

# RETHINKING DESIGN FROM OTHER LENSES

## PEER-TO-PEER OPEN DESIGN

*Samara Tanaka*

For some years now I have been reflecting on design processes, especially in project contexts that seek to provoke social innovations. Researching and getting to know several initiatives, both governmental and private, and from civil society, coming from several countries, I became aware that the design processes frequently used bring intrinsic limitations. These are related to certain principles imbued in practice and to ontological understandings widely spread in the field of design, which often contribute to the creation of projects that are not in the best interest of the communities for which they are intended.

Understanding the necessity to explore this field, we started in 2013 netweaving to experiment alternative forms of collective creation in communities, consciously using some principles, perspectives and intentionalities referred to in this text as lenses. This approach was called Peer-to-Peer (P2P) Open Design and comprises several network-based initiatives that are distributed, open, with horizontal co-creations, made and incorporated by common people (formal designers or not).

Peer-to-Peer Open Design initiatives do not have features often present in a design project, such as stages, managers, specialized team, schedules. Due to the absence of these characteristics, we differentiate “project” from “netweav-

ing” — the former has definitions and limitations (such as beginning and end) and the latter is more fluid, being able to be continuous or intermittent, without time restrictions or pre-established planning, and is not restricted to fulfill a project objective. Moreover, a fundamental point in this differentiation is that, in netweaving, the relationships between the people involved are of great importance, and generally transcend the initiatives that are being undertaken.

Because it is an open and networked approach, there is no single vision about P2P Open Design, but multiple understandings constantly dialogued, which change over time. Among the common understandings that permeate the network from my point of view are that any individual has relevant contributions and the capacity to develop new proposals and solutions; that creative activity is part of human practice; that there are several intuitive design practices being applied daily by “non designers”; and that there are alternative ways to give life to sustainable and nonhegemonic solutions if we use other lenses, such as the open-source sharing and opening mentality, the new economies, the concept of commons, netweaving, to name a few.

There is also the understanding that design practices brought by “formal designers” carry with them thoughts, methodologies and project structures that may, even if not consciously, reproduce and stimulate hierarchical and colonizing relationships, both in the design process and in the form (solution) created, if there is not a reflection of the designers on the subject.

This text seeks to discuss and outline an analysis — from the perspective of a formally trained designer, author of this text — about some experimentations on ways of designing, the learning obtained, the difficulties of designing this way and what this means for the understanding of the role of the designer when acting to stimulate, promote, or create favorable conditions for sustainable social innovation in communities.

## THE LENSES USED

The P2P Open Design started as one of the open social technologies of Mecca Rede (Microeconomia Cocriativa Conectiva Glocal), a network which converged people who were working with several of these technologies, such as creation of community broadband (provision and maintenance of Internet access by communities), crowdfunding, zero waste, among others. All these initiatives bring in some way elements of open source and open knowledge thinking, such as collaboration, knowledge sharing and creation of nonproprietary solutions.

Open-source thinking has been used by design communities with different degrees of openness, such as in the sharing of files and solutions (solution libraries), the means of production (in the case of Fab Labs), the creation process (as in cases of codesign where the aim is to reduce barriers between users and designers [STAPPERS, 2011]). In P2P Open Design both the solutions and the dynamics of creation are open and when there are means of production involved, they are also usually open.

Another important aspect of thinking that permeates individuals connected to this network is the concept of commons: everything for common enjoyment, which should not be alienated to private entities (BOLLIER, s.d.). Through Mecca Rede and P2P Open Design, we seek to create environments and solutions for common enjoyment or create a common good.

The new economies (shared, collaborative, creative, multi-currency) (DEHEINZELIN, 2016) are also lenses that encourage us to think about new ways to structure initiatives and to perceive resources and financial flows. Fluxonomy 4D organizes these new economy concepts into a four-dimensional flow: the first is cultural (equivalent to creative economy), the second, environmental (shared economy), the third, social (collaborative economy) and the fourth, financial (multi-currency economy) (DEHEINZELIN, 2016). The flow between the dimensions would generate sustainable solutions.

Another lens that is no less important, but perhaps less disseminated and deepened among the nodes of the network, is the one of systemic and complex thinking and concepts linked to biological systems (such as autopoiesis, described by Maturana and Varela [1995]). These point to the systemic interconnection between all that exists — a paradigm that brings deep implications for the understanding of how to act in a network, inspired by nature and life.

