How the Power of the Crowd could change Urbanism Social sustainability in digital culture and the possible impact on urban planning

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Introduction

Our current social and economical system – capitalism – is ill. It was ill from the beginnings, as the workers in the industries had to work under inhuman conditions. Since that time there are strong movements against capitalism – the women suffrage and later feminist movement, the socialist movement based on Karl Marx and Friedrich Engels, the national socialist movement in Germany, the Green movement starting in the 1980s as the problems of the auto-mobile age became apparent. Still capitalism rules our world and exploits labour: Women doing the household and caring for children unpaid, the corporations of the rich countries producing their goods in poor countries and therefore saving on production costs, artists not being able to sustain themselves as their value creation can't be measured in monetary terms. On the other hand some economists got (and still get) immensely rich by gambling.

Capitalism already crashed several times: the Great Depression starting in 1929, the Oil Crisis in the 1970s and right now we face the ruins of the so-called Financial Crisis. And there are more reasons why a change in global economy is necessary. We can't longer deny global warming, every day we delay our change of living, the impact will get worse. Already the amount of nature catastrophes increases and there's strong evidence, that's it's the fault of humankind. Earth's population exploded in the last hundred years, can this process continue forever? In many poor countries there are wars going on, wars financed by rich western countries and corporations, fighting for nature resources.

To cite Barack Obama, the new U.S. president: "It's time for change". But change to what?

The age of industrialization is already over, most countries already changed to the next era – the age of information and communication. Starting with the invention of the telephone in the 19th century and the computer in the 1940s, the introduction of the Internet and the mobile phone changed our lives radically in the last decade. It is now possible to simultaneously communicate with people all over the world and to share information to practically no cost. There's a subculture based on cooperation developing, which might change our social system in the long run. Many people active in this subculture are not yet aware of doing so, but the possibilities are here.

In this essay I want to explore some of these subcultures, investigate their possible impact on Urbanism and discuss how they could contribute to a more sustainable future.

Definitions

First I want to define some terms. Some of them are widely used, but often used in different meanings. And some of the terms might not even be known to everybody (some were not even known to me before I started writing this essay).

Information, Information Age

The 19^{th} century and the beginnings of the 20^{th} century were dominated by industrialization. Big factories were built that produced more and more of our goods. Many people were employed in these industries, but as the development continued the jobs of many people were taken by machines. At the same time many important things were invented that still influence our lives nowadays: photography and the film camera, radio transmission, the telephone and many electric devices. In the 1940s the first electronic computers were invented.

As the industrial age came to its dawn in the middle of the $20^{\rm th}$ century the economy changed to a service economy. More and more people became clerks, teachers, office workers or shop assistants. Eventually information devices became wide-spread: the television, the radio, the phone. The information age was born. In the late $20^{\rm th}$ century

the Internet and the mobile-phone became wide-spread and provided even faster and more direct access to information and communication.

In the information age one of the main products is information. It can take many forms: reports about events, images, ideas or code (work instructions for computers). Information is often interlinked, by pointing to (e.g. a hyper link, 'Go ask Alex') or including (e.g. a citation, 'Bertha told me ...') other information sources. Again, a link itself is information.

Analogue vs. Digital

Nature is somehow blurry, not easily expressive in concrete terms. Take a meadow: How to tell which colours you see and how to differentiate them from one another? Where is the exact boundary to the forest nearby? On the painting, how to create the colours of each spot? If you make a copy of analogue data (a painting, music cassettes), you always lose information, the result gets worse.

If you produce digital data, you put a grid over the original analogue data. If you scan an image, you split it to little tiny spots of the same size and for each you measure the colour and give it a distinct number. Noise we measure in split seconds and give each level a specific number. By digitalization we also lose data, but the advantage is, that we can copy the resulting data without effort and without any additional loss of data.

Internet

The Internet is the technical base of the information age. It was developed as a fail-proof network of computers. As the name Internet suggests, it's a network that integrates different networks, there is not one company that runs that network. The interfaces and data structures are clearly defined, so everybody who has the technical know-how can build and integrate their own devices and services. There is no real hierarchy in the system, communication channels can change their routes if necessary. So a single event can't stop the Internet from working. As William J. Mitchell states in his book "City of Bits" [Mit1996], democracy was one of the foundations and possibilities of the Internet.

