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# Lighting the community: Design Anthropology and Participatory Design as a Social Approach

*Iluminando la comunidad: Design Anthropology y  
Diseño Participativo como un enfoque social*

**Abstract.** This article presents a social project developed by a multidisciplinary group based on the theories of the emerging field of Design Anthropology (DA). The Parada do Sol project was facilitated by designers based on Participatory Design processes. The project aimed to support the community in its desire to initiate a process of social transformation through technology using renewable energy. The main objective of this article is to present a project process relating knowledge of Design Anthropology and Participatory Design applied to the development of a technological intervention in a peripheral community, from a multidisciplinary group including representation of the university, industry and society. The main contributions observed were that Design Anthropology approach proved to be essential for leading us to the identification of the intervention most needed by the community; Participatory Design helps to insert an effective participation of residents in the construction of a new reality in the social space of the community; for the non-designer participants, this work model allowed the visual materialization of an important solution for the community, with the idealization of a sustainable bus stop, using solar energy as a source of electricity; and the project demonstrated the ability of a multidisciplinary group to act purposefully together showing the group's great ability to mobilize resources to make new ideas tangible.

**Keywords:** Design Anthropology, Participatory Design, brazilian community, multidisciplinary group, renewable energy

**Resumen.** Presentamos un proyecto social desarrollado por un grupo multidisciplinario basado en las teorías del campo emergente de la Design Anthropology (DA). El proyecto Parada do Sol fue facilitado por diseñadores, en base a procesos de Diseño Participativo, con el objetivo de apoyar a la comunidad en su deseo de iniciar un proceso de transformación social a través de la tecnología utilizando energías renovables, a fin de presentar un proceso proyectual relacionando conocimientos de Design Anthropology y Diseño Participativo aplicados al desarrollo de una intervención tecnológica en una comunidad periférica, desde un grupo multidisciplinario que incluye representación de la universidad, la industria y la sociedad. Los principales aportes observados fueron que el enfoque del Design Anthropology resultó ser fundamental para identificar la intervención más requerida por la comunidad, mientras el Diseño Participativo ayuda a insertar una participación efectiva de los vecinos en la construcción de una nueva realidad en el espacio social de la comunidad. Para los participantes no diseñadores, este modelo de trabajo permitió la materialización visual de una solución importante para la comunidad, con la idealización de una parada de autobús sostenible, utilizando la energía solar como fuente de electricidad. Un proyecto que demostró la capacidad de un grupo multidisciplinario para actuar en conjunto y con determinación, mostrando el amplio alcance del grupo para movilizar recursos y hacer tangibles nuevas ideas

**Palabras clave:** Design Anthropology, Diseño Participativo, comunidad brasileña, grupo multidisciplinar, energías renovables.

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## Introducción

In 2019, a community leader from Morro da Cruz, a neighborhood in the city of Porto Alegre, challenged the university to bring innovation through renewable energy to a peripheral neighborhood. The neighborhood is close to the university and is inhabited mostly by people in social and economic vulnerability; the challenge was to initiate a process of social transformation in the Morro da Cruz community through renewable energy. This first idea became after all the process of research and creation, in what we are calling a sun stop, in other words, a bus stop that works through renewable energy.

In order to carry out this project, some important decisions were taken based on the needs of the project's proposal. The group defined the university team as leading the project from a collaborative process, being the facilitator of the design and research process. Participatory Design tools such as collective brainstorming, group voting to prioritize, and workshop for prototyping were used to mediate the group interaction. In parallel, we had the premise of respecting the territorial characteristics and their needs, while stimulating the local creative potential.

The questions that guided the collaborative process were: How can designers contribute to the community to act as skilled designers? How can we facilitate design processes that are open not only to participate but also to the creation of the process itself by Morro da Cruz, its people, diversities, and territory? How prompt the resident's empirical knowledge and bring them into the design practice, encouraging their creativity to design technological intervention for their community?

The objective of this article is to present a project process relating knowledge of Design Anthropology and Participatory Design applied to the development of a technological intervention in a peripheral community, from a multidisciplinary group including representation of the university, industry, and society.

