

This is the author's version of a chapter accepted for publication in the *Handbook of Peer Production*. Changes resulting from the publishing process such as copy-editing, typesetting, and other quality control mechanisms may not be reflected in this document. This author manuscript version is available for personal, non-commercial and no derivative uses only.

Citation: Bloom, P., Mecky, M., Okolloh, O., Taherivand, A., & Zacchiroli, S. (2021). Making a case for peer production. In: M. O'Neil, C. Pentzold & S. Toupin (Eds.), *The Handbook of Peer Production* (pp. 373-387). Malden, MA: Wiley-Blackwell. ISBN 9781119537106 Available at: <https://www.wiley.com/en-au/The+Handbook+of+Peer+Production-p-9781119537090>

## **The Handbook of Peer Production**

### **Chapter 28 – Making a Case for Peer Production**

Chapter 28 – Making a Case

**Interview with Peter Bloom, Founder of Rhizomatica, Oaxaca, Mexico**

**21 February 2019**

Sophie Toupin (ST): What is Rhizomatica?

Peter Bloom (PB): Rhizomatica began in 2009 as a quest to make alternative telecommunications infrastructure possible for people around the world dealing with oppressive regimes, the threat of natural disaster, or the reality of living in a place deemed too poor or isolated to cover. Currently, only very large, powerful companies have access to the mobile spectrum and the concessions to provide cellular service. But their business model and the technology that these traditional providers use have proven unable to solve the problem of connecting much of the world. Rhizomatica set out to break this oligopoly and allow communities to become network owners and operators, as well. Thanks to a variety of open-source efforts developed in the last few years, it has become technologically and economically feasible for a community or an individual to provide cellular service to thousands of people. Rhizomatica was amongst the first groups in world to embark on actually making this technology something that could help people.

ST: How would you describe Rhizomatica's approach?

PB: In our work we try to look at different aspects of telecommunications, we can think of it as a triangle of three different elements that we have to deal with, i.e. technology, policy and the economics of the network, if we really want to change things. First, we want to make technology

## Chapter 28 – Making a Case

more accessible, easier to understand, less expensive and open source. Second, considering the policy and regulatory aspects of telecommunications, we want to make those more favorable to people-centered networks. Third, there is a more organizational component to our work that has to do with the economics of the network, the sustainability of the network, the social engagement of the network and how you can create other ways of running networks, maintaining them, getting more community value out of the networks, value that is not so much economic, but how the network should be useful to people. All these elements that are part of our approach are at odds with the global internet platforms.

ST: Great, excellent. So, in your view is Rhizomatica connected or linked to peer production and if so, how?

PB: I guess it kind of depends on what your definition of peer production is. At Rhizomatica we look at it more from a people's perspective – people need to create or produce the network that they want to use, and I think it's very centered on moving away from being a user. It requires active participation, it requires investment from people, it requires people to understand how things work. It requires keeping all of those things going, so it's a pretty active process. I think it's somewhat about peer production: it can get a little complicated as to whether or not you're producing the network and maintaining it. I think it's more of an ensemble of many different things, that come together, that are put together in such a way, that they can actually be maintained and keep going and affordable, but certainly the idea is with a group of people living in a place where there is no existing network, they are literally producing the network that they then use, and then reproducing that network everyday, so that it continues to exist. In that sense,

## Chapter 28 – Making a Case

I do consider it as a type of peer production. There is a very physical component to the process, the communication infrastructure is produced and shared by everybody. People are installing, putting up, physical base stations, the radio equipment and putting them together in a way that works.

ST: At Rhizomatica do you use the notion of peer production?

PB: I mean I wouldn't say that we actively use that term. I think we were – many of us at Rhizomatica have engaged with peer production. When I was doing my master's thesis, I was definitely engaging with those ideas, which helped me further think about Rhizomatica. I wouldn't say we explicitly use the word peer production, but I think it is a general concept that we are engaged with.

ST: What brought you to Rhizomatica and how was it co-created?

PB: For me two elements are intertwined in thinking about Rhizomatica and explain why we decided to co-create it: the aspect of need and an ideological commitment. The need for Rhizomatica as a cellular communication network is pretty obvious where there is none. The ideological commitment is what distinguishes us from other organizations. We believe technologies are hackable in the sense that we can build a whole communication network, without being dependent on major corporations. This commitment on our part where we said no, let's question the hegemonic model that's being put out there and try to set up our own. So, I think getting back to your question, the need was there: people want to be able to communicate

## Chapter 28 – Making a Case

differently. The most vital question for us is: what are the tools people need to solve their communication needs? That is the need part of the project that pushed us to co-create Rhizomatica and then there is the more ideological part where we believe that there should be an open source solution for cellular communication. We believe that people should be able to access the spectrum that they need, not just corporations. We believe that people can and should produce, build their own networks and operate them rather than being passive users. Does that answer your question?

ST: Yes, definitely. Where did Rhizomatica start? Was it in Nigeria?

PB: The roots of Rhizomatica go back to the work I was doing in Nigeria where I was working with people who were being displaced from their neighborhoods and also people working against the oil industry in the Niger Delta Region. I was working as a citizen journalist doing participatory video documenting different rights abuses that were happening and it just became evident that the easiest and best way to do the work, would be if people used their phones, actually to do the filming of the things they wanted to film. Now this has become a totally normal tool or technique activists use, but in 2009 it was not. We were trying to get people in the Delta Region video cameras. Once the footage was on people's phones, they were able to do a lot more with it, but it was really expensive to use the 3G network, to do a video and upload the video to the 3G network, it was twice someone's monthly salary and then the networks were highly surveilled by the Nigerian state. We tried to come up with a different way that people could pass information between their phones and we got a mobile mesh network working and all these other crazy things, that were kind of more a theoretical solution than practical one. That's

## Chapter 28 – Making a Case

kind of how it started with Rhizomatica. When I came to Mexico, we started doing something slightly different i.e. building a cellular network for and by the community in Oaxaca. At Rhizomatica we are not married to one technology, we are not married to one process or toolkit. A people's network of cell phones is a pretty good thing to engage people in, but again if you work with indigenous folks – in Mexico we work with indigenous folks, and in Brazil too – then we use short wave radio. It just really depends on where people are at.

ST: What is the impact of Rhizomatica? In which way does it make a difference?

PB: I guess it has a really tangible impact to have set up a people's cell phone infrastructure network. First, it helps people communicate better since we are an actual functioning network. Thousands of people use Rhizomatica infrastructure for their everyday communication, which they helped build. That's at a really practical level and then we also are pretty engaged with a lot of this policy and regulatory work. We are helping to change policies at the international level so telecommunication policies can be more favorable to community networks. Those are the two biggest impacts. As a case in point, in Mexico our work enabled a change in policy at the national level. It's no longer illegal to use the spectrum to set up community cellphone networks. You can now get a license to do that in Mexico. It made some progress in terms of legitimizing and legalizing this type of people's-centered telecommunications.