From a design perspective, another inspiration is the concept of design humanism described by Bonsiepe as the “exercise of design activities in order to interpret the needs of social groups and to develop viable emancipatory proposals in the form of material and semiotic artifacts” (BONSIEPE, 2011, p. 21). Although it does not broadly reflect the intentionality of P2P Open Design, the concept of an emancipatory design, which reduces heteronomy and is more democratic, as well as the idea of exploring alternative spaces of creation from a critical consciousness is one of the references for the experiments described here.

In other words, the set of these lenses brings thoughts and principles, such as: collaboration and netweaving; free sharing of resources and knowledge, along with new ways of thinking about the concept of property and assets; the

multi-currency perspective, i.e., the nondependence on a single currency — such as fiduciary — and the perception that there are other resources and forms of value being generated; the nonconcentration, which translates in a practical way in the possibility of disseminating not only resources but also triggering the embodiment of knowledge and ways of doing; the concept of emancipatory design, generated horizontally.

## WHY THESE LENSES?

Behind the choice of using these lenses, there is a continuous search to understand alternative ways of living, creating and relating, which reflect values identified from critical observations and thoughts about the way we currently live, relate to each other and produce. Besides inspirations for initiatives and projects, these lenses are ways of seeing and thinking that we seek to apply in our lives and that consequently influence the way we act. It is not only a change in how to design, but also a personal change.

The necessity to rethink under which lenses the project activity was shaped came up, in my case, from analyses and observations of various initiatives of social impact and citizen participation in recent years (TANAKA, 2011), which brought reflections and criticisms about how these design activities were thought, structured and from which principles and purposes they were carried out. One of the questions that frequently occurred was the short duration of projects, which mostly ended up with lack of participation of affected communities, lack of financial resources, government changes or end of investment by companies. In these cases, the power of decision about the continuity of the project is usually outside the benefiting community.

Another obvious issue is the lack of involvement of the communities to which the solution is directed during the project conception (TANAKA, 2011). Or even the opening to participation only for appearances, in order to position oneself in an open way but not effectively opening the process. Corroborating this observation, Miessen (2010) points out the concept of pseudo-participation, a politically motivated model of openness to decision processes, which in their origin have no intention of democratization but rather a political agenda. Examples of this are referendums often used to transfer decision-making responsibility on controversial issues to society, thus avoiding further criticism.

One of the conclusions I have come to is that when the project is not thought out together, the possibility of effective interaction and incorporation is not

opened up and there is inevitably a maintenance of a position of power. When the designer sees the people who will use and benefit from a solution only as users, a relationship is created that, besides keeping the benefited communities in a situation of dependence, does not generate exchange of knowledge and networks so that these solutions are maintained by them.

Another reading about the term “user” is the type of relationship it evokes. Using more traditional design methods I realized that, when we design for users, we are referring to a passive relationship and, most of the time, a consumer relationship. While netweaving P2P Open Design, we try not to frame people as users, but to consider them as cocreators, codesigners, netweavers, or prosumers — people with agency, with an active attitude and position.

Centralized and hierarchical structures do not have characteristics of sustainability and resilience, and everything that is sustainable has a network pattern (FRANCO, 2008). Projects that purposefully build and maintain a relationship of dependency (either of financing or of access to knowledge) hardly bring with them a genuine thought and intentionality of sustainability.

With all this in mind, experiments on how to generate solutions in alternative ways, taking these lenses into consideration, began in 2013 at the Complexo do Alemão in Rio de Janeiro and continue to take place in several locations.

## EXPERIENCES IN P2P OPEN DESIGN

In this section, three initiatives are described: JogaCria, Casa Livre do Altinho and Mini Bibliotecas Livres, chosen to exemplify some characteristics of both the P2P Open Design approach and the lenses identified in the previous section of the text.

**Figure 1** – JogaCria at Complexo do Alemão, 2015



Source: Author's collection.

JogaCria is an open initiative of learning through the creation of games aimed at young people. From the personal interests of each one, with stimulation to the creation of games and with the creation of networks, young people seek to learn, by their own initiative and along with their peers, about diverse subjects such as mathematics, history, science and programming, with the objective of making their own games.

The initiative arose from interactions with young people at Complexo do Lins with little interest in what the school has to offer but great interest and dedication to games. From this observation and before starting to design what this initiative would be, conversations and provocations with young people led to the discovery that there was a latent desire to create their own games.