One important event was the development of the WorldWideWeb in 1989. At that time data exchange was difficult. Files of different programs had their own formats, media devices

Illustration 1: The Internet (Source:

| Wikipedia - CC)

could only be read by computers of the same company. The first improvements were already taken, as IBM published the first personal computer in 1981. Although it was not the best system, it had one big advantage: The system and the interfaces for extensions were standardized, so other companies could produce their own compatible computers.

The WorldWideWeb, invented by Tim Berners-Lee[BeL1990], is based on a few basic foundations. A standardized protocol to communicate with a server (basically just another computer) for downloading and uploading data¹, a simple – human readable – file format to write text and data² and the possibility to link from one page to another page, which doesn't necessarily have to be located on the same server³. Nowadays the term Internet became more or less synonymous with the WorldWideWeb.

¹ HTTP – Hypertext Transfer Protocol

² HTML – Hypertext Markup Language; XML – Extensible Markup Language

³ URL - Unified Resource Locator

Society and Culture

In my understanding culture describes the particular way of how people live, based on their values and ethics, influenced by other cultures, by media (television, Internet, radio), commercials and politicians. There can be many different cultures at the same place, but usually there are interfaces where the cultures influence each other. How much the cultures connect and interchange can be heavily influenced by politics and urban planning.

We all live next to each other, especially in urban places, which nowadays inhabit more than 50% of worlds human population. We can't just deny the presence of our neighbours and ignore them. How we structure the way of living together is a big part of our culture. Do we listen to loud music in the early morning? Do we smoke cigarettes in the presence of non-smokers and children? How do we try to integrate migrants into our culture? What is a crime? How do we treat criminals – Do we sentence them to death, send them to prison or try to re-socialize them? Do we survey all our public places by video cameras in the fear of violence and terrorism or do we encourage people to take care of one another?

Digital Culture

Humankind has always been inventive to introduce new words to describe cultural or social currents. Our current era is mainly influenced by information and communication, that's why most people use the term "information age".

I decided to use the term "digital culture" throughout this essay, because for me it defines this new culture, based an information and communication through computerization.

There are two particularities which mainly influence digital culture:

- First, it's very easy and cheap to create copies of data, you don't need any big printing presses for this. And the data is non-rival, meaning, if I use the data, I don't consume it, it's still available to the next person.
- Second, it's very easy and cheap to communicate with people, independent of their current location. In fact you don't even have to know, where they are situated.

Sustainability

"Sustainability" is also one of these modern buzz-words. Wikipedia defines the word as "in a broad sense [...] the ability to maintain a certain process or state". The goal of humankind should be, that we and our children and the next generations can live an interesting life, without destroying the last resources of Earth, the planet we depend upon. But sustainability is more than just environmental protection, we also have to keep our societies sustainable.

An example: Corporate companies usually try to get rid of competitors on the market, may it by being better, buying them (and closing them some years later, sending the workers to unemployment, often in marginalized regions without hope for a new job) or using unfair methods (like binding people to use a specific product). We've experienced often that this happens, companies are getting bigger and bigger, and therefore slower and slower with innovation. But they are so powerful, that competitors don't have a chance to get a share. Finally the companies collapses and the states see the necessity to keep these companies alive, because of the fear of high unemployment rates. A sustainable economy on the other hand keeps diversity by keeping companies competing, without the fear of one company overruling the others.

In a society there are many ways how to improve sustainability. A decision which is being made in a democratic, participative way often is more sustainable than a dictatorial one. A society can define its ethics and values. A society, where the members are respectful, just and honest is much more sustainable in the long run.

Hartmut Bossel writes in his book "Earth at a crossroads" [Bos1998] about social sustainability and their influences in different aspects.

Urbanism



Illustration 2: Urban area (Source: Flickr, (cc) User spanaut)

Urban areas are the densely populated areas on the world, which inhabit more than 50% of world population. They are the cultural, economic and social centres of our society. Urban areas are changing very fast, and they are changing all the time. New developments, like mobile phones, are adapted by the people very fast. Especially by the younger population, for whom cities are attractive places.

