

**The Impacts of Popular Participation in the Urban Landscape: A Case
Study in Lorena, SP.**

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SUMMARY

Despite being an intrinsic factor in people's daily lives, active mobility still presents itself as a challenge in the model of Brazilian cities due to the lack of adequate and inviting structure for walking. This case study was carried out in a city located in the countryside of the State of São Paulo, with the purpose of enabling a higher quality in walking, reinforcing walkability and the importance of more sustainable modes of transportation, fostering urban vitality and reactivating neglected areas by promoting a network articulation to develop sustainable initiatives. In this way, it seeks to highlight the importance of popular participation in the construction and requalification of urban public spaces, not only in terms of displacement, but also in the occupation of idle spaces through the use of methods and tools, such as tactical urbanism, which proposes interventions in the city in the context of the micro scale, from short-term solutions, low cost and multipliable. The study presents the challenges and the results of the project, arising from the collection and systematization of data, and from the collective construction and continuous appropriation of space by the population.

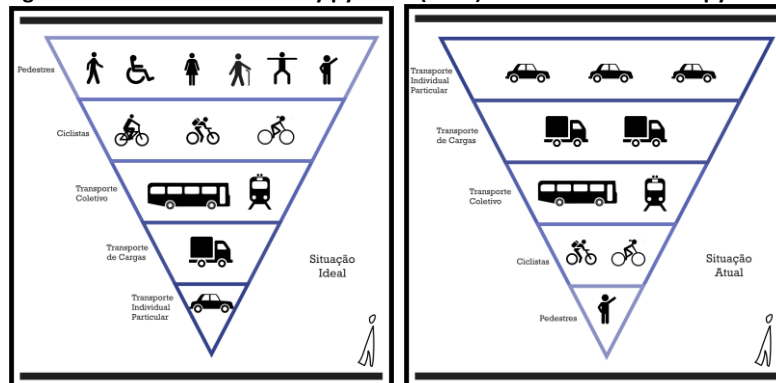
KEYWORDS: Active Mobility. Popular Participation. Interventions in the City.

1 CITIES, RIGHT TO THE CITY, ACTIVE MOBILITY AND CHALLENGES

When it comes to cities, the movement of the rural population to cities peaked in 2007 when, for the first time, the urban population surpassed the rural population in the world (UN, 2014). Latin America is one of the most urbanized regions, with 81% of its area composed of urban settlements (UN, 2018). According to the Brazilian Institute of Geography and Statistics, in Brazil, the process of rural exodus was intensified in the 1970s and 1980s, largely due to the search for job opportunities (IBGE, 2010) and, in 2010, the IBGE Census already informed society that the urban population had already become more than five times larger compared to the rural population.

Urbanization in Brazil can be considered a disorderly and rapid process, with the automobile as the main actor and development parameter, responsible for concentrating a privileged infrastructure for its use, being placed as a priority in the elaboration of public policies, planning and management of cities. Such exclusivity put the other modes of transportation in contention for a democratic space, admitting that the most vulnerable, democratic, and sustainable means of transportation was the last in the urban mobility pyramid (Figure 2). In this way, the Bicycle Innovation Lab DK Project has drawn up the ideal priority order situation for safer and more democratic commuting (Figure 1).

Figures 1 e 2 – Inverted mobility pyramid (ideal) and current situation pyramid.



Source: THE AUTHOR, 2020.

The challenges of active mobility in the Brazilian urban context are still affected by the modernist city model, which was thought of based on functionality and setorization of urban functions, besides considering the automobile and its speed as inspiration and guiding elements for the design of cities (BRITO, 2021). Moreover, in March 2020, the World Health Organization (WHO) decreed a state of worldwide pandemic for SARS-CoV-2, imposing, at first, the deprivation of social dynamics and consequently, of the daily activities and interactions of the population in detriment of the prevention of contamination by the Covid-19 virus, since the risks of the virus transmission rate in the urban environment were still unknown (KRONKA MÜLFARTH, R. C.; ALBALA, P. L. R.; SATO, 2022).

1.1 A Collective Construction

Daily activities that used to be done mostly on foot (Southworth, 2005), are now strongly directed toward the use of the private car in cities. The spaces where people live in urban centers have become more and more degraded and idle; however, in Brazil, from 2001 to the present day, there has been a growing manifestation of entities, NGOs, civil society groups, enthusiasts, and professionals engaged in contributing to more humane, sustainable, and safe cities for people. Therefore, in 2021, the Como Anda initiative gave life to Lab.MaP - Direct Action Laboratory for Mobility on Foot - which selected 11 projects from different locations in Brazil to promote a more sustainable urban mobility, seeking to foster practical actions in mobility on foot to, among other issues, strengthen networking and materialize actions and small-scale changes for the benefit of mobility on foot.