Together, we decided to hold a workshop, which at that moment was simply a way to gather interested young people and generate interactions on the subject, so that the initiative could take shape. This is a characteristic of P2P Open Design initiatives: not to start with a ready-made proposal, but with stimuli for interactions, conversations and meetings so that the whole project is thought and carried out together and everyone perceives it as a common initiative.

All the dynamics of designing this first workshop (naming, structuring, producing, communicating) was done together with two teenagers so that they could incorporate this project knowledge. The first workshop lasted three days, with high community engagement, several games created and many discoveries about

youth interests. There wasn't anybody in the role of a teacher — the exchange of knowledge between the youth themselves and other people we invited to share their knowledge in the area was encouraged. This experience worked as a first step, from it we were able to have a common understanding of what this initiative could be, and start to evolve. Many relationships gained flow and netweaving followed so that the youth themselves took the initiative to continue it.

Since then, JogaCria gatherings have been held several times at both Complexo do Lins and Complexo do Alemão locations, in different formats, depending on who was involved. At Complexo do Alemão young people took ownership of the initiative and netweaved it independently, even receiving public funding for it. Other youths in the Complexo do Lins are intermittently incorporating the dynamic, each in their own time and with their own barriers, but so far there has been no broad incorporation of the initiative in this location. It is still necessary to encourage young people to meet and continue to overcome various barriers linked to fear and the new without giving up.

Like the other P2P Open Design initiatives, JogaCria is an open initiative, it is stimulated that any interacting person becomes the initiator of a cluster and there is the desire to dedicate efforts to creating materials and sharing experiences that stimulate young people from other localities to form other clusters. Generating materials that at the same time stimulate people to have an entrepreneurial attitude, without this being a recipe ready to be reproduced (and therefore leave room for changes that are consistent with the context in which it will be applied) has been a challenge not only of JogaCria but also of other P2P Open Design initiatives.

The Casa Livre do Altinho is a convivialist space located in the community of Cachoeira Grande, one of the favelas inside Complexo do Lins, in Rio de Janeiro. It is a house open to residents of the region and other people in the network, where I live since 2016 and opened for common use. Several people, mainly teenagers and children who live in the surroundings, attend the house daily by their own will, without a call. There is no program — the visitors themselves are encouraged to suggest and carry out ideas and activities. Most of the time, the motivation is the desire to be together and to coexist, in a space that is perceived as a place of freedom. These fluid interactions in the house make possible the emergence of new ideas and actions, which occurs daily. The visitors have already organized movie sessions, workshops, plays, all on their own, simply by stimulating the creation and use of existing resources. Initially, I realized that there was an expectation on the part of the visitors that someone



would lead the activities, but over time they began to take over the space and start netweaving activities that they wanted or at least suggesting ideas that could be carried out together.

Objects present in the house, as well as provocations from the netweavers (usually house dwellers or other netweavers in the network), instigate visitors both to learn and to generate ideas. Conversations about zero waste, for example, are stimulated by the strangeness provoked by a compost bin, the separation of recyclables and organic waste — elements that provoke questioning and bring familiarity with the concepts of zero waste to the frequenters. Some local children have already built, by their own initiative, compost bins in their homes, started to separate organic waste and to grow food, which indicates a change in behavior. This learning is also perceived by the frequenters, even the youngest ones — a 15-year-old teenager reported that he attends the space because he learns more there than at school.

The site hosts temporary residents, who contribute to the flows of the house, both financial and interactive, and bring with them different world views and ways of thinking. Coexistence makes it possible to create deeper relationships, exposes conflicts, catalyzes exchanges and generates learning about new ways to coexist. The existence of this physical space allows actions to be created and becomes a point of reference and encounter that enhances ideas and joint actions.

The Mini Bibliotecas Livres initiative begun by a netweaver at the Complexo do Alemão and consists of thematic minilibraries distributed in different locations. The initial idea was simple: placing boxes with books in accessible locations, allowing anyone to read, take home and include books. What differentiates this initiative from similar ones is that it is not centered on books, but on the people who are caretakers of the libraries. We started the initiative by talking to the owner of a small store in Complexo do Alemão, with whom we already had a relationship, and, from her personal reading interests, the initial books were selected and placed in a crate. All the dynamic was done with the owner of the store (caregiver) and netweavers and together we discussed several aspects of the initiative and implemented this first library point.