As urban planners we have the opportunity to influence these urban areas, to create liveable places, but also to destroy places. Planning is often done in a top-down way, which often doesn't make people happy. The discussed topics in this essay promote a democratic, bottom-up way. I

believe that urban planners should use these methods to improve their urban areas.

Commons

A common good is a good, a product, which is a available to everybody, like a park or the air that we breathe. Often common goods are not rivalry, meaning a person who uses the good, does not consume it, or it's available in huge amounts. In Internet culture common good is information, e.g. news. Everybody can access the news, but they are still available for the next person. Only if too many people access a website at the same time, or use the park, problems might occur, but not because of the consummation of that good, but because of overloading of the resources (the park gets crowded, the website is getting slow processing the requests).

Peer production

Peer production is a new economic model for production processes, which we can observe in several Internet communities, like the Free Software Movement or the collaborative projects Wikipedia and OpenStreetMap – I will talk about these later in the essay. It was first defined by Yochai Benkler in [Benk2002], who compared this model to firm production (where the process of production is decided centralized) and market-based production (where individuals contract other individuals for parts of their product). It's based on gift economy, where people "produce" without a direct feedback or payment.

In peer production peers - meaning individuals or teams - work on one project together by extending and adapting it for their needs with the gain of having a common product which is superior. Usually the product is information (e.g. software), which - as we stated before - has the advantage of being non-rival.

Democracy

Democracy is a political model, where all members of the society (should) have equal access to power and equal freedoms and liberties. Most democracies elect representatives, who are in charge of daily affairs. The society is more or less involved in decision making.

We can distinguish two types of democracy:

• Representative Democracy, where the people elect their representatives according to the values presented in the election campaigns and from the experiences in the past time. The representatives handle the topics in politics according to these values. Discussions only include the representatives, who should

be experts in certain topics, therefore decisions can be made fast. On the other hand the representatives might not be able to see the whole figure and are prone to bribery and cronyism.

• Participative Democracy, where the people get directly involved in the process of decision making. Experts and interest groups discuss the different views of the current topic publicly, in the end a decision based on all people's opinions is made, e.g. by referendum. Discussions might take longer and are difficult to moderate, but the output often is better and people feel integrated in the process and therefore motivated to undertake action together. It's also easier for them to accept unfavourable decisions, as they can understand the decision process.

Working together in Digital Age

Most companies produce software or data (e.g. books, media) in a capitalist way. The management, based on market competition, decides what is to do and the resulting product is being sold. On the other hand, the Internet allows new methods of working together.

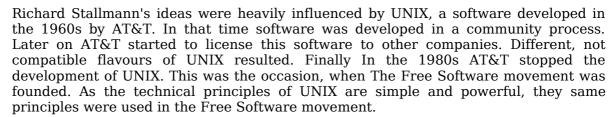
In the media we can often see discussions about intellectual property. People steal from the companies by copying and downloading. Is this really a crime? Maybe it's the companies, who follow a wrong economic model? Maybe we need another model of creating art, creating software? Commons based Peer production seems to be a solution. And it's already widely used, as I will show you in the following examples.

Free Software Movement / Open Source Community

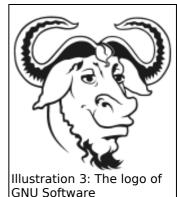
Software, as we know it nowadays, usually has many restrictions. You are not allowed to install it to more than a certain amount of computers, you can't share it with other people although it would be technically easy and you can change it to your needs only in ways the developers intended.

The Free Software movement⁴, started 1983 by Richard Stallmann, has the goal to develop software, which does not restrict users in any way, therefore four paradigms have been defined:

- The freedom to run the program, for any purpose.
- The freedom to study how the program works, and adapt it to your needs.
- The freedom to redistribute copies.
- The freedom to improve the program, and release your improvements.



The Free Software Movement is based on the idea, that software is not something secret, where only its developers have access to it, but rather as a process of the community, where everybody is welcome to take the code and extend it. But on the other hand everybody is obliged to share his/her changes, at least if they are used commercially.