ST: What is driving Rhizomatica forward?

## Chapter 28 – Making a Case

PB: We invest a lot of time and resources into different tools, so we want as many people as possible to use those tools, if they think they are useful. We have this functioning network in Oaxaca, that I was talking about, that we want to keep going, because people are using it. Turning it from a 2G network into a 4G network is a goal; this is sort of keeping us up with technological change. We are now collaborating with a much larger group of people. This motivates us. Before it was just us hacking away this problem here in Mexico, and now we work with people from Africa, from Asia, from all over the world. We are trying together to build this more inclusive communication situation. So in that sense it keeps us going.

There is also the state of the two main monopolies or big giants that are keeping us busy: one giant are the telecommunications companies and the other giant is the internet companies. The internet was supposed to be this great invention for the people, but it turns out there are a lot of problems with it. It's been highly privatized and commercialized and it turned into a massive spying and data-mining platform. We feel that from a practical standpoint what we are co-constructing helps make this situation less bad, and I think that on the telecommunication side, you see this movement toward the internet of things or the 5G network, this is what the telecommunication companies want to do and I think that we feel we are part of the resistance to those tendencies. We are not the only ones, but I think we are an important one and that motivates us to keep going.

ST: Voluntary engagement is an important part of peer production. I'd like to ask if there any voluntary engagement in Rhizomatica? You have volunteers? And you are non-profit organization, correct?

PB: We basically started with the following principle: if there was money, we shared it around. Last year in 2018 we got our papers in order and we turned Rhizomatica into a non-profit organization. This is mainly due to the fact that we were doing too many things at the same time, there were too many people involved, and the type of work we were doing was very high level such as IT or negotiating with government. So I just felt like we needed a more formal status to engage in the type of work we do. There are also other parts of the Rhizomatica project that we wanted to get autonomy of status for. The network in Mexico for instance is now its own organization. We decided to split it out from Rhizomatica, so that it could do what it needed to do rather than being dependent on Rhizomatica. So yeah, our work has been fairly formalized at this point. There are still people that help out and volunteer, but now, it is mainly a paid staff.

ST: In your opinion are there tensions between the institutionalization of Rhizomatica and its voluntary engagement? Do you see any tensions?

PB: No, I don't think so. The biggest tension was around the split between the network in Mexico and Rhizomatica the non-profit organization. This was a very complex and complicated process. The main issue was that Rhizomatica was only dedicated to the Mexico cellular network project, and not interested in having full-time jobs. We were ideologically committed to doing the work that needed to get done on a daily basis for the network to be functional. We basically built a network, had an informal group of people trying to keep that network going and that was that. And then the network in Mexico became an official entity. As the community itself had invested a ton of money and time into it we were under a lot of pressure from the communities to



## Chapter 28 – Making a Case

make the network better and to make the network legal. This is what led to the formalization or institutionalization process. We have ten or eleven staff now who are all in Oaxaca. It is all local people, local staff, making the network function together with the community. It requires a very different set of skills and set of attitudes to keep that going.

ST: The office is in the state of Oaxaca but where are the communities using the cellular network communication located?

PB: The cellular network covers more than 70 towns and villages and the central office is in the city of Oaxaca. Those 70 villages are spread all around the state of Oaxaca. Some are two hours away, some are seven hours away, but the midpoint is the city.

ST: According to you what has changed in the world of peer production?

PB: What we are trying to do at Rhizomatica is to allow more people to access information and get online. These simple things are much more problematic and difficult positions to hold compared to a few years ago when we were not totally and fully conscious about what was going to happen. I think that the peer production model is based on a series of assumptions about there being a neutral platform on which to do that. This description does not encompass the whole of peer production, but it is an important dimension. Let's think about when we started doing this mobile mesh network in Nigeria it was totally a peer to peer infrastructure. But those experiences did not scale up partly because of the ways in which the internet has evolved over the last ten years. If you look at the layers of

## Chapter 28 – Making a Case

the internet (fiber optic, Internet exchange points (IXPs), etc.) you see massive consolidation. What you see is that these companies, the global platforms like Facebook and Google, are actually the ones building fiber cables and installing them. I think we are very close to losing the peer to peer model of the early internet. Pretty much all traffic on the internet is going through these platforms and then you have the internet turning into a content delivery network, rather than a sort of flat peer to peer network. From the actual architecture standpoint the industry has dramatically changed how the internet used to be. You can still do peer production on top of all of that, but it's harder and harder. Like you and I right now we are having a conversation on Signal, right? Which is kind of like oh we like Signal because it has good cryptography. All of us who believe in the good part of peer production, the peer to peer aspect of it I would say we have more or less given up on it. The tools that we were building five or ten years ago like XMPP this is kind of gone. I would say we more or less have lost a lot of ground over the years. We are talking about the largest corporations in the world, Facebook, Google and the like, the most valuable corporations in the world, who have found a way to suck a ton of money out of essentially nowhere. So they get to build their own fiber-optic networks, because they have the money to do so. They have created a completely separate internet on which all their services run and that's why their stuff works better! You can get a YouTube video to work with a pretty crappy connection. It's not only a money thing obviously, but when it gets down to it, then you can run all of your traffic through your own data centers and over your own network. You can control it a lot better. But more so, the issue is that the internet has become an unsafe space in a bunch of ways and I don't think it was like that before or at least it wasn't evident. There is a lot of garbage, of misinformation and surveillance on the

## Chapter 28 – Making a Case

internet and a number of years back it didn't feel like that. I think the actual infrastructure itself was better, it was fairer, it was more balanced and it was more decentralized. Is it still a tool on which peer production happens? Sure, I mean you can still get your Wikipedia, but it feels less and less like a - I do not want to call it neutral - but it feels less and less like a safe space to be able to do things. I think a lot of the people that we work with including us, are now looking at how do we do a lot of what we want to do by circumventing the internet, how do we do local servers, how do we do local services, how do we tunnel through the internet to meet each other in some safe way? So now the internet itself has become the thing to circumvent, which is interesting. I think a lot of cool stuff is going to come out of that, but again we are talking about really small projects, with not a lot of money. I guess the hackers are not always the most organized group of people and I feel like we are dealing with something that's highly, highly organized and which has unlimited funds. In this context what do you do? Do you fight back? Do you just completely avoid it? Do you engage with it at all? It's good that people such as hackers and others are building the kind of services, the kind of tools they want. I just also think, we need to engage, to be more aware of what's happening with the internet of things for instance. That might potentially reshape not just the way we get information, but how we interact with the world. I feel there is not enough of political engagement with where things are going and that troubles me. What are we actually going to be able to do in the future?

ST: That's a grim picture. My last question is about imaging the future of peer production. What will it look like in ten years, twenty years?