Among the proposals that were contemplated to participate in the laboratory, this article will detail a little more about the trajectory, motivations, and challenges experienced by the Coreografando Ruas Team.

Figure 3 –Selected proposals to participate in Lab.MaP



Source: COMO ANDA INITIATIVE – Lab.MaP, 2021.

The Team was idealized by the author and came into existence in March 2021, based on her concern to contribute to safer and more sustainable cities, a purpose that has been fostered since her final graduation work. The construction of Coreografando Ruas was the result of a common desire to transform the landscape and make positive changes in the public space,

seeking to provide a more inviting environment for people's permanence and well-being. The Team is based in the city of Lorena - Metropolitan Region of the Paraíba Valley and Northern Coast (MRPVNC), and is composed of an interdisciplinary (architects and urban planners, managers) and interinstitutional (representatives of educational institutions, public authorities, professionals, and civil society). The team was divided into four fronts, for better organization of the work, which were the administration, communication, project, and institutional relations boards.

Understanding that the physical intervention in public spaces could also raise awareness and sensitization in society, the team proposes the realization of an intervention in the city, contemplating one of the initiative categories of the Lab.MaP edict. The creation of measures to improve road safety and reactivate idle spaces were the guiding aspects of the project, which, by means of small interventions, believed it was possible to reestablish the interaction of the population with deactivated public spaces, aiming to reduce the feeling of vulnerability and fear, and intending to encourage new perceptions and the users' sense of comfort, safety, and well-being.

1.2 Theory Leads to Practice

Thus, a more sustainable city model - focused on people, their interactions, activities performed in the public space, and comfort when walking through the urban environment - is one of the premises of this proposal. For this, the Collective relied on some concepts and terms for the development and realization of the project. The perception of urban space through the eyes of its users was one of the main guiding aspects of the proposal. The understanding that society and the city are built simultaneously leads us to understand the importance of the mobile elements of the city (LYNCH, 1997), such as people and their activities, actors beyond the physical and immobile parts, which also make up the urban landscape.

In *The Right to the City*, Lefebvre (p. 47, 2008) explains precisely about the dynamics and interaction between the individual and the space, when he says that transformations in the city are not only results of its "composition and functioning with its constituent elements" (p. 51), but also depend on the "direct relations between people and groups that compose society (...)". Like Harvey (2014), he refers to the right to the city as an aspect of collective character, finding in social participation the vigor for physical and social transformation.

Walkability, according to Chris Bradshaw (1993), is a quality of place, which is being impaired day by day all over the world. For Bradshaw (1993), walkability has four basic characteristics:

The first refers to the physical structure of the man-made microenvironment that is "foot friendly"; the second refers to the importance of the variety of active uses and destinations within a comfortable walking distance; the third deals with natural environmental and climatic issues; and the fourth, the social and cultural diversity of space that positively influences local commerce (MORITA, 2020 apud BRADSHAW, 1993).

Experiencing the urban space is intrinsically connected to people's encounters and

social activities. Thus, walkability and urban vitality are elementary concepts for the well-being of people (users of urban space), either by encouraging walking with comfort and safety (SOUTHWORTH, 2005), or by the diversity of uses and "life on the streets" - constant movement of people on the streets - at different times and places (JACOBS, 2011).

In this context, tactical urbanism proposes to perform interventions in the city considering the micro scale, through low cost, short term and multiplyable solutions. For Lydon and Garcia (2015) this tactic is an "approach to building and activating neighborhoods". There are authors who, like Brenner (2016), defend tactical urbanism actions as a bottom-up movement, with the confrontation of urgent issues, other authors like Lydon and Garcia (2015) who believe in an approach made by various actors (NGOs, public power, groups of people and companies) and a third way, following the example of Samsão Fontes and Fernandes Barata (2018), who recognize the importance of hybrid actions through the articulation between civil society, government and various professionals.