We list the main results as:

- a) Design Anthropology approach proved to be essential to lead us to the identification of the most relevant technological intervention for the community, in this case, the sun stop;
- b) Participatory Design helps to insert effective participation of residents in the construction of a new reality in the social space of the community. This approach helped us as designers to be part of the field, as well as allow the residents feel comfortable to express their needs and ideas;
- c) For the non-designer participants, this work model allowed the visual materialization of an important solution for the community, with the idealization of a sustainable bus stop, using solar energy as a source of electricity, protection against rain, street lighting, cell phone charging sockets and trash cans that encourage the correct separation of garbage; and
- d) The project demonstrated the capacity of a multidisciplinary group uniting representatives of university, industry and society to act together with purpose, and also showed the great capacity of the group to mobilize resources to make new ideas tangible.

Next, the main theoretical framework of the work will be described with the concepts of Design Anthropology and Participatory Design, followed by the description of the project of the bus/sun stop in the Morro da Cruz community and its main phases. After it, the main results obtained are presented and discussed, as well as the conclusion of this paper.

### **1. Design Anthropology in a Participatory Design approach**

Tim Ingold (2011) points out that anthropology observes and describes the world, but does not propose changes in the field. From a new perspective, the author is one of the thinkers that explore the idea of exploring Anthropology through Design (Ingold, 2013). In a collaborative and experimental way, Design must open up the perceptions of Anthropology as a process of improvisation that responds to the concerns of the present, looking at the past, but thinking about the future.

From this critique, Ingold suggests uniting anthropology with design in order to create a new field of knowledge, capable of converging efforts to propose new futures based on reflections from the past. He proposes not to build something innovative, but to create a subdiscipline capable of combining the practice of Design with an anthropological perspective, and by merging Design and Anthropology via a methodological approach.

The Design Anthropology (DA) creation sought to combine action with the field of Anthropology, as well as to bring a new perspective to the practice of Design, to respond to the world, and not just describing or representing it. DA builds a more critical design practice, but also a more interventionist anthropology.

This conjunction between Design and Anthropology, in addition to creating a new discipline, also guides creativity and observation to modify the future, and in this way promotes an engagement focused on social transformation (Costard et al. 2016). DA presents intrinsic challenges, not as to establish a new discipline, but also in developing new practices and methods appropriate for uniting diverse teams in a design process.

Wasson (2000) states that the use of ethnography occurs differently in Design, in a faster and less theoretical contextualization-based way. As ethnography is in a way simplified in the Design field, and also as it focuses on specific needs of product or service development, participant observation has proved to be the fundamental approach to understand consumption behaviors and how people buy and use products.

Complementing Wasson, Ingold (2012) in the article "That's enough about ethnography!" proposes one should be careful when calling every trip to the field a participant observation. The author also reminds us that participant observation is to join the group studied in a movement towards the future. Thereby, Ingold & Gatt (2013) suggests changing "participant observation" to "observant participation", which is when Design is explored through anthropology and its research methodologies.

The observant participation in this work had a direct relationship with the territory since the design processes of the project took place in the relationship between the territory and its residents. When working with DA, the territory is a crucial issue. According to Escobar (2014), there is a planetary dimension to local struggles, that is, questions of survival in a space pressured by globalized liberal development, based on a standard imposed by people external to the environment. He brings four important components to work on the issue of territory, which are:

- a) conceptualizing and enhancing the life project of communities according to the practices and values of their own cosmovision;
- b) defend the territory as a space that supports local people's projects for community;
- c) dynamize the organization of the territory from the appropriation and social control of the same; and
- d) participation in broader transformation strategies.

Thinking about Design and territory we can bring some challenges such as "valuing products and processes located in the territory, promoting the political and aesthetic potential of the place; practicing the 'exercise of making a place'; dealing with convergences and divergences: new business models, new paths for artisanal production; create 'spaces for experimentation'" (Krucken, 2017, p. 327).