^{4 &}lt;a href="http://www.fsf.org/">http://www.fsf.org/

To give these ideas a legal base the GNU General Public License⁵ has been developed, a license which allows the four freedoms defined above. It is the most widely used license in the Free Software Movement.

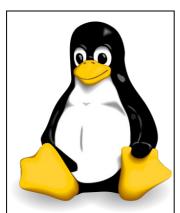


Illustration 4: Tux, the famous mascot of Linux

One of the most well-known examples of the Free Software movement is Linux, the operating system kernel developed originally by Linus Torvalds, a Finnish student, in 1991. He actually just wanted to try to build a new operating system, and because it worked he published it. He used the specification of UNIX, because they were simple and clearly defined, that's why the name Linux reminds the name UNIX. People started asking if they could use, extend and sell it, and so he decided to use the GNU General Public license for his operating system, which was already used for some programs he used from the GNU project. Nowadays Linux runs most servers world-wide, many people use it on their desktops (only about 1%, but still it ranks on third place after Microsoft Windows and Apple MacOS X) and now it's emerging on mobiles phones too (with the Google Android platform).

Although these projects are based on democratic processes and the freedom of extending the programs, the projects themselves have hierarchies. I can change the program, but who says, that my changes will be integrated into the main product? Sometimes forks of the original project are more successful than the original project, or the maintainers are overruled by the community. This might not be good for the maintainers of the original project, but for humanity it's an advantage, because they get better software.

I believe, that Free Software is sustainable, because people and organizations using Free Software are not dependent on one company, they can choose between different options. Even if the main organization who is working on one software product fails and cancels it, the source is still available and other organizations can fill in the gap. Therefore Free Software is much more sustainable.

To give an example: In the end of the 1990 the browser war⁶ was going on between Netscape, the first widely used browser and Microsoft Internet Explorer. Microsoft finally won after they invested a lot of money and pushed Netscape out of the market and reached a market share of up to 95%. After this, in 2001, Microsoft published Internet Explorer 6, but stopped developing. Finally, as the other competitors catched up, notably Mozilla Firefox – Free Software and a late ancestor of Netscape – Apple Safari and Opera, Microsoft lost market shares and restarted development. Even though they published Internet Explorer 7 in 2006 after 5 years (which is a long time in the information age), they still lose market shares.

Free Software on the other hand keeps developing, as the improvements have to be shared with the competitors. Therefore peer production keeps the competitors competing without fear of monopolization.

Wikis

A Wiki is a simple content management system that contains pages in a simple, onedimensional name space, and features Hyperlinks to connect these pages. The content of single pages can be changed by a few mouse clicks very easily. One of the main features is the full history, which sets the entrance barrier low, as every change can be reverted. Therefore Wikis are very robust. On the other hand the features are rather limited, compared with HTML, the language of the World Wide Web.

⁵ http://www.gnu.org/copyleft/gpl.html

⁶ http://en.wikipedia.org/wiki/Browser wars#The first browser war

The first Wiki, called "WikiWikiWeb" (Wiki is Hawaiian for 'speed') was developed by Ward Cunningham, an American computer programmer, in 1994/1995. Nowadays there are many Wikis out there, in different (programming) languages and with different features⁸.

Many software projects in the Free Software community use Wikis as internal documentation and communication platform. Before the introduction of Wikis, mailing lists were (and still are) quite popular, but their disadvantage is the high level of unwanted information. On Wikis people can participate on thematic discussions only if interested and the information can later be summarized for new interested users.

In 2001 James Wales, an American Internet entrepreneur, started Wikipedia⁹, a well-known community based multilingual encyclopaedia project. Everybody is allowed to write to this encyclopaedia – in some versions of Wikipedia even anonymous editing is possible. The Wikipedia has often been criticized for missing quality checking, but the operators believe in the community principle. Apparently they have a point there, quality assessment shows a similar quality to other encyclopaedias. Problems exist and scandals happen, but are relatively seldom. As of this writing, the Wikipedia is available in 235 languages, the biggest are English (2.8 Mio articles), German (900.000 articles) and French (800.000 articles). The Bulgarian edition currently features 70.000 articles.