2 COREOGRAFANDO RUAS IN THE CENTRAL AREA OF LORENA

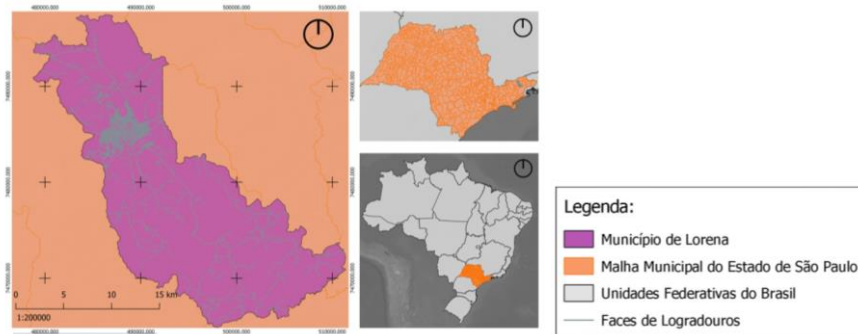
2.1 Primary Objective

The project's main goal and motivation was to enable higher quality on-foot travel, reinforcing the importance of more sustainable modes of transportation (walking and cycling) and increasingly fostering urban vitality, reactivating neglected areas, and promoting a network articulation to develop sustainable initiatives, not only in the municipality of Lorena, but also in other cities of the Metropolitan Region of the Paraíba Valley and North Coast (MRPVNC).

2.2 The Challenges in the Landscape: The City, the Square and the Surroundings

Lorena is a municipality with an estimated population of 89,000 inhabitants (IBGE, 2021) and is inserted in the MRPVNC. The choice of the city of Lorena for the pilot project considered the ease of access of the members of the Collective to carry out research and meetings with the public authorities and other actors involved, as well as the familiarity they all had with the city. The site proposed to receive the intervention is located in the central area of the city, a space that has a diversity of land uses, a structure that allows short distances on foot, and a movement of people at varied schedules.

Figure 4 – Lorena City Location Map.



Source: IBGE and OSM, THE AUTHOR, 2022.

Conde Moreira Lima Square and its surroundings were chosen based on 02 (two) central factors: the accessibility and connectivity of the location and its historical and affective value. The Square contains two bus stops where municipal and intercity fleets circulate, connecting the most distant neighborhoods and neighboring municipalities to the city center. In addition, the square houses the city's ground zero, that is the point of origin of Lorena, and the Sérvulo Gonçalves Municipal Library - founded on October 31, 1876, which currently also serves as the headquarters of the Secretariat of Culture and Tourism. The surroundings of the square have education and health facilities, such as Conde Moreira Lima Municipal School, Santa Casa de Lorena Hospital, and the Specialty Outpatient Clinics (SOC), the last two of which receive patients from other locations and provide specialized care to a population of approximately 450,000 people (MORITA, 2020).

The main challenges identified are related to the presence of idle spaces in Conde Moreira Lima Square and the lack of infrastructure for active mobility, especially around the square, due to the large movement of people towards health services and local commerce. In light of the pandemic scenario, it would be crucial to be able to move around the city more safely with respect to preventing SARS-Cov-2 infection, either for environmental comfort, the user's spatial perception, or the pedestrian's safety when moving around. Therefore, the purpose of this action was to solve the challenge of the pedestrian crossing, taking into account the user's desire line (BACHELARD, 1978), as well as to encourage the appropriation of the square's space by people.

Figure 5 – Lorena City Location Map.



Source: COREOGRAFANDO RUAS, 2021.

3 SITE ANALYSIS, SURVEYS AND THEME PROPOSAL: METHODOLOGY USED

At first, a preliminary analysis of the site was made in order to understand pedestrian circulation in this area. We also used previously collected data from Rua Dom Bosco - one of the main street sections of the site - taken from the author's specialization monograph. In the sequence, new quantitative (analysis of the physical aspects of the environment) and qualitative (interviews, questionnaires, and evaluation scales) researches were carried out, with the purpose of raising data that would reaffirm the importance of reactivating this space, and how to proceed efficiently so that the actions would be positive outcomes.

With the data collection already consolidated, it began the data systematization, resource management, meetings with public authorities and stakeholders, and training with volunteers to carry out the execution of the project. After the intervention, new analyses were carried out at the site, with the purpose of corroborating the changes and impacts of the intervention on the city, considering the possibility to facilitate a permanent change in this space.