Beyond the territory, the field of action of DA also involves its participants in the process of developing social transformation. When we talk about participants and the design process, Ingold (2012) presents the concept of "skilled practitioners", affirming the ability and appropriation capacity of what most call 'users'. To allow for skillfully practice it is necessary to be open to learning as one goes along, so the design process cannot be pre-established but must be created according to the needs of the group.

Fals Borda (1999) reminds us that in Anthropology, researchers are part of the observation field, which makes them experience and affect it. Based on this reflection, the author states that there is no neutrality in social research, and reminds that researchers/designers must identify and be affected by the field in order to contribute to the social changes thought by the group. For Ingold (2013) the role of the designer is a mediator role, not a problem solver. This is how he criticizes the idea of "user-centered design" since this design model is thought by a professional who is far from the interested group and designs something for someone to use, leaving these people out of the process.

Although each person involved is autonomous, for López (2021) the designer is an agent and a tool mediator. The designers are not neutral, they have political and social action that influences their decisions and their design choices. The designer's role as a facilitator does not diminish his professional and social responsibility towards the group. Complementing López (2021) we mention again Fals Borda (1999), who states that we cannot extend to the field the binary positivist idea of differentiating researcher/designer and researched. For the author, breaking the dichotomy between specialist

and client makes the design practice more pluralistic and democratic. We also can say that it places designers outside neutrality, highlighting a social and political struggle not only in the field it is located, but also the place of speech of the designer.

This is how Ibarra (2021) proposes that we weaken the hierarchical relationship of the design process to seek a more collaborative creation where the designer is part of the group. For her, designers must let themselves be affected by the world and the struggles of the groups they study, they must identify with them, establish effective dialogues, and adapt the tools they use to their needs. This proposal is in line with DA, but also with the idea of a more horizontal and participatory design.

Gatt & Ingold (2013) remind us that designers must perform towards transformation, but designers are not the only ones capable of designing it, since creativity is for all. Based on that, we propose the usage of Participatory Design in the project, thinking that It can lead us to an open process that allows skilled practitioners to be part of the transformation of their community. This approach helps us to rethink the idea of “experts versus users”, and propose collaborative processes that allow the expert (or designer) not only to collaborate but also to facilitate dynamics in the group. This type of practice connects the designer with reality and permits greater immersion in it. The designers become more engaged within the group due to their insertion.

A creative open process compels participants to collaborate and get involved in creative practices capable of transforming realities. These processes are also co-constructed to meet the needs that arise from the field—and not the other way around. Participatory Design in an DA perspective must be multiple, contributing for the group itself to create its own process in order to reach solutions to specific local issues.

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According to Halskov e Hansen (2015) Participatory Design emerged about 25 years ago as a set of Design and research practices based on a Scandinavian approach, which emphasized designers and users working together in a process aimed at improving the quality of working life. With the human-interaction issues, participation has become crucial to stimulate interest beyond Participatory Design. With Participatory Design one is able to begin to think about how to shape the future without prioritizing stakeholders needs and wants, but pondering the different relationships in the world without differentiating specialists and clients nor expecting a false neutrality from the designer. This criticizes user-centered design, as it presupposes the user as an outsider in the design process—not as an essential part of the development of solutions capable of integrating past, present and future.

More than group participation in the design process, from our perspective Participatory Design could allow the group to present a diversity of opinions, creating space for debate and exploring the ability to trace paths from converging the multiple visions of the group. The process might be contradictory and present tensions between the traditional role of the

designers with their new role as mediators of design practices and tools (Ingold, 2013), but as the designers are part of the group we can build a design less hierarchical, where the designer choices don't create the solution, but the group participation develop a new possibility. Participatory designers present critical thinking, and must be concerned with ethical and social issues, as well as open to welcoming new alternatives and shared perspectives. This approach replaces the user-centric resolution practice with a practice of collaboration. Design tools become alternatives and paths to reach more humane upcoming times, without pre-defining what the future should be and offering an open space for groups to envision and build it collectively.