PB: Well, I mean at this point I am very pessimistic about where things are going. So, again how much of that affects peer production? I mean we will still be able to talk to each other over great distances. We will be able to collaborate and build things. There will still be a thriving Linux code base. But the question is how well that is going to be able to respond to what people need and what people need in a network in a shitty world. I do not know how else to say it. I mean one of the things that we are talking about internally at Rhizomatica is how to rethink our networks for basically the collapse of civilization? I do not want to get too dramatic about it, but the place that we are working in now in Oaxaca, they are getting killed by climate change. Their roads are being washed out in ways they have never before. Their coffee is being killed by these bizarre molds that never grew on them before. People's lives are being seriously affected, so the question for us if we want to try to help them in their communication is: what does the network need to look like to be able to continue functioning when a bunch of other systems start failing? The simple answers are: we need to put solar energy, we need not to rely on satellites, or fiber-optic. I think that this peer production space needs to probably recognize the fact that people's lives are becoming more difficult. That is the central piece of the matter. I think the theoretical part needs to be as grounded as possible in praxis and practicability to continue to be useful. What does peer production look like when you know we are living inside this crazy internet network where we are spied on and surveilled? I don't know exactly what forms it will take but I hope it will allow us to maintain some level of freedom and economy for communities to satisfy their needs. Capitalism and the current state of things is doing the opposite, taking that away from us.

**Interview with Mariam Mecky, Communications Unit Head at HarassMap, Cairo, Egypt,**

**13 March 13 2019**

Sophie Toupin (ST): What is HarassMap? And, how do you think it is linked to peer production?

Mariam Mecky (MM): HarassMap, a volunteer-based organization, was launched in December 2010 by a founding group of four women together with tech partners, advisers, and volunteers. The four founders were prompted to launch after experiencing sexual harassment in their daily lives, and that almost everyone we knew, witness it on a daily basis. They have also been working against it since mid 2000s. HarassMap focuses on working against the social acceptability of working harassment where its vision is to engage all of Egyptian society to create an environment that does not tolerate sexual harassment. Part of HarassMap's work is to highlight the prevalence of the issue to work against it. To be more specific around HarassMap scope of work, HarassMap is an information and communication technology (ICT)-based participatory action initiative that serves multiple functions: It highlights the gravity of the problem by providing an outlet for testimonies from those who have suffered or witnessed sexual harassment; it provides data that improve understanding of how sexual harassment is evolving in Egypt, which in turn provides HarassMap with information to create relevant communication campaigns and research programs; and it serves as a tool for community outreach teams to motivate the public to stand up against sexual harassment. In this manner, the idea behind HarassMap is directly linked to peer production; where the four founders were self-organized, collaborated, and coordinated on this project with a shared outcome relying on voluntary

## Chapter 28 – Making a Case

engagement. Capitalizing also on the idea of crowdsourcing, in which I elaborate more on in further questions, this project very much utilized the internet for this shared outcome.

ST: What brought you to the HarassMap? How did you become involved in this commons-based production?

MM: I personally became involved because I was particularly interested in their approach around sexual harassment, as well as their efficient way of collaboration and management. I was also incredibly passionate about the cause.

ST: According to you what is the impact of HarassMap? In what way does it make a difference?

MM: The main successes of HarassMap work is that we use the reports received on the map to draft and publish studies and build campaigns on this data that counter social acceptability and normalization of sexual harassment debunking stereotypes and raising awareness. One of HarassMap's early successes with creating a zero tolerance anti-harassment policy is its partnership with the biggest public university in Egypt, Cairo University. In that process, HarassMap provided a draft of a recommended well-rounded policy that encompassed definition and types of harassment, enforcement mechanisms and penalties for harassers. We, then, worked with stakeholders from the university, NGOs, and activists to tailor and implement it in the university. This policy is now used as a guideline and reference for 15 other universities in Egypt. HarassMap also assists businesses with adopting and enforcing anti-harassment policies. As a result of our work, we have received requests from hundreds of activists and organizations in other countries to assist them with replicating our model. The founders made the HarassMap concept completely open-source. Since its launch, although it was not its mission until 2016, HarassMap has advised and supported over a hundred activists and NGOs from around the world

## Chapter 28 – Making a Case

on setting up HarassMap-inspired initiatives. Independent groups in at least eighty different countries have been advised on how to launch similar projects. The countries include Jordan, Libya, Turkey, South Africa, US, Canada, Malaysia, Indonesia, Japan, Cambodia, Morocco, Saudi Arabia, Afghanistan, Kenya, Sudan, UK, India, Nigeria, and some groups in South America. The groups and activists from these countries received advice, and other succeeded in setting up local versions of HarassMap.

ST: How do you organize collaboration in your project?

MM: HarassMap operates in a less rigid hierarchical structures than those under more traditional organizational or business models. It is organized as units; headed by a unit head and a coordinator. We have at the moment four units based on our policy that is updated every year. The four units are Safe Areas Unit, Communications Unit, Community Partnerships Unit and Research Unit. Many of these units rely on volunteers. Safe Areas Unit that focuses on sexual harassment training and policies, for universities, schools and corporates. More than a thousand volunteers were trained and assisted in building zero-tolerance zones within communities and inside institutions, both informally and through policies. By creating physical spaces that do not tolerate sexual harassment, HarassMap's offline work is focused on building a society that guarantees safety for all people from sexual harassment. In the Communication Unit, public campaigns conducted on traditional and social media use learnings from reports and community-based work to change perceptions that create and reinforce a culture of blaming the harassed, excusing the harasser, and accepting sexual harassment. HarassMap also steers media discourse away from unproductive stereotyping towards a facts-based positive discussion of what measures

## Chapter 28 – Making a Case

need to be taken to end sexual harassment. As for Research Unit, HarassMap also conducts traditional research to understand and learn more about sexual harassment. In 2016, HarassMap conducted a study on how the usage of different ICT channels can generate societal change.

ST: What are the main drivers of HarassMap?