Wikis are also widely used in corporations for a variety of uses, "including e-learning, project management and technical support" [Bla2008]. Interestingly Wikis are more widely used the longer they are in use. They might even change the company's structure, as "the official organizational structure [...] collides with the more or less informal structure of the communication network we find in corporate Wikis" [Maj2006].

If a Wiki is sustainable depends on the specific use. Many Wikis never got the required attention and fail after a short time. As I explained before, successful Wikis usually grow over time and the possibility of failing is small. In a case like Wikipedia, the content is available under a free license, so people can take it and start their own project. Usually the use of Wikis promotes a democratisation of organizations, which usually is more sustainable than a hierarchical model.

OpenStreetMap

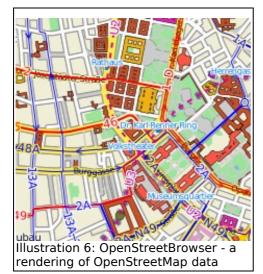
The OpenStreetMap¹⁰ is a Wiki-like collaboration platform with the goal to generate a free map of the world. Most maps, although they seem to be freely available, have technical and legal restrictions. The data of the OpenStreetMap however is usable in any possible way. The data is mainly collected by volunteers, but also some free databases, e.g. governmental data, are being imported.

⁷ http://c2.com/cgi/wiki

⁸ http://en.wikipedia.org/wiki/Comparison_of_wiki_software

⁹ http://www.wikipedia.org

¹⁰ http://www.openstreetmap.org



In my opinion the OpenStreetMap is a perfect example of a peer production process. The possibilities for contributions are vast. They can be as simple as reporting mapping errors or adding some pubs, running around with GPS-receivers to collect new data, convincing municipalities to donate their data, to writing new applications which use the data of the OpenStreetMap in new and creative ways.

There are uncountable interesting projects emerging, which make use of this data, e.g. the OpenCycleMap¹¹, a special map for cyclists; the OpenRouteService¹², a routing service for car, bicycle and walking or the use in guidance systems (e.g. for cars) and services which help to locate errors in the database. As the data is available for commercial use, there are also some

companies emerging, notably Cloudmade¹³ who provide consulting and services. I also started an own services for browsing the data in the map, called the OpenStreetBrowser¹⁴.

Since the availability of Google Maps there's a big hype around mapping data. With the emergence of smart phones with built-in GPS receivers the possible uses are getting more and more. Just one example is the service Google Latitude¹⁵, which shows the current location of your friends on a map.

Society and Democracy

Although most people in Europe live in democracies, many don't feel represented by their representatives. People go to elections because they fear things might get worse if they don't go, and not because they feel it will get better. People have the impression, that their representatives are just toys of the lobbies and the Mafia, following commercial interests.

In the previous chapter we learned how the information age can change our economic model. Now it's time to look at the social impact. Everybody can observe changes due to the information age – nearly everybody owns a mobile phone these days, people can't imagine living without the Internet any more, many people spend their time in social platforms like Facebook.

Can this economic model "peer production" also be used for new democratic and social models? In this chapter I will highlight some efforts in this direction.

¹¹ http://www.opencyclemap.org

¹² http://www.openrouteservice.org

¹³ http://www.cloudmade.com

¹⁴ http://www.openstreetbrowser.org

¹⁵ http://www.google.com/latitude

The Debian Constitution

Debian is one of the largest non-commercial distributors of software based on GNU and the Linux operating system. Many commercial distributions, for example the well-known Ubuntu Linux are based on Debian. To structure communication and decision making the project developed an own constitution¹⁶ which was ratified in 1998 and has been revised several times.

The constitution defines the roles and powers of developers and their elected project leaders. It also defines the process of amendments and elections. It is noteworthy, that the Debian project uses a different kind of elections, in which every voter ranks all or a part of the possible options and can therefore set priorities.



Patents Peer-Review

As the U.S. patent office is overloaded, a web service¹⁷ for public participation of the patent examination process was started. During this process it has to be determined whether a patent is already covered by prior art. The patent examiners usually have about 20 hours to review a patent, but often they can't find all valid information. This peer process should help, as all interested peers can provide objections. Part of this peer process is a discussion with the goal to find only the ten most important objections, which will get forwarded to the patent executives.