## **2. Parada do Sol project**

### **2.1. Partnership between society, university and industry**

Morro da Cruz is a big community that is part of the São José neighborhood located in the outskirts of Porto Alegre, capital of the state of Rio Grande do Sul, in southern Brazil. With different characteristics in its socioeconomic constitution, this community is mostly composed of people with low-income and who live in a socially and economically vulnerable situation. Aiming to start a process of transformation in his own neighborhood, a community leader from Morro da Cruz went to the university to ask for help in August 2019 to find ways to access the knowledge and expertise of the university and renewable energy industry to benefit your community. His intention was to approximate the community to the concept of renewable energy while they worked on a technological intervention to be placed in the neighborhood. He expressed his willingness to disseminate the outcome of this project during the annual Christmas event in Morro da Cruz. This event would take place in December of the same year, and it is an occasion that traditionally brings together many residents around celebrations with music, dance and attractions.

This provocation led the university to develop a collaborative project methodology involving university, industry and society, described in detail in section 3. The university was responsible for engaging partner companies in the area of renewable energy to participate in the project.

### **2.2. A multidisciplinary group**

The multidisciplinary group established to work in the Parada do Sol project was composed of 15 people: two professionals from university with experience in facilitating groups, research, and conducting projects using the Participatory Design approach; four professionals from two different companies in the business of solar energy sector; the community leader and eight young people from the community selected by him. This group of eight aged between 16 to 36 years old didn't know each other before the project. Based on the work of this multidisciplinary group the Parada do Sol project is presented. The project started unnamed, and its denomination was created collaboratively between the young participants, members of the university, and companies that work with solar energy. The process was oriented to the collaborative methodology and non-hierarchy approach to capturing the community's needs and wishes. Project interactions took



place between August 2019 and January 2020, but the unfolding of the generated initiatives continues to this day (April 2022). Figure 1 shows the work team.

### 2.3. The transformation of the bus stop into a sun stop

As a result of collaborative creation work, described in 3.3 section, it was determined that the place for the intervention would be the main bus stop in the neighborhood, located close to the community center, a central commercial area where every day a large number of residents wait for public transport to move from the community towards other neighborhoods in the city.

The group identified inherent problems suffered by people who transit in the area. Also, the group identified constraints and opportunities of solar energy technology that could contribute to solving some of these problems. Among the main problems, the lack of public street lighting was highlighted, because this condition makes people feel unsafe in the area. Another issue was that the size of the shelter is insufficient considering the large number of people waiting who have to wait for public transportation on a daily basis. After a brainstorming activity, the group came up with ideas to solve it. Besides lighting the area and increasing the size of the covered area of the bus stop, complimentary ideas arose, such as adding seats so that people could wait for the bus more comfortably and offering USB ports to support cell phone charging. During the collaborative workshops, the community named the project with a wordplay: Parada do Sol. Instead of “bus stop”, the name means “sun stop” in Portuguese. Figure 2 shows the meeting in which the group performed the discovery of the Sun Stop.

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### 3. Methodology

Based on the concept of DA, this project was developed from a collaborative process using concepts of ethnographic research as a tool for exploring the field of research based on observant participation. The methodological approach is built from the understanding of DA that brings the idea of researchers being part of the field they are researching. In this way, the methodological course sought to unite the knowledge of designers and



Figure 1. Work team at the community. (photo by the authors)

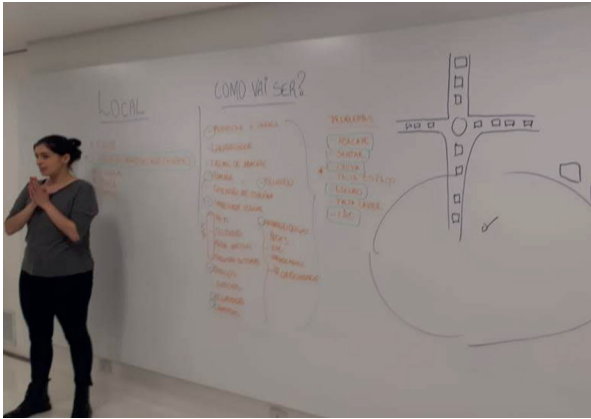


Figure 2. Meeting for the collaborative creation of the project, at the university (photo by the authors)

residents of the community where the technological intervention would be carried out.