The differential of the minilibraries is not only to make books more accessible, but to stimulate conversations about reading and therefore themes of interest to the local caretaker are chosen. In this first library created, the caregivers demonstrated incorporation of the initiative dynamic through the modifications they made in the crate: painting and making a sign indicating what it was and how the dynamics worked. They also started reading sessions for children who



frequented the place, that is, in fact, the caregivers started to netweave the Mini Biblioteca Livre and stimulate its dissemination. One of the wishes that emerged at that time was to generate a network among these minilibraries, generating a distributed library, so that these interactions were not only local, but this has not materialized until now. The thought of networks is present both in the way books are collected, and in the care and use of libraries, in the activities carried out locally, and in the connection that can be made between the various localities. We notice that when there is no netweaving, that is, when there is no close contact with the caretakers, the tendency is for them to give up. Even with cocreation, netweaving is essential to keep the initiatives alive.

This is a very simple and concrete example that demonstrates how the thinking of the lenses and the dynamics of P2P Open Design becomes tangible in projects in communities.

**Figure 2** – Gathering at the Associação de Moradores da Cachoeira Grande, in Complexo do Lins, 2015, for the cocreation of a room for community use. Several residents created workshops to share their knowledge with the community



Source: Author's collection.

## P2P OPEN DESIGN APPROACH CHARACTERISTICS

As there is no centralization of the dynamics, the characteristics identified here refer to the author's point of view. I emphasize that they do not represent or seek to generate any type of methodology. It can be said that they are perspectives, open enough for them to be incorporated and modified by whoever wishes to do so.

The basis of P2P Open Design thinking is the relational peer-to-peer (P2P) dynamics. The P2P Foundation (2006) in its wiki defines P2P as a dynamic in which there is equipotency of participants, free cooperation for the performance of a common task, creation of common good and distributed forms of decision making and autonomy. The P2P dynamic is related to ways of producing (peer production), governance (peer governance) and universal common ownership as a mode of distribution and access (P2P FOUNDATION, 2012).

One aspect that differentiates the dynamics described here and the processes adopted by a traditional design vision (STAPPERS, 2011) is the principle of equipotency of participants (or interagents). Peer-to-Peer Open Design is based on the understanding that everyone has value to add to the network, any individual is a potential designer, and there is no control of the dynamics by an authority — everything is talked about and defined horizontally (at least it is sought to do so).

In traditional design processes, even in participatory design, the designer usually has a position as the conductor of the process, defining when and in what terms participation will be open. In P2P design this fixed driving role is eliminated, since all are considered designers and noncentrality is sought.

For this to be possible, in my case, it was necessary a certain “demethodologization” of the previously incorporated design practices, by the understanding that inserting a design methodology that must be followed by everyone puts the formal designer in a command position. In order to respect the fact that the participants are equipotent, for the initiative to be distributed and horizontal, and to create together cooperative ways of doing, it is necessary to have openness to absorb distinct ways of designing (and sometimes not designing). This means that the formal designer is not the owner of the process and of the project methodologies, but only one of the participants that has specific experiences and knowledge to add.

Another characteristic is the openness of both the dynamics and the solutions created, which can be replicated and incorporated by others and become a common good. This feeds back the network, distributes the learning generated, and enables the continuity, collaboration and evolution of the solutions created. The total openness of the design dynamics also means giving up control, since the pace, design time, way of doing, quality and definitions do not depend only on a group in command.

When starting conversations about an initiative, a very relevant aspect to be considered is how to enable and stimulate the incorporation of ideas, process and knowledge by all involved, which characterizes an open learning process. It is

from these constant interactions that there is exchange of knowledge to generate solutions — all dynamics are shared and thought out together, not developed by one group and delivered to another for use.

During the development there is a joint construction, so that all participants take ownership of what has been created. In thesis, completely opening the dynamics and enabling the exchange of design knowledge is a form of emancipatory design, because it allows the participants to acquire this knowledge to apply in future modifications in the project and in any other initiatives they want to accomplish. This is an example of creating a relationship of nondependence.

During these constant conversations and interactions, it is not intended to teach design methods, but to create conditions for learning interests to arise. The learning arises from doing together, from the conversations, in a fluid way and without previous and rigid structuring of content. This fluidity is a characteristic that allows the various paces and ways of thinking to be appreciated.