MM: At the time of HarassMap's launch in 2010, legal recourse for people who experienced sexual harassment was limited by several barriers. Victim-blaming and negative effects on reputation were powerful deterrents keeping many silent, and away from police stations. Moreover, the law required bringing the harasser to a police station, where additional harassment often occurred, providing witnesses, and convincing police to report the crime. While not denying that legal reform was needed, the co-founders believed that in a context in which existing laws were not enforced because sexual harassment was not seen as a crime, advocacy for a new law would have little impact on its own. Therefore, they decided to tackle what they believed to be the source of non-enforcement – social acceptability. This idea remains at the core of HarassMap's work also today. In fact, there are strong social roots and an established history in Egypt for rejecting sexual harassment. We believe that bringing back social discouragement needs to come from within, and we consider ourselves to be ordinary members of the public. We see crowdmapping as a way to decentralize activism on the issue away from experts and policymakers, who often view society as a passive beneficiary, and restore an active role for society in addressing the problem on its own behalf. For the first time in Egypt, HarassMap's crowdmap offered a free and easy tool for providing a direct means to voice sexual harassment experiences safely and anonymously. And speaking out, HarassMap's co-founders had learned during their work on the issue prior to HarassMap, was very often the first step to activism. Crowdmapping has, however, been only one element in our approach since the beginning. More



## Chapter 28 – Making a Case

than “just a map,” HarassMap simultaneously launched a community mobilization program to train and coordinate anti-harassment activism in neighborhoods, interactive social media outreach and media relations, all designed to build off of each other and the crowdmap to convince people to stand against sexual harassment and deter harassers. The system also bridged a gap, sending victims an auto-response about existing but little-known services like legal aid and psychological counseling. Finally, the reports and map provided evidence for volunteers to mobilize bystanders to create neighborhood “safe areas” in which sexual harassment would not be tolerated.

ST: In your view, what are the main advantages of this approach for the generation and dissemination of a specific type of knowledge?

MM: As previously mentioned, the main driver for HarassMap was working against the social acceptability of sexual harassment. Part of the work against sexual harassment, HarassMap worked on highlighting the extent of the problem initially through the map and expanding into other programs and means. As one of the founders Rebecca Ciao put it “We can't say today how bad the problem really is and that's one of the things that we're trying to do with HarassMap.” Crowdsourced data collected from the reporting system helps document facts about the issue, counter stereotypes that blame the harassed and make excuses for the harasser, challenge previously held views about who harassers are and what their motivations are, and emphasize the criminality of sexual harassment in Egypt. HarassMap uses an integrated approach to creating zero-tolerance for sexual harassment and assault that includes reporting and mapping harassment incidents to document the problem; public campaigns to spread accurate information and mobilize the public to take action; and anti-harassment policies inside institutions such as universities, NGOs, corporates, and schools, to establish consequences for harassers. These

## Chapter 28 – Making a Case

policies are easier to implement and monitor within an institution, empowers their own leaders, and are an important step to spreading a culture of zero-tolerance.

ST: What would, in your view, characterize a successful peer production project, and why?

MM: A successful peer production project, in my opinion, is what is centered around a certain social cause and sustained through resources or/and revenues.

ST: Is there a problem with success or growth? Do you see tensions between commercial or non for profit ambitions and voluntary engagement?

MM: There is often tensions between commercial or non-commercial work for voluntary engagement, not even necessarily for profit ambition. Commercial is often viewed as problematic from the public as it only targets certain privileged groups while non-commercial is rather risky for the success and sustainability of the project. Hence, the non-commercial aspect in the case of our project may stand in the way of sustainability as the current work is funded only through individual projects of grants and donors without any expectation of financial returns.

ST: What would be your advice for people planning to start a peer production project such as HarassMap?

MM: Our advice would be to be able to maintain pillars of peer production as voluntary collaboration and open distribution of means of production. More importantly, to consider in your strategy whether commercial or non-commercial means to ensure sustainability of your projects. It would also be as well up to date with knowledge of the idea behind your project and constantly developing it while ensuring to be up to the challenges of peer production.

## Chapter 28 – Making a Case

ST: In your opinion, what are the main challenges HarassMap had to tackle in order to thrive? And how should peer production be fostered?

MM: HarassMap has faced several challenges. First, there has been the challenge of volunteer management, as our project/ organization is volunteer-based organization. This included a lot of follow up, and making sure they are committed to take part. Another challenge has been financial resources as at first, it was solely based on voluntary engagement, with our first funded project was in 2012. This challenge rose again in Egypt; with the restrictions and bureaucracy of procedures. Another issue was the map itself and the technology itself. We have had to work on it and develop it ourselves as there was an issue with the location, and we could not edit the application in the software itself as its customized and when we couldn't edit or add further questions. Hence, we moved to another platform creating it ourselves later. Lastly, there was also the issue Internet access and urging people to use the app to report. This has been part of my we complimented our online work with various offline work that is tackled above. As for how peer production should be fostered, the main pillars of my understanding of peer production should be maintained; from voluntary engagement and cooperation, common knowledge and openly accessible means of production.

**Interview with Ory Okolloh, Co-founder of Ushahidi, Director of Investments at Omidyar Network, Johannesburg, South Africa**

**17 June 2019**

Christian Pentzold (CP): If you think about your time with Ushahidi, what was the project about?

Ory Okolloh (OO): At the time, in the aftermath of Kenya's disputed 2007 presidential elections, the project was about collecting information from citizens about the post-election battles, what was going on then. It was intended both as a workaround to government censorship at the time, but also kind of a recording of what happened or what works best, which is why the name is Swahili for testimonial. That is how the name came about.

CP: What brought you to the project?

OO: I think at that time I was blogging and people left comments telling their stories in the comments in this blog at that time. I think just realizing that the volume was heavy, it was hard to kind of moderating the comments, there needed to be bit of a systematic way to tag and most importantly link it to a map, so you could track the reports along with the location and begin to sense of parts were most affected who needed help and so on.

CP: Looking back, what do you think, was the impact of Ushahidi on society or how did it make a difference?

## Chapter 28 – Making a Case

OO: I think in the situation then and even later, it was certainly a gamechanger at first. It relied on the crowd early on, in 2007 or 2008, when the web was a lot more open and things weren't concentrated on platforms. It was a great model of using the crowd, the people, the peers and all their information. Relying on peers is about correcting wrong information. Folks could report errors other had send in or report what was false. I think this was an opportunity and it was later used in other incidents for crisis response during natural disasters when people were not able to get to the ground immediately. So why not use what people already have known on the ground, carry together what they need? The idea was to rely on the crowd and provide a way for people to share important affairs in a simple manner. I think that had an enormous impact.

CP: What are the main advantages of such an approach for the generation and dissemination of knowledge?

OO: You just have to look at the history of Wikipedia and what were back then called message boards and news boards. This idea of learning from others is still transformational. When you talk about peer production it's about generating knowledge and being able to learn from people who share information even you were sitting in Nairobi. We never had access to, you know, just knowledge. I think it's about breaking down the barriers around knowledge by sharing it. I think it also is about the breaking down the boundaries around information. It is this ability to get instant information, not always quality information, but the idea that you don't need a whole bunch of intermediates who filter information. And finally, I think if you look at how peer production, the idea of language diversity becomes important. How do you share information

## Chapter 28 – Making a Case

that makes sense for people. Still, there is much in English but peer production allows you to add generate content in other languages, too.

CP: For people who want to start a such project, what would be your advice?