The methodology of this project is based on a Participatory Design model proposed by Spinuzzi (2005), which considers that participatory design processes generally comprise three stages: **Exploration**, **Discovery** and **Prototyping**. Based on this understanding, the methodology of this project is presented on this way:

**Stage 1 - Exploration**, through visits with observant participation, aiming to identify the potential of the community for the development of the project.  
**Stage 2 - Discovery**, mapping the main needs of the community and identifying opportunities to bring greater engagement from the workgroup.  
**Stage 3 - Prototyping**, with collaborative workshops for idealization and prototyping of the group's ideas.

All stages were covered by the multidisciplinary group composed by members from the university, industry and society. The group was led by the university facilitators who mediated the interaction between members, ensuring a comfortable environment for everyone to express themselves. The facilitators conducted workshops using techniques such as collective brainstorming for idea generation, group voting to prioritize the ideas generated, and dedicating a time for everyone to design and present their ideas in a low fidelity prototype. It was challenging to generate a welcoming space so that everyone felt comfortable to expose their ideas, especially for young people who were not used to participating in the collaborative process. A good interaction was achieved from an informal posture of the facilitators emphasizing the importance of having the perspective of the young people for a good resolution of the project. Each of the steps of the methodology applied is described in more detail below.

### 3.1. Exploration

The multidisciplinary group interacted in two parallel and concurrent moments: understanding the needs of the territory from the perspective of those who



live in the community, and understanding the technical viability of developing a technological intervention with the use of solar energy. For this, observer participation was carried out (according to the idea of Ingold & Gatt, 2013).

A first meeting—planned in a workshop format—was held in the community, as a kick-off and with a team-building objective. The community leader played the role of facilitator of the meeting, initially explaining to the young people of the community his intention to promote a technological transformation in the neighborhood using renewable energy that gave rise to the project, he introduced the team from the university and the companies that would compose the team to make it possible. Afterward, the university team presented the project's methodological proposal, explaining that a sequence of workshops was planned so that the group could collaboratively create a technological intervention to promote this transformation of the community. To conclude, the community leader brought up a reflection on the term *Ubuntu*, which means that we must act with a collective conscience because we are part of something bigger and we are in the kibundu language. This theme was introduced to make participants aware of the project being carried out by a diverse group towards a common objective: to bring innovation in renewable energy to the community. Participants who were sitting in a circle at this point seemed to have been touched by the reflection. This moment brought to the group the perspective of the potential positive impact on the community and also reinforced our purpose of working on behalf of the community as part of a cause for the benefit of the territory's collectiveness.

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The first activities of the project were focused on the exploration of community spaces, guided by the young people themselves. Along with the visits, the participants were encouraged to think of places they would envision a positive intervention with solar energy. This moment was very important to the unfoldment of the project, since it was possible to understand, through the residents' lens, more of the local reality. From that, we started thinking about how the group could be led to take part in the conceptual design stage of a complex technological project.

### 3.2. Discovery

For the non-residents, these first interactions highlighted the scarcity of resources and inadequate access to basic public services in the community, and therefore the distance between the realities of the community and the university campus and its innovation ecosystem. With this in mind, a plan was devised to bring young people closer to the field of solar energy by conducting a six-class training, covering the concepts of basic electricity, basic photovoltaic projects, installation and maintenance of photovoltaic systems. Professionals from one of the companies led the training meetings that took place in different spaces of the university. This educational approach with the group aimed to connect them to technical issues and also to the technological and innovational spaces and initiatives on campus. Figure 3 shows some moments from these first stages of the project.