The interactive dynamic of creation depends a lot on the interests of the network nodes that are interacting and netweaving an idea, so it is not a linear process, nor does it obey artificially established schedules. If there is no interest, desire, flow, convergence, there is no cocreation. In several cases, an idea hibernates for months until the flow emerges, which can occur by convergence of wills or by an effort of individuals to netweave this idea so that it comes to life.

For all these described dynamics to occur, it is necessary to netweave, which is what makes everything come alive. As there is no command-and-control relationship, netweaving is what generates connections, connects resources, keeps conversations active. It is a constant exchange that allows an initial idea or will to begin to take shape, and the participants to start to generate knowledge, language and common narratives. Netweaving is what connects networks, people with different knowledge.

The motivations for interaction or making something together are the most varied and are not primarily a financial reward. They are usually linked to interest in learning and personal concerns (e.g., intrinsic need to create or solve some identified problem). The ideas and the initiative to accomplish something together arise from the relationship and interactions, which provide opportunities for conversation, stimulation for reflection, exchange of contents and references, connections between thoughts and people, and thus spontaneously sparks and connections appear.

There are also characteristics that are part of the implemented solutions, so that they reflect values discussed by the participants, as well as sustainability

thinking. With new economies as one of the lenses used, one always tries to have a broad look at the concept of resources (mainly identifying the idle) and not to focus narrowly on monetary resources. Opening our eyes to these possibilities is a way to reduce our dependence on monetary resources. Examples of idle resources are spaces, tools, assets, knowledge. A house can be considered an idle resource that can be transformed into a common good for dozens of people, as is the case of the Casa Livre do Altinho described above.

Another important aspect is the balance between the tangible solution (spaces, things, tangible objects — “hardware”) and the intangible, that is, the netweaving that gives life to these solutions (“software”). There are very well-equipped spaces that are not used by people because the netweaving was not taken into account as part of the project activity. Examples of this are the several Fab Labs that often show low incorporation of the dynamics by visitors.

The other values previously discussed, such as sharing what is possible for common use, prioritizing forms of financial sustainability that do not generate dependence and concentration, using language that facilitates absorption and incorporation of the dynamics on the part of those involved, are examples of aspects that we try to bring to the solutions.

The design and creative dynamics in itself do not have a methodology to be followed, but what frequently occurs is the stimulation of critical thinking and an active attitude towards problem solving. This arises through conversations and questioning that encourage people to reflect and perceive a problem or situation from other angles. An example of this was an interaction with a teenager who mentioned a problem of lack of dumps in the Complexo do Alemão. She reported problems with garbage collection and the impact this had during heavy rains. Through a conversation with questions that urged her to think about ways to solve the problem and to have another attitude towards it, she came to the conclusion that there were materials, people and knowledge available to build garbage cans and that this would be an alternative way to solve a problem that the public authorities do not solve. She then built a small-scale model of the dump and other people came together to build a second life-size version. This kind of thinking is in part nothing more than what is already done daily by various people, especially in economically disadvantaged communities — they are the quick fixes, or *gambiarras*, and ways of solving problems from the resources available.

This is an example of the wealth of local knowledge, which together with other thoughts (such as those of new economies, networks, virtual distribution) and design knowledge may gain other dimensions and pollinate. This kind of in-

sight that has just been reported is often generated in P2P Open Design interactions, but it usually depends on many interactions, conversations and meetings. This interactive dynamic is also important for the incorporation of the dynamics by the ones who are interacting and for common narratives to be formed. As they are fluid interactions, with no start and end date, the information must always be circulating because new people can insert themselves or withdraw from the dynamics at any time.

Peer-to-Peer Open Design is not only related to the activity of cocreating solutions themselves, but also to the creation of adequate conditions for this activity of cocreation to take place, that is, for solutions to emerge among people. Concepts that have some similarities to this, such as infrastructuring (HILLGREN, 2011) and seeding (MICHELIN, 2016) were addressed by other authors.

As already mentioned, this initiative is not only a way of designing, but also of living and coexisting that reflects certain values. P2P Open Design is based on empathy, affectivity and relationships and these have a relevance that should not be minimized in the face of a cocreation activity. Thus, coexisting is essential both for the emergence of solutions and for establishing and maintaining the flows of relationships. From being together, from constant exchanges, connections are made in a fluid way and thus new projects and netweavings are initiated.