OO: I think, it's much harder now, because you know, the platforms are so dominant. In a time of online video, how do you to get around YouTube for real-time information? You can't get around Twitter. Nothing beats Twitter, right? And the same for Facebook when you try to reach out to audiences there. I think the challenge is becoming a signal in a world with a lot of noise. This makes it a bit harder now than it was before. Folks who want to begin now are thinking about where to fit in, in a particularly crowded space with a lot of noise and growing distrust of what people see online. I think it is a challenge, but at the same time it could be an opportunity when people look out for trusted information providers. I think it's about balancing peers and experts and this hybridity is probably what folks want to think about, if they try to start peer production projects now.

CP: When you imagine the future of peer production, what could it be like, let's say in five years, or in ten years?

OO: I have no idea. I think if you look at what are now called influencers, I think that is kind of the future, where there is a mix of this kind of a hybrid world and less a crowd phenomenon. I think this is getting back to verification, probably linking that with AI, in terms of sorting out content, even though peer production is getting better in sorting out what's real and what's not. I

## Chapter 28 – Making a Case

think it's interesting to see where young kids go and to look at how multiplayer gaming is now the only way you game. There is for example a whole scene where communities are emerging in digital spaces. I think the future will show out in very different ways than we expect.

**Interview with Abraham Taherivand, Executive Director of Wikimedia Deutschland,  
Berlin, Germany**

**18 March 2019**

Christian Pentzold (CP): I would like to start with a basic question: What is your project about and how do you think it links to peer production?

Abraham Taherivand (AT): First of all, I would like to highlight that Wikimedia Deutschland itself is an organization that supports a variety of projects around Free Knowledge. There are fifteen different Wikimedia projects, but of course the most known or well-known project is Wikipedia, the free online encyclopedia, which is used by millions of people every day. Wikipedia collects the knowledge worldwide and makes it accessible to everyone at any time. However, I would say encyclopedic knowledge cannot only be represented. It needs to be constantly discussed and negotiated to avoid that there are personal opinions in an online free encyclopedia, because that's all about. It's about knowledge and not opinions. And for a project like Wikipedia it needs the intelligence and of course also the joy of the discussion and by the end of the day also the diligence of all the people involved in the project. The mayor success factor of Wikipedia and the other Wikimedia projects is, that everybody can participate. This is one mayor point: to be able to contribute and to be part of that. Wikipedia is the world's largest example for collaboration in a volunteer project and the best proof that it works. The German version of Wikipedia just turned eighteen on Saturday.



## Chapter 28 – Making a Case

CP: What brought you to the project?

AT: I would not count myself as an editor on Wikipedia. Maybe it is more really about what brought me to Wikimedia as an organization and that was in 2012 when I had the chance to found the Wikidata project together Denny Vrandečić. After more than six years Wikidata is now the most active sister project within the Wikimedia universe. We started with the vision of having not only free knowledge, but free structured knowledge. We wanted to have a centralized, structured knowledge base, which cannot only be edited and understood by humans. We focused on structured data and structured knowledge so that machines can edit and understand that knowledge.

CP: What is the impact of Wikipedia on society? In what way does it make a difference?

AT: What I would definitely like to highlight is really the vision we are fighting for and we are aiming for and a world in which the accumulated knowledge of humanity is free accessible to everyone and everyone can contribute to it. I think that's, in a nutshell, Wikipedia's impact. The software on which Wikipedia is based was one of the first that enabled users on the internet not only to read webpages but also to modify them directly via the browser and edit them in parallel with other users. Mediawiki was one of the first software solutions which really had collaboration running through its veins. Of course, the idea of free knowledge is relevant beyond Wikipedia. From my perspective, it stands for an approach that translates the right to education to the conditions of our digital society. Access to knowledge is the base for development. This

## Chapter 28 – Making a Case

applies to individuals as well as companies or societies. I see different layers of impact, but these are the major ones.

CP: How do you organize for collaboration in Wikipedia or the Wikimedia projects at-large?

AT: Based on my experience during the last two decades, I would say that it comes down to the level of technology, the tools we are using. Yet besides the tool perspective or technical perspective, we also have the perspective on values supported by the people. The rules and the governance models and the structures and the processes within Wikipedia are owned by the volunteer community. I would definitely say this is a key success factor – finding an organizational structure and I would also say the key success of Wikipedia are the principles of collaboration which are about sharing and openness. Anyone can participate, anyone can start anywhere and someone else can go on from there and bring in a new aspect or point of view. The Mediawiki software helped to ensure that. Unfortunately, even though Wikipedia now turned eighteen, a majority of people really do not see the edit button or they think you need to have an account to edit. No, you don't need that. To participate, you can just click the edit button and for instance find there is a semicolon missing or a point not mentioned or whatever. The hurdle to participate is not so high, but then we are coming back to another discussion, which I don't want to get into now – the user experience. To sum it up, in general I want to say that the organization of collaboration is on a technical, a tool level. But then, of course, it is also about values.

CP: Bringing it down to some core points, what would you say are key benefits of this kind of collaboration and production vis-à-vis more bureaucratic or hierarchical systems?

AT: I would say it's the thousands of volunteers. The volunteers that build our community are working together to create the world's largest collection of knowledge. Before I joined Wikimedia I came from the business world and you think about what drives the volunteers to contribute. Wikipedia thrives on the participation of as many people as possible. You can say that if we have a monetary incentive model, we could increase the quality of content. But that was exactly the opposite of how Wikipedia started. The idea Jimmy Wales initially had, was to have a bunch of very high professional experts payed to write something. And it did not really work out. The moment at which the system was opened to everybody where you can build on what someone else already put in as content and you can extend that content and keep that content up to date is, I would say, definitely a main driver within Wikipedia. That applies to all Wikimedia projects I would say. It's clearly the engagement of the volunteers, the passion and the willingness to invest their time to contribute to the projects. And we are coming back to the point that technology is also a driver that enables people to easily collaborate and build on content which is already there.

CP: Speaking about benefits – if we look at the flip side of it, would you also be able to point to costs associated with this kind of openness and information freedom?

AT: From a cost perspective, you can always bring the argument of efficiency. But that's not how nonprofit organizations are managed or run. Usually we are focusing on the impact we have. I see that the environment is changing around us. The political environment is changing and we want to provide information that is proofed and viable. With a vision of free knowledge,

## Chapter 28 – Making a Case

we need to have a free licensing framework around us. Content needs to be available under creative commons and this needs to be addressed constantly. Because if you are not, all of the sudden there could be push backs. Besides that, the digital transformation is something we need to be aware of. Our software did not really change during the last fifteen years, so the base software and the user experience for authors is nearly the same. Of course, during the last ten years the mayor change was there that people are not needed to know really a kind of a programming language to provide content for Wikipedia. So now we have a what-you--see-is-what-you-get attitude, that the people have a more sustainable or easier user experience. Nevertheless, if you don't have that and everything comes together, then also a project like Wikipedia is under threat and this is at least what we see in Germany where the number of editors is decreasing. There are several reasons for that. On one hand there are technical hurdles. On the other hand, we now have more than 2.2 million articles. The knowledge, has increased and new topics for are not so easily found by new editors. Nevertheless, in general the most important asset – and don't get me wrong when I use the term asset – is the volunteer base, the community. And of course, we need to take care that the existing community has the ability to grow healthy and to be stable within their own created rules and processes. The argument you usually get from people who are working in a more closed system is that we can either ensure quality or we can ensure that no one is hijacking the project. I personally don't see this predicament because that's exactly the point that when a system is open you have the possibility to identify if there is a hijacking process going on or not. In a non-open system, I don't see that this is possible. Of course, there are always bugs and security issues but at least there is a possibility to be transparent about that.

