestry, concentrated solar construction, and other DIY innovations. Armed with the knowledge of how to produce wealth with land, America's energetic youth can build their own communities – earth brick by earth brick. By bridging the gap between those who desire a new society and the more docile older population who owns the land but prefer to spend their time pursuing other pastimes, Occupy Farms is organizing the infrastructure for a new, FLO economy. If we exhaust the resources of friendly land owners, we can take the land from the Federal government, which owns 29% America, mostly in the western states. Just a small fraction of Federal land could support all the Americans who want to transition from the industrial lifestyle to a more ecologically sensitive and liberated one.

This lifestyle doesn't necessarily involve conventional farming, which has a well deserved reputation as being hard work. Permacultural practices produce ample amounts of food but in a different way. While farming focus on producing crops that need to be planted and harvested every year, permaculture focuses on creating abundant landscapes that produce more per acre over the long term. Permaculturists design their landscapes in layers. For example, a permaculturist will plant nut trees, vines, berry bushes and grown crops all in the same space. Once planted, these crops require minimal maintenance, and when mature, the space will produce food consistently over the course of the year, every year. Permaculturists proudly call themselves lazy farmers and viewing their horticultural approach as an evolution of conventional agriculture and the foundation of a solutions-based social movement of its own. While their natural instinct is to share as much information as possible with any and all people who're interested in a more sustainable lifestyle, their exposure to FLO practices is minimal so the community is still producing more books than semantically structure online knowledge resources, but that's changing thanks to projects like Appropedia.org, Farmhack.org and OpenSourceEcology.org. Each of these projects have Occupy activists embedded within them who are coordinating with each other to ensure that we're all ready to integrate our resources when the time come.

A master plan for revolution is organically emerging that involves the development of a competency in useful FLO solutions within the occupy community, the distribution of FLO solutions through networks of rural farms, urban occupied spaces and allied communities, and the manifestation of a new set of exchange practices that can replace the coercive neoliberal economic model with something more conducive to the collaborative production practices of a FLO economy.

FLO economics can't exist without FLO money. Fortunately, money is just a technology and there's already a sufficient FLO alternative to the Federal Reserve Note called Bitcoin. While the mainstream media likes to pretend that Bitcoin is a product you can purchase, it's better understood as a software service people can deploy to create their own cryptographically secure digital currency network. Just as physical currency has security features such as intricate

designs, unique textures and exotic printed features, digital currency requires cryptographic features to remain secure. One way to understand Bitcoin is to focus on its physical features. A Bitcoin is a long string of information - numbers, letters and symbols - that can be printed out as a QR code. That QR code contains the Bitcoin. If you give it to someone, they have the Bitcoin. When they scan the QR code, the Bitcoin is transferred onto a computer and automatically authenticated by the network of computers running the Bitcoin software. Once authenticated, the network changes the Bitcoin, so the QR code can't be reused. If someone wants to create a physical Bitcoin again, they have to print out a new QR code.

Just as a Federal Reserve Note is one part of our currency ecosystem which also includes everything from gift certificates and credit cards to complex derivatives, Bitcoin is one tool in a toolbox of alternative currency technologies that are emerging to support the new types of exchanges being motivated by FLO economics. It'll be quite some time before a FLO currency can provide its users with the breadth of economic exchange possibilities as the Federal Reserve Note, it won't be long before someone in the Northeastern United States York purchases some local produce from an occupied farm using FLO currency systems. Indeed, by the time you've read this, it might have already taken place.

"The revolution is here - it's just not everywhere."