### 3.3. Prototyping

After exploring the territory and reflecting on the needs of the community, the next interactions took place at the University. From the considerations raised in the initial observations, the working group went through a brainstorming session to raise possible locations for the technological installation and so they determined that the site of the intervention would be the main bus stop.

In a further meeting, the group met to prototype their ideas for the bus stop. To make each participant's vision of their individual expectations for the Sun Stop tangible, each sketched and presented how they envisioned the installation. The group discussed and combined ideas, converging on a single vision for the new bus stop. With the new bus stop in mind, the group collaborated to build a life-size prototype. In a previous activity on community territory, a technical visit prepared the group to think realistically in terms of dimensions. We used a low-resolution approach to prototype the installation, that is, build the model using cardboard, brown paper, tape, pens, and other simple materials available. Figure 4 illustrates the ideation and prototyping processes.

In the last interaction, a retrospective meeting was conducted by us, where participants could open up to express how they felt during the project. The activity was guided by three prompts: what the group liked, what they felt could have been better and what suggestions they have for a new project like this. This moment was important because it was possible to understand the benefit of the project, especially for the young people of the community. The community representatives mentioned they were grateful for the opportunity to know the innovation ecosystem of the university, and felt they had learned a lot about topics their regular school does not cover. They were also enthusiastic about the solution that was built. As to aspects to be improved, they felt frustrated because the new bus stop would take a

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Figure 3. Some of the group's meetings at community exploration and training times (photo by the authors)



long to be installed—the initial expectation was a few months from the end of the collaborative process. As suggestions, they expressed the desire to continue with the approach of the group on new projects of this nature. To celebrate the end of the conceptual project, and also to share the results with the community, the group produced an intervention in the neighborhood’s Christmas event of that year. There is a high cross placed in an elevated part of the area, that is an important symbol to the community and from which the neighborhood is named after: Morro da Cruz (The Cross Hill). The cross was wrapped with lighting generated from photovoltaic panels. Because of its location and size, it can be seen from a long distance in other areas of the city.

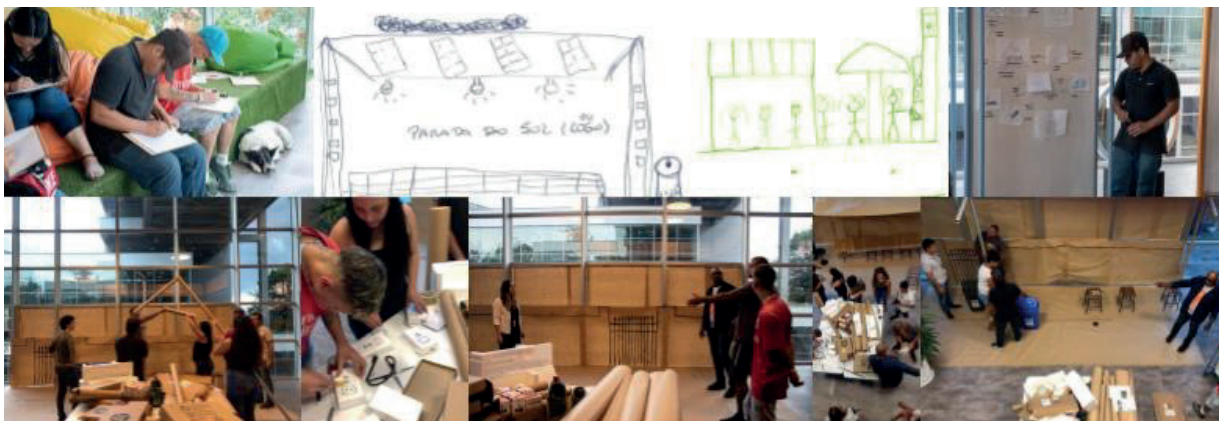
A few days before the Christmas event, one of the partner companies installed a lighting system powered by photovoltaic panels at the place. The young people participated in the installation, helping with the knowledge obtained in the training.

During the event, a video of the group was presented on a big outdoor screen, and also certificates to the young participants were delivered, as a way to recognize their involvement and encourage them to take ownership of the knowledge accessed. This participation left the residents present excited about the initiative and with great expectations of seeing Parada do Sol light up the main street of the neighborhood.