## Chapter 28 – Making a Case

CP: If the opportunity would arise, would you welcome private firms or investors who wanted to become involved in Wikipedia or in other Wikimedia projects?

AT: Of course. Now I am speaking for myself and in general I'd say yes because our vision is really free knowledge and everyone and everybody should be able to participate. There is a controversy within our volunteer community base about Google and Facebook or whatever Silicon Valley company is using our content to build business models, but that's exactly what free knowledge is about. That's also what we are preaching, or what at least I am preaching. We strongly believe that free knowledge should be reused by others. But of course, we must be transparent about who is involved in the content production. We are already working together with institutions, mainly institutions in the GLAM sector, with galleries, libraries, archives or museums. They are usually funded by state taxes. My experiences is that usually the corporate world is anxious to engage because of the need to have the content distributed under a free license. Yet I see that there is a shift during the last ten years. You try to collect intellectual property as much as you can, but for what reason? To sue your competitor and now I definitely see some companies saying: "Okay, let's release that in public". Because they believe that when we release it someone else can jump on it, build something better from it. I think this is the main hurdle for companies because they still think keeping knowledge is a competitive advantage, which I definitely don't see. Sharing is caring and releasing your knowledge is a great opportunity that someone else is bringing that knowledge, or information, or data to the next level and then you can take something out of that again.

CP: Looking back: What do you think has changed in a world of peer production and in

## Chapter 28 – Making a Case

Wikimedia's world since you started?

AT: I would definitely say, the awareness and the recognition from the science field. Ten years back, or fifteen years back, you would have been really, really threatened in academia if you would cite from Wikipedia and look there for references. Today, that definitely has changed. Wikipedia and the Wikimedia projects are really seen as a trustworthy source of knowledge. That's definitely something that has changed, especially within the science field. Leaders from the science field reach out to us. This is also due to movements around open science which changed the entire perspective of how Wikipedia works and what the benefits of it are. In terms of awareness, Wikipedia has been among the top-five websites in the world for the past ten years. Only search engines are usually under the top five if you take a look at Alexa. Among the majority of normal users or readers, at least in North America and the Western world, Wikipedia is very, very well known.

CP: If I would ask you to imagine the future of peer production. What could it be like in ten years?

AT: From my perspective, the future of peer production rests on the principles the Wikimedia projects stand for. Without those principles you have always a tension with forms of monitoring. If you chose to do that, then you do what corporate business is doing or what publishers do. In addition, we can be the target of manipulation. It has always been the case, but this is a direction which is dangerous. My wish for the future is that we understand better what high value free volunteer contributions have for peer production and to apply the underlying principles and

## Chapter 28 – Making a Case

values. If you have that in mind, you can definitely build peer production systems or equal systems. So that's what I wish for the future without saying this will become true.

## **Interview with Stefano Zacchiroli, former Debian Project Leader, 17 June 2019**

Mathieu O'Neil (MO): So, in a few words: what is your project about and how does it relate to peer production?

Stefano Zacchiroli (SZ): Right, so the project is Debian, making a free software operating system. It's allowing you to run your computer from down to, you know, making the hardware, up to applications, like Libre Office and productivity tools and games and what not. It is one of the oldest self-organized free software projects, dating back to 1993 and it's also one of the largest in term of its volunteer base, we estimate that there are still today about one thousand Debian members or Debian developers, we call them, who self-organize to work together and create this operating system. So, it's kind of historical and also a paradigmatic example of peer production in the context of software and especially free software and open source software.

MO: What brought you to this project? How did you become involved in voluntary commons-based peer production?

SZ: I was a student in computer science, I guess second year, and we were using Debian as an operating system in our university lab. Some things were missing, software that existed, but was not available in Debian. Some things needed some fixes and I discovered that I could do it myself and share my improvements with the other people who were working with Debian. So I started that way and essentially what happens, when you do that kind of stuff you somehow



## Chapter 28 – Making a Case

become euphoric about the joy of doing that together with other peers, so I got hooked and remained a volunteer for many, many years to come after that.

MO: What do you think is the impact of the project on society or in your field and how does it make a difference?

SZ: For Debian the impact is very significant as it is one of the most open operating systems for computer servers on the internet. I don't remember the stats today, but a very high number of websites that you browse during a day run with Debian. A very high number of computers in the cloud run on Debian, so even if it started as a volunteer project and remains today very much a volunteer-driven project, it's basically running the backbone of the Internet itself.

MO: Given Apache is used in servers, what is Debian used for exactly?

SZ: Right, that's a good point. Debian is the framework that allows you to run the core of our operating system, which is Linux, and a number of applications. Apache is one of them. You can imagine Debian as similar to the AppStore that you run on your phone, where it is installed as a basis of your system and then you use it to manage all the rest of the software that you run. So when I say that basically Debian runs the largest number of computers which are the backbone of the Internet it means you first install Debian and then you use Debian to install Apache, WordPress, MediaWiki, or any other user-facing applications you might need. That is very significant, because there are always security issues. Debian allows you to keep your software up to date and to be free from known security issues.

MO: How do you organize collaboration in your project?

SZ: Debian is pretty much a self-organized project. The creator of the project, Ian Murdock, decided that there was a granularity, that isolated and defined areas of collaboration and in Debian those are our organized packages. A package is a piece of software you can install on Debian. A package can have a single person who is a maintainer of the software, usually it's a group of people, up to a dozen people. And within a package, maintainers are autonomous. They can do whatever they want, as long as they respect some baseline quality requirements that applies to Debian. To give you an idea of the scale here, Debian is composed of something like tens of thousands of packages. So, when you volunteer, you usually start by noticing that the package you use yourself has some issues. Maybe it is not up to date, maybe it has some bugs, that you want to fix. You start by picking a bugtracker against that package and if you know how to code, the maintainer looks at your patch and may accept it or not. This is the initial step, then you got hooked in, if you keep having an interest in that package you may become one of its co-maintainers. So, this is the site of collaboration and then you can step up the ladder if you wish. Not in terms of authority, but in terms of becoming more interested in Debian as a project, for instance after maintaining many, many packages, I became interested in the infrastructure of Debian projects, so working on quality assurance services, like checking in an automatic way if packages have bugs, and then I also ended up being Debian Project Leader as a kind of ultimate coordinator of activity into the Debian project, but it all starts from packages, which are separate sites of collaboration and then you can move to more cross-cutting responsibilities.