For this reason, many meetings — face-to-face or virtual — are encouraged so that these exchanges and sparks occur. Having a flow of people who bring new thoughts and perspectives, who live in different places, enhances these meetings and the formation of connections.

**Figure 3** – First P2P Open Design meeting at Complexo do Alemão, 2013



Source: Author's collection.

## HOW THE EXPERIMENTATIONS HAVE TRANSFORMED THEMSELVES?

Along the P2P Open Design netweavings many transformations took place. The first meetings used as basis some traditional design formats for cocreation: materials for prototyping, mural for identification of problems and solutions, date and time scheduled for the interactions to take place in a given space. Over the weeks we realized that this configuration was alien to the location, it was not a natural form of interaction, and people started to go less and less to the meetings in this fixed place. So, we started to walk around the surroundings and talk to people in the places where they were: bars, streets, squares. In the following months, getting to know more people and creating relationships, we started visiting their homes and the meetings started to be more and more distributed and fluid. The cocreation started to happen during the conversations, wherever we were, and only if there was the will to do it. The intention with the visits was not to generate projects, but to nourish affective relationships. Thus, the networks were formed and maintained both in the Complexo do Alemão, the Complexo do Lins and other places, such as the Parque da Cidade in Niterói.



We realized with this the importance of conviviality for relationships and the importance of presence to generate mutual trust. This perception has generated several changes in our actions, including leading to the beginning of E2GLATS (Estação Experimental Glocal para Ciências Abertas e Tecnologias Sociais P2P), which values the various localities and conviviality in its surroundings.

## CHALLENGES AND DIFFICULTIES

There are difficulties common to several of the network initiatives. And there are others that are related to each regionality. One of the main difficulties is that the initiatives and netweaving are indeed incorporated in a distributed way. There is still a behavioral expectation that someone will take over the role of leader or manager and for a distributed horizontal initiative to sustain itself, a significant change in perception and behavior is necessary. In the case of JogaCria, for example, several young people have the conditions and knowledge to be netweavers, but they lack the confidence to do so. This self-perception of capability, along with an entrepreneurial attitude, in many cases take time to develop and do not develop in everyone.

Over time, we come to understand that from a sustainability and networks perspective, there is a flow of initiatives that emerge and die and that they do not necessarily need to be maintained for a long term. Through relationships, new initiatives emerge, others are transformed. Even with this understanding, I consider that one of the difficulties is to be able to maintain the initiatives (or the interactions for them to materialize), especially when the initiatives involve people who live in places of great instability (for example, due to violence, the case of the favelas of Rio de Janeiro) or when changes occur that make their lives unstable (loss of income source, for example). In the communities in which we live, these situations are common and contribute to frequent interruptions, reducing the energy employed in these initiatives.

For some time, we have been cocreating environments for the generation of diverse multicurrency flows, but not yet generating sufficient financial flows through them for the maintenance of the netweavers' needs, which eventually causes intermittences or temporary asynchronies.

Because initiatives need netweaving to come to life, they can take longer to be incorporated and materialized than a traditional process and make people discouraged. For something to be created together, convergence is needed.



Maintaining the weaving of networks to enable convergence to occur is one of the challenges.

There are other difficulties that are common to other dynamics, such as how to deal with the freedom of an open learning process. We perceive a tendency to give up when the dynamics is very open, probably due to the habit acquired in schools, where we are often trained to receive stimuli in the form of command. Although it is a more generic difficulty of learning, it is essential for P2P Open Design because all the time we stimulate the learning and incorporation of what is being cocreated.

A differential of the dynamics are the ways of sharing and documenting learning and solutions so that they can be incorporated by other people. Currently, the sharing (pollination) is done through personal interactions and the documentation is done individually, by whoever wants to do it, which restricts its dissemination. Being able to document and narrate experiences in an intelligible way, for people who are not interacting, demands a great effort and there is not always a perception of value on the part of the netweavers to employ efforts to do so.

In conclusion, there are many difficulties and challenges when it comes to such a broad change of perception, which involves various aspects of our lives, our way of relating to other people and our way of producing. Unlike a traditional design process, where it is desired and practically certain that following a methodology a solution will be reached, in P2P Open Design there is not necessarily this expectation — the dynamics seek to bring changes in perception that go far beyond the creation of solutions.

Although there is an intrinsic personal desire to see various solutions materialized and implemented, I realize that the generation of these relationship networks is the change itself (FRANCO, 2008), that the very act of seeking to talk and generate interactions on alternative ways of creating and shaping our environment stimulates and creates conditions for these changes to occur spontaneously and in a distributed way.