After we had already received the approval from the local government to carry out the intervention, the next steps of the project was to invite two companies to continue the development of the sun stop. The prototype created by the group was described in a conceptual way and transformed into a technical project by an architectural company. Also, an urban furniture company is responsible for building the physical structure of the stop. Currently, the project is looking for a company interested in donating the material for the photovoltaic installation. In the next section, we present an analysis of the project in light of the DA.

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Figure 4. Workshops to design and prototype the model of the Sun Stop (photo by the authors)



### 3.4. Analyzing our field by the DA lens

Working together with the project group, we understood that it was possible to respect the characteristics of the territory, and especially the way of life of the people in that place (Escobar, 2014). From our place as part of the Creativity Lab, the bus stop would not be the first alternative that we would count on to perform the technological intervention, but it is an important space of the territory because it is part of the daily life of many of the residents to move around within the city. With the residents' perspective on the project, it was possible to choose the bus stop as the space to be transformed in the territory, and thus, the exercise of making a place (Krucken, 2017) that would bring comfort, practicality, and well-being to the community was practiced. The eye and knowledge of the community leader provided the creation of a working group with young people from the community, and participants from companies contributed with the technical view necessary for the solution.

We reflected upon the advantages of associating design practices with an anthropological approach to territory intervention oriented-projects. In the Parada do Sol project it was especially important to count on the contribution of residents, who would be the people directly impacted by any intervention. The use of DA in this project allowed us to carry out anthropological research with a focus on Design. From the beginning, we intended to develop some intervention to start a process of transformation in the community's reality. On the other hand, the way we conducted the creation of this intervention shows us the anthropological character that was present in the whole process of understanding the local needs from the perspective of the community. In this way, we carried out the research with the community, seeking to associate the anthropological form of the research with the practical bias of Design. Figure 5 demonstrates how the bus stop is now and how they imagine it would be.

The current stop consists of a small area covered by two awnings fixed on two poles that are fixed in the middle of the awning, forming a space where few people can shelter from the sun and rain while they wait for the bus. The stop, idealized by the group, has a larger coverage area with benches that hold up to six seated people. In addition, the model of the new stop has energy plugs for people to charge their cell phones while waiting for the bus using the energy created by the solar panels that will be installed on the roof. The structure also has a trash can on the outside and space for vegetation. As the contribution of the local people was fundamental for the results achieved, we also were able to see the positive effect of the collaborative work between designers and non-designers. The conduction of the process by the researchers and designers using Participatory Design approach was essential for the engagement of the group. In this case, we acted as facilitators of the process, mediating the interests of the group with the possibilities of creation. The work format adopted in the Parada do Sol project sought to break with the dichotomous vision that separates experts and users, highlighting the importance of working with techniques that allow extracting and uniting the looks of a plural group.





Figure 5. Comparison of the actual bus stop and the idealization model (photo by the authors)

More than performing a technological intervention in Morro da Cruz, the Parada do Sol project aimed at creating something that would have a positive impact on the community. For us the value of a solution is directly linked to the value perceived by the community, so we sought a process of Participatory Design. More than us as researchers and designers inferring about the field, we sought to bring the community leader, partner companies, and mainly, the youth from Morro da Cruz to create a solution together. The approach aiming at the horizontal participation of everyone relates directly to Ingold's (2012) concept of skilled practitioners since it perceives everyone as equally capable of being creative and socially transforming a reality. In addition to the insertion of everyone in a non-hierarchical process, we worked with a non-established process, aiming to create the steps as the need of the field showed itself to us.