## Chapter 28 – Making a Case

MO: The project leader is elected every year, but what about if you want to join one of the teams? Is it just through cooptation? There's no formal process for joining a team, it's just through working with people and getting known, is that right?

SZ: That is correct. So, elections are just for the project leader position, which are indeed yearly whilst the process of joining and leaving individual teams is completely ad hoc. So, as soon as you show that you have some confidence, some willingness, to work on a project, you can just join the team. As a volunteer, okay? If you want to become an official member of the Debian project, someone who can vote, there is a more structured vetting process, in which you need to show that you are really sure and declare that you agree with the core values of the Debian project. You also go through a sort of technical examination, checking that you are competent enough to be given access to the archive of the Debian project. So being given the authorization to be able to push new version of software to all Debian users. In terms of peer review to be accepted in Debian, it is enough that others review your work and say it's good enough and then that would be integrated. While if you want to be autonomous when making changes to software that is part of Debian, you need to go through this examination process.

MO: What would you say are the main drivers of your project? Or I guess, why does your project work, why do people get involved in it?

SZ: I think there are two separate drivers. One is technical. Debian is already used by system administrators around the world. I am using something which I like technically, but something is missing, something I can improve, so I join in, because by improving it, my work-life and my

## Chapter 28 – Making a Case

technical activities will become better or easier. This is a technical driver and then there is an ethical driver, which is that of a free software activist. People who believe that everyone in the world should be able to do any sort of computation, use only free software, see Debian as one of the champions in that area and want to push this goal further by using technical skills.

MO: What do you think are the main advantages of this approach for generating and disseminating knowledge?

SZ: We have peer production in a number of different sites, and in the context of software, I would say that the main advantage is peer review. Peer review makes your code better, others can look at your work and say whether it's good or not. This is well known in software engineering and relatedly if the access barrier is low, if you have a thousand people that can fix issues in specific software it is much easier. I think these are the two main advantages. Both actually end up in software quality.

MO: So that would be one of the benefits of peer production, when compared with more hierarchical systems, that there are less barriers to improving the content, but what are the costs?

SZ: This is something which is felt very deeply in Debian, when you want to make a decision, if the decision is within the realm of a specific package, well then it's clear who has the authority to make the decision. But when you want to make a decision that affects the entire Debian operating system, like changing the way something is done that affects many, many packages, taking the decision might be very challenging, because you end up having a discussion with

## Chapter 28 – Making a Case

hundreds of people, who all have their own opinion and who all think that they are very good at making that specific decision, even when they are not. So, how do you organize this discussion, where you have a thousand people? This is a well-known challenge in social movements. Debian has a way to fix that: we try rough consensus, what are the pros and cons of what is being discussed, but in the end if you cannot reach an agreement we have a technical committee, a sort of tribunal, which can settle technical disputes within the project.

MO: So technical disputes are never resolved by a vote?

SZ: That is very true, we try to shy away and not to use that tool too much, but if there is too much division over a specific matter, the tribunal will settle it with a vote or it can be escalated further to a project-wide vote, which is a referendum. That can be applied to anything, but again it can be very divisive. So, we try to use it at little as possible.

MO: You mentioned the technical committee. Has there been some discussion in the past about the renewal of the committee because there can be a bit of a lag, or people can stay on the committee for a very long time, right? How does one become a member of the technical committee? Is there some process to renew membership?

SZ: The initial procedure is actually defined in the Debian constitution, which dates back to 1996 I think and the original procedure was that the project leader proposed names for the technical committee and the current technical committee needed to accept them. That has been changed. This is something that I proposed when I was Debian project leader and it was accepted. After a

## Chapter 28 – Making a Case

number of years, I don't remember how many, maybe four or five, members of the technical committee need to step down. So, this guarantees a turnover. This again is not rocket science, it is something we have learned from the organization of other Non-Profit-Organization in free software and it's working pretty well in renewing and making sure the technical committee remains active over long periods.

MO: About the DPL position, which you occupied for three years and obviously, that's quite remarkable. I don't think that there is anyone else who has ever been elected three years in a row.

SZ: That's right.

MO: You said that there is a coordination role, but really that would be quite limited, because people are self-organized as you said. So how do you see the role exactly and what did you try to achieve?

SZ: Right, it is indeed a classical management position, but what makes it interesting is that it is still a volunteer position. You need to find time for that in addition to your normal life duties. And the other thing is that you don't have the usual carrots and sticks that you have in classical management. You are not the leader of the firm, so you cannot give bonuses, you cannot fire anyone. It's leading by example to some extent and actually just coordinating discussions. Making sure that discussions that need to happen do happen and when there are fights, you need to be a good mediator. So that's what you do within the project and then in addition there is a role with respect to the outside world, being the representative of Debian with other

## Chapter 28 – Making a Case

organizations, free software or not, public institutions and that kind of thing. There again you are the face of the project but you cannot decide anything yourself, so you just relay information back and forth. You can propose decisions to the project, but in the end these should always be accepted by the project itself. That may be the two best definitions: mediation and facilitation is what you do as a Debian Project Leader.

MO: What would in your view characterize a successful peer production project, and why?

SZ: This is quite broad and of course my experience of different projects is limited. So, something we have learned recently is keeping disruptive personalities at bay is important. Back in the days in the 1980s and 1990s, in the early days of the Internet, we had this tradition of accepting disruptive personalities in communities, people that will kill discussion and overwhelm every discussion. It is well known now that that will keep new volunteers far from your project and create very toxic environments. So being able to say no and then actually banning those kinds of personalities from your project is something that is needed in every kind of peer production project. Initially you will get some kind of pushback because, you know, “freedom of speech” and that kind of concern, which is actually not really relevant, but it is the typical argument you hear against keeping your community sane. You cannot tolerate intolerance and people who will keep others away from your community, that’s something we have learned and which is very, very important. Keeping a nice, friendly environment is fundamental. It’s a basic requirement. Another one is being clear on where you want to go. Where is the roadmap of your project, where are we within the spectrum of what we are trying to achieve, and then also having easy entryways into your project. The structure of contribution in most peer production projects

## Chapter 28 – Making a Case

is well-known now, so you start from people that are contributing very small things. You know, it can be a collaborative writing process, it can be adding bold type, it can be adding a reference or that kind of stuff and then those potentially hopefully high numbers of volunteers on the periphery, some of them become more involved and even fewer of them will become your next leaders. So, you have fun in the process, which starts with a lot of people coming to a group, less people contribute important stuff and very few people contribute very important stuff and you need to reduce the barrier for any sort of contribution along the way. So, having clearly documented ways to make your first contribution and then hooking people in, by making it as simple as possible to contribute something, anything at all. In a software project for instance, it should be very easy to make your first bug report. It should be very easy to make a fix, which is just a typo or something like that, and then everything from there, all the way to becoming an official maintainer of the project, it should be as easy as possible.