Observation by the author: the thoughts and initiatives developed had influence and emerged from conversations with several people, including Vinicius Braz Rocha (initiator of Mecca Rede and E2GLATS), Leticia Santos (netweaver and initiator of Mini Bibliotecas Livres), Jonas Bezerra Alves (netweaver JogaCria), Vânia Trindade (netweaver), among others.

## BIBLIOGRAPHY

- BOLLIER, D. **The Commons**. Public Sphere Project, s.d. Available from: <http://www.publicsphereproject.org/content/commons>. Access on: 26 July 2017.
- BONSIEPE, G. **Design, Cultura e Sociedade**. São Paulo: Blucher, 2011.
- DEHEINZELIN, L. **Fluxonomia 4d**: visão de futuro e novas economias aplicadas ao desenvolvimento. Medium, 2016. Available from: <https://medium.com/fluxonomia4d/fluxonomia-4d-vis%C3%A3o-de-futuro-e-novas-economias-aplicadas-ao-desenvolvimento-d16f9777e28a>. Access on: 26 July 2017.
- FRANCO, A. **Escola de redes**: tudo que é sustentável tem o padrão de rede: sustentabilidade empresarial e responsabilidade corporativa no século 21. Curitiba: Arca—Sociedade do Conhecimento, 2008.
- HILLGREN, P.-A.; SERAVALLI, A.; EMILSON, A. Prototyping and infrastructuring in design for social innovation. **CoDesign**, Glasgow, v. 7, n. 3-4, p. 169-183, 2011. <https://doi.org/10.1080/15710882.2011.630474>
- MANZINI, E. **Design, When Everybody Designs**: An Introduction to Design for Social Innovation. Cambridge: MIT Press, 2015. <https://doi.org/10.7551/mitpress/9873.001.0001>
- MATURANA, H.; VARELA, F. **A árvore do conhecimento**. São Paulo: Editorial PSY, 1995.
- MICHELIN, C.; FRANZATO, C.; DEL GAUDIO, C. Sementes e seeding na rede: o metadesigner e as possibilidades de subversão para inovação social. In: 12º CONGRESSO BRASILEIRO DE PESQUISA E DESENVOLVIMENTO EM DESIGN. **Anais...** Belo Horizonte: Blucher, 2016.
- MIESSEN, M. *The Nightmare of Participation (Crossbench Praxis as a Mode of Criticality)*. Berlin: Sternberg Press, 2010.
- P2P Foundation. Defining P2P as the relational dynamic of distributed networks. 2006. Available from: [https://wiki.p2pfoundation.net/Defining\\_P2P\\_as\\_the\\_relational\\_dynamic\\_of\\_distributed\\_networks](https://wiki.p2pfoundation.net/Defining_P2P_as_the_relational_dynamic_of_distributed_networks). Access on: 26 July 2017.
- P2P Foundation. What this essay is about. 2012. Available from: [https://wiki.p2pfoundation.net/What\\_this\\_essay\\_is\\_about](https://wiki.p2pfoundation.net/What_this_essay_is_about). Access on: 26 July 2017.
- STAPPERS, P. J.; VISSER, F. S.; KISTEMAKER, S. **Creation & Co**: User Participation In Design. Open Design Now, 2011. Available from: <http://opendesignnow.org/index.html%3Fp=421.html>. Access on: 26 July 2017.

TANAKA, S. **Designing for Citizen-government Interaction**. 2011. Dissertation (Master in Integrated Design) – Cologne University of Applied Sciences, Cologne, 2011.

WAHL, D. C.; BAXTER, S. The Designer's Role in Facilitating Sustainable Solutions. **Design Issues**, Cleveland, v. 24, n. 2, p. 72-83, 2008. <https://doi.org/10.1162/desi.2008.24.2.72>

## **AUTHOR'S BIOGRAPHY**

***Samara Tanaka** is a strategic designer, netweaver and interdependent researcher in design, networks and natural sciences. She netweaves P2P Open Design and develops several social innovation initiatives, through which she seeks to critically reflect on design processes and experiment alternatives towards more plural and collective paradigms. She is a Strategic Design collaborator at PUC-Rio and coauthor of the book Gamification, Inc.*

E-mail: [samaratanaka@gmail.com](mailto:samaratanaka@gmail.com)