It was through an interventionist field research practice that we were able to identify the bus stop as an ideal place for our performance as a group. This perception would not be reached by looking at people from outside the community who do not live the routine of the neighborhood. The understanding of the needs does not happen only from research - we cannot understand only by observing from afar. It is imperative to be close and seek to live the reality along with people and understand their experiences, that is, to be part of the field, as Fals Borda (1999) reminds us. This is the benefit of working with Participatory Design and with a vision of DA, that proposes to reconfigure the field, bringing the designer/researcher into it, reflecting on design practices that embrace the community and offer its tools as means to solve local issues. It is the main project result, the involvement of a multidisciplinary group and the development of the design process from the field itself. In Figure 6 the group is posing for the photo with the finished prototype.

Besides seeking to achieve a final result, it was important for the project that the group's interactions flowed as the field demonstrated its needs. The development process was guided by DA, since we allied Anthropology and Design in order to bring to practice a human look answering questions found in the field through Participatory Design. Thus, the project process was being built as the interactions unfolded.

Figure 6. Work group and the sun stop prototype (photo by the authors).



In the retrospective meeting it was possible to identify the benefit of the interactions for the work group. We noticed that people felt emotional regarding the process, showing surprise and satisfaction to have had interactions in an unusual group. Overall, the young people felt welcomed and satisfied to see the result of their work consolidated into a life-size prototype. For us, as designers and researchers, it was rewarding the possibility to be part of the field, to collectively build a process, and a product that proposed to create impact in a community that, territorially, we are not part of, but we are touched.

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The union of Participatory Design and Design Anthropology allowed us to not neutralize the designer's role, and think about a world construction without differentiation between specialist and client. This way of designing allowed us to create space for debate, for diversity, and for new paths that can think the local from the past projecting solutions for the future.

#### 4. Conclusion

Based on DA theories, we understand the Parada do Sol project as an opportunity that came to us to help think about the future of a community through the collaborative work of a multidisciplinary group. We, as designers and researchers, felt especially impacted by the entire path taken with this project. Since the beginning with the group formation and its interaction, the discovery of the field, the proposed idea to develop an innovative bus stop and also the possibility to enhance a little the reality of the community. All these steps make us feel excited to see the project happening, not only the result, but also enjoying all the way to the solution.

This article aimed to report a collaborative design process that used concepts of Design Anthropology and Participatory Design for the development of a technological intervention. Using a multidisciplinary group



with members representing the university, society and government with the intention of promoting transformation to reality in a community on the outskirts of Porto Alegre. Among the main lessons learned in this article, we observed that the DA approach proved to be essential for the identification of the most relevant technological intervention for the community, the Sun Stop; the DP approach helped us to form a multidisciplinary group working collaboratively at all stages of the project, and on the one hand the designers were able to effectively enter the field and understand the needs of the community from the point of view of the residents, while the non-designers participants were able to materialize a solution relevant to their community. In addition, it was possible to perceive the ability of a multidisciplinary group to act together to make a common objective tangible.

The full-size prototype was developed collaboratively and can be presented here as part of the tangible result of this project. Despite not being implemented in the community yet, the solution is unfolding in technical and financial partnerships to become, soon, a public space that can remedy some of the pains of the community mentioned above.

Associating this result with the concepts of DA allowed us to perceive all people as skilled practitioners, and in this project, the residents of the community were the people with the most ability to identify what their main needs were. The recognition of the bus stop as the most suitable place for a technological intervention shows us how the choice to work in a multidisciplinary group based on Participatory Design processes was the most assertive choice, especially for this project that intended to carry out an intervention in territory outside our routine.

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Another important point perceived in the development of this article concerns the possibilities of expanding the practical performance of design associated with the human vision of anthropology. This project is characterized by using anthropology research associated with a design participatory approach. Our objective was to develop a solution to the challenge proposed by the community. We had the task of thinking of a technological intervention. The differential that connects to the assumptions of DA is given by the applied collaborative work that made it possible to take advantage of the potential of all members. In this way, all participants joined the group, working towards a better future for the community.

We conclude this article with the awareness that the role of the designer is fundamental to think about new futures. Also, it is necessary that their work be conducted together with non-designers who will be impacted by the solutions created. It is important that designers understand their role not only as creators of solutions, but as facilitators who can help people access their creative potential and take the best of everyone's skills to design new futures.

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