MO: Are there issues with success or growth and do you see tensions between commercial ambitions and voluntary engagement? A topic that we are quite familiar with.

SZ: There is a scale factor, right? Any project can face a growth crisis as coordination tools when you are two or three, are not the same when you are ten, or when you are a hundred people. So you need to have tools that scale in terms of coordination, in terms of responsibilities. This is classic organizational stuff, nothing specific to peer production. In terms of the other issue, commercial interest, that is pretty challenging. It is kind of strange as Debian is a very important building block of the internet, you can imagine using it in commercial contexts, but it remains officially a volunteer project, so the project does not pay anyone with project funds. There are



## Chapter 28 – Making a Case

people who are in fact working in Debian. We ran a survey on that a while ago. I think the numbers were significant.<sup>1</sup> The approach that Debian is using, is kind of ignoring that. Having structures in which you try to make the best technical decision, but without discriminating or acknowledging that someone is working as a peer volunteer or someone else is being paid. So, it's kind of a naïve project to some extent and there has been a lot of pushback in the past to embrace more the fact that people are getting paid for their work on Debian. It's been working pretty well this far. So, there are discussions now on whether we want to pay people to do stuff that is not getting done. Usually it's the non-technical stuff or management work on the side, accounting work, communication work, that the volunteers are not managing to do during their completely over-booked work time. But it hasn't happened yet and so we are kind of in, if I may borrow an expression, a "don't ask, don't tell scenario": you can work on Debian, you can be paid, but the project itself will not pay you and we don't care if you're being paid for working on that.

MO: Sébastien Broca writes in his book *Utopie du logiciel libre* that people who are paid lose their autonomy somehow. It's an interesting question - if you are working in a self-determined project, but you are getting paid for it, does that make you less free, because you are following an employer's, you know, orders?

SZ: I think that's clearly true, but we are seeing that in free software in general and not in Debian as we are still in a context in which people seems to have their allegiance more to the project, than to their employer. So, this is something which is very much agreed on. People care more

---

<sup>1</sup> O'Neil et al. (2017, 2020) found that 18.3% of all participants to the project and 36.8% of Debian Developers were being paid.

## Chapter 28 – Making a Case

about their project, than about their employer usually. I think this is temporary in the sense that right now, people who are good at technical stuff know they can find a job very quickly. So, when you are in that position, it's easy to say I care more about my project, because even if you fire me, it's going to be easier for me to find another job-

MO: That's what they say, but I mean we haven't really seen any concrete examples of conflicts and how they play out, so, I guess it is a bit abstract for me at this point.

SZ: No, you are absolutely right. So, I am just saying this is what people think. I don't have any evidence either way. Well, I guess some evidence to support that would be that you can find how people change the firms they work for over time, but still keep working on the same project. That might be some confirmation, but you are right. It's just a feeling. I'm saying it makes sense, given the current condition of the labor market in IT.

MO: No, that's right. There is that safety net. So, this builds on what we were talking about: If the opportunity arose, would you welcome private firms or investors, who wanted to become involved in your project? Why, or why not?

SZ: In Debian that already happens in a couple of ways. The main way is that we run a big yearly conference, DebConf. A conference with a budget ranging between \$200.000 and \$400.000, so it's a not very big budget for an IT conference, but it is significant for the Debian project and of course we have sponsors for that. That is something which is completely okay, that has happened for a very long time and nobody has ever complained about it. What you

## Chapter 28 – Making a Case

provide to the companies in exchange is visibility during the conference, it's not a big deal. We had something similar with artwork donations in the past. For a very long-time companies have been donating artwork for the Debian project and that was seen as okay as well. This is the kind of involvement we have seen historically, plus all the non-official examples we have already discussed. So, people who work on technology for a company which uses Debian pay for that developer, but we haven't seen anything more than that. What I see in non-profits and free software is the key element is whether you can keep your project running without employees. If you decide to have employees, then everything changes because then you need stable incomes over a significant period of time. So if Debian keeps not having employees, probably no more involvement than that will ever happen. If Debian decided to start having employees, then probably you will see more involvement by companies and then you have all the discussion about how do you shield the employees from depending on a single company, how do you create some isolation from that and so on.

MO: What has changed in the world of peer production in general and/or in your project in particular since you started?

SZ: The Internet of course. When Debian started, collaboration over the internet was just beginning. Right now, it's everywhere. Your potential public of contributors is huge these days. To have tools and to have a number of people with access to the internet, is just incredible. That's a huge potential. It comes with threats as well, trolls and this idea of clicktivism, the idea that people can contribute something useful by just talking about something, is something that wasn't really true back then. Back in the day most people connecting over the internet were tech

## Chapter 28 – Making a Case

people, so for our software project, they were almost all potential contributors, while these days that's no longer the case. Anyone can comment on anything. Anyone thinks they are entitled to an opinion, while in a project like Debian the governance model is very much based on who did the job, gets to have a say. People that are not willing to put in work don't really get a say. Wikipedia and any sort of collaborative project has this kind of issue.

MO: Imagining the future of peer production, what could it be like in ten years' time?

SZ: That's a good question. I don't see any huge change in the tools we are using or the way of contributing we are using today. What I wish is that it would be more possible for people to be activists full-time. Finding a way to do their activism and producing things together, without getting into conflict of interests and so on. So it's really related more broadly to the question of how do you finance in a socially responsible way to uphold the collaboration and the activism that people are doing. But other than that, I think that in terms of tools, in terms of structure, it won't be much different from what we have today.

MO: In case you got the chance to engage in a new peer production project, what would it be?

SZ: These days I think it would be very much about open hardware. So essentially, we have opened up a lot of peer production knowledge in software, in arts, in writing, etc. Something which remains relatively segregated is the world of hardware, which is something that is very much controlled by whoever owns the firms, right? These people who own the means to produce physical stuff. We have some improvement there with 3D printing, but I think that's something

## Chapter 28 – Making a Case

that we really care about and are not really involved in any of that today. I know what it is, people are involved in those areas, but it is something I would love to see very much more democratized than it is today.

MO: I hope it wasn't too long and thank you very much. It was really good to talk to you.

### **References**

O'Neil, M., Raissi, M., de Blanc, M. & Zacchiroli, S. (2017) Preliminary Report on the influence of capital in an ethical-modular project: Quantitative data from the 2016 Debian Survey, *Journal of Peer Production*, #10.

O'Neil, M, Muselli, L., Raissi, M., & Zacchiroli, S. (2020). "Open Source has won and lost the war": Legitimising commercial-communal hybridisation in a FOSS project. *New Media & Society*.