The patent peer-review is still in an evaluation phase, but the first experiences are promising and – as [Nov2008] states – could be "a model for precisely this sort of collaborative governance" which we need, because it sorts out bad contributions.

Reusing Art - Creative Commons

The current Copyright laws restrict creativity. If you search around YouTube¹⁸, you can find new versions of songs, new videos for existing songs or mash-ups (mixes) of songs and videos. But in fact the people creating this great art are seen as criminals, because of current copyright-rules. In some cases people just have to take down their art, in bad cases they have to pay high fines.

To work against these problems a non-profit organization called "Creative Commons" was founded. Artists are encouraged to publish their work under a so-called Creative Commons license, which allows re-using art under special rules. The organization publishes the licenses and promotes the use of them.



On most media we pay we can read "All rights reserved", but on Creative Commons media you can read "Some rights reserved". On the internet there are already many websites who use Creative Commons licenses, e.g. the TED-Talks²⁰ or Flickr²¹, where users can decide which license to use.

This essay is also available under a Creative Commons license – so take it, extend it, sell it, use it for other works. But you have to attribute it to me.

- 16 http://www.debian.org/devel/constitution
- 17 http://www.peertopatent.org/
- 18 http://www.youtube.com
- 19 http://www.creativecommons.org
- 20 http://www.ted.com/
- 21 http://www.flickr.com/

CouchSurfing

"Participate in Creating a Better World, One Couch At A Time"

CouchSurfing²² is a global social network for connecting travelers with the local communities. One of the main ideas of CouchSurfing is, that travelers can stay at a place of somebody who lives in that place - without paying. But in fact it's more than just free accommodation, it's about cultural exchange and making friendships. The system is based on trust - every user has a profile where he/she presents him/herself (like in most social platforms). But it also features references of other users who got into contact with this person and some more functions that improve trust. So it's possible to get an image of this person beforehand. As a result, negative experiences are very uncommon, especially when users choose their hosts or quests wisely.

In most places the CouchSurfing community has regular meetings, where local people, foreigners living in that place and travelers can meet and exchange their experiences. CouchSurfing is available all around the globe, in March 2009 the system reached 1.000.000 registered users. The biggest cities in the world have up to 20.000 registered users, Sofia at least 1.300 (as of April 2009).



Bulgaria (Source: couchsurfing.com)

In my opinion CouchSurfing is sustainable, because it promotes cultural diversity, as it enables exchange between people on a very personal level without commercial interests. Tourists often get a standardized image of a foreign place, seeing all the sightseeing spots and listening to stories of the tourist guide. To meet local people, talk to them, experience their life, listen to their views is a much deeper experience.

Influence on Urbanism



Berners-Lee calling for "Raw Data Now!" (Source: TED Talks)

All this new methods of working together and commonsbased creativity sound great. But, they have a simplification: It's your choice if you want to participate or not. Something which is not true for urban planning, as it affects everybody living in a region. And you can't deny hierarchies as you have the laws, municipalities and politicians. On the other hand, urban planning and politics suffer of missing participation of the residents (at least in most communities), so these methods could make a change.

Tim Berners-Lee, the inventor of the WorldWideWeb, calls for open raw data (in [BeL2009]). In his opinion governments, municipalities and companies shouldn't only create beautiful reports about the data they collect (all kind of data: crime data, weather data, traffic data), but in the

first place they should provide the raw data, the original data, so that people can use that data to use it in new, creative ways. This is were transparency is coming from, and not from beautified reports and questionable statistics. He argues that it is the residents money which pays for the collection of the data, so the residents should get this data for no additional cost.

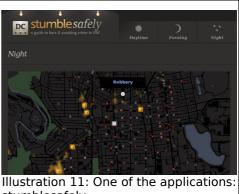
In this chapter I want to highlight some examples were organizations already tried to apply peer production methods in planning and politics.

²² http://www.couchsurfing.com

District of Columbia: Apps for Democracy

The district of Columbia in the U.S. is one of the first governments to publish all their collected data in a computer readable way. And they even made a contest²³ last year to create applications that make creative use of that data. The results were really successful, 47 different applications were created, which mix the data sources and present the data in new ways.

The results: Applications to create tours through the city with historical interests; Applications showing free parking places, based on the information of the parking meters; Applications for car pooling. Applications that show recent crime activities and pubs, so that people can find a save way home. And so on.



stumblesafely

Mysociety.org



A very promising example is mysociety.org²⁴, a non-profit organization in the United Kingdom, which provides several democracy websites for the UK. They are fully Open Source, organizations in other countries can just take them and adapt them to their needs. Most of their websites are meant to improve communication between residents and politicians.

One of their web services is FixMyStreet²⁵, where people can enter problems like pot holes in the street, piles of trash or dangerous spots and they will automatically be reported to the local

municipality, so they can go and fix it. You can also go and browse problems near your place and get automatically informed if something changes (to the bad or the good). You can even integrate the service to other web pages, what some municipalities already did on their home pages. Their newest extension is an application for the IPhone, so you can enter problems as you walk.

This might sound similar to functions of websites of municipalities themselves, like citizens services. But the difference is the organization who takes care of it, because it's a non-governmental organization. Therefore it's a bottom-up effort and not topdown. The people know where the problems are.

The Open Planning Project

The Open Planning Project²⁶ is a U.S. non-profit organization, that develops open source software, media products and other projects to catalyse social change.

OpenGeo²⁷, a collection of free software tools for GIS, is one of their projects. Some of these tools are also widely used in the OpenStreetMap-community, but there are also some municipalities that use them, e.g. TriMet Portland²⁸, who use them to improve public transportation and provide an on-line trip planner.

²³ http://www.appsfordemocracy.org/

²⁴ http://www.mysociety.org

²⁵ http://fixmystreet.com/

²⁶ http://theopenplanningproject.org/

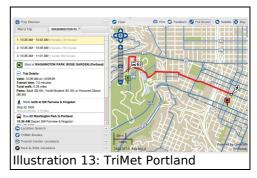
²⁷ http://opengeo.org/

²⁸ http://trimet.org/

Another initiative is OpenPlans²⁹, a platform for social activism. Groups can create project in this platform and use them for documentation and coordination. They feature blogs, task lists, a wiki, photo pages, mailing lists and much more.

Conclusion

Although many of these projects sound very promising, there's still a long way to go. Although Free Software has a big influence on the Internet



community nowadays, most people are not aware of using it and don't understand the impact (and maybe don't even care). Who knows that most of the servers of Google are running Linux? Mozilla Firefox gained a market share of more then 20%, but who uses it, because it's free software?

The peer production community is a grassroots development. People join to social platforms because they get some benefit, they use free software because it's better and free, they report pot holes on FixMyStreet. It takes time to spread, especially as most of these projects don't have a lot of money and are distributed by word of mouth and have to fight against FUD (Fear, Uncertainty and Doubt) of the big players. But as constant dripping wears away the stone, the projects get more attention.

As Hartmut Bossel states in [Bos1998], we need a change to a more sustainable way in many different ways: social, environmental and economical. The presented solution of commons-based peer economy could be one of the puzzle stones for our future. On the other hand Michael Bauwens states in [Bau2009], that "fundamental change is only achieved by a congruence of change, both from the bottom, and from the top, a double reconfiguration of classes to a new system." But currently, catalysed by our crises, we can see change in the top too: Barack Obama supporting opening of public data and ecological change, big companies like IBM investing in Free Software. Michael Bauwens concludes in [Bau2005], "that a new kind of society, based on the centrality of the Commons, and within a reformed market and state, is in the realm of human possibility."

Still there are many problems to solve, e.g. how to integrate people who don't feel comfortable with computers or can't afford to have one, especially minorities could be affected. People without access to the Internet could get excluded from democracy. On the other hand the spread of mobile phones (where internet access will get common soon) is very high, and it was never easy or possible to integrate everybody into decision making processes. Maybe the Internet could be a chance to integrate even more people than before?

In the time of all of our crises these projects showcase an alternative future. A future of constant innovation through competition. A future of working together in communities, of people who work there because they want to and are excited about it.

²⁹ http://www.openplans.org/

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