3.1 Data Collection and Popular Participation

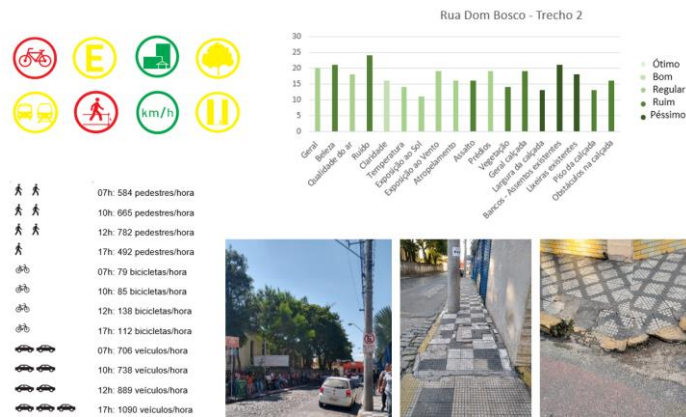
Preliminarily, the bibliographic base - "Walkability Network: Proposal for the City of Lorena, SP" (Figures 6 and 7) - was verified, which already contained some data about the area proposed for intervention. Based on the data collected by this monograph, it was realized that the time with the highest flow of pedestrians in the area was at noon and, therefore, the quantitative analyses for the intervention were performed from this same time (MORITA, 2021).

Figure 6 – Location of Segment 2.



Source: THE AUTHOR, 2020.

Figure 7 – Qualitative and quantitative analysis of Segment 2.



Source: THE AUTHOR, 2020.

Data collection was performed on weekdays, three times a week, for a period of 03 weeks (pre-intervention), according to table 1, and for 01 week after the intervention. After the quantitative analysis, two types of forms were applied, one with questions directed to merchants in the surrounding area - with a face-to-face format, and another form aimed at the general population, being made available through a link disseminated on the social networks of Coreografando Ruas and also via QR Code inserted in the posters scattered around the square and in authorized stores.

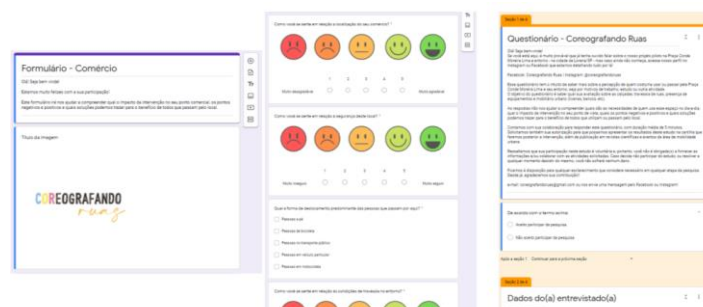
Table 1 – Quantitative pre-intervention research.

WEEK	STAGE 1	Time	PARAMETERS - FLOWS (PRE INTERVENTION)							
			Pedestrians in the invisible sidewalk	Bicycles in the invisible sidewalk	Vehicles D. Bosco Street	Vehicles Siqueira Campos Street	Pedestrians outside the crosswalk	Bicycles outside the crosswalk	Pedestrians in the crosswalk D. Bosco Street	Bus
1	Dia 1 - 03.05.21	12:00 - 12:40	56	52	385	-	-	-	36	3
	Dia 2 - 05.05.21	12:05 - 13:05	92	131	773	119	84	125	39	6
	Dia 3 - 06.05.21	12:10 - 13:10	98	114	780	95	58	119	51	7
2	Dia 4 - 10.05.21	12:30 - 13:30	86	122	808	110	91	110	60	4
	Dia 5 - 12.05.21	12:35 - 13:35	64	114	720	78	73	103	42	5
	Dia 6 - 13.05.21	12:04 - 13:04	62	86	815	65	82	72	51	7
3	Dia 7 - 17.05.21	12:30 - 13:30	84	140	853	87	76	120	57	6
	Dia 8 - 19.05.21	12:10 - 13:10	67	94	807	80	94	101	59	6
	Dia 9 - 20.05.21	12:38 - 13:38	86	115	834	64	112	99	66	6
Average			77,2	107,6	752,8	87,3	83,8	106,1	51,2	5,6

Source: COREOGRAFANDO RUAS TEAM, 2021.

The forms were prepared in Google Forms, considering the ease of systematization of data and the possibility of displaying collages with "before and after" the implementation of the proposal. As a result, there were twenty-nine responses from merchants and service providers around the square, and thirty-one responses from the population.

Figure 8 – Interview forms with merchants and the overall forpopulation.



Source: COREOGRAFANDO RUAS TEAM, 2021.

3.2 Participation Process: Public Authority

From the systematization of the data collected, face-to-face meetings were held with the public authorities, in order to establish intersectoral cooperation and formalize the performance of the Team before other actors involved. The meetings were held in person to present the project and explore the possibilities for making it effective, and there was a greater dialogue with Mayor Sylvio Ballerini, the Secretary of Culture and Tourism, the Secretary of Public Works and Urban Planning, the Secretary of Maintenance and Municipal Services, the Secretary of Environment, and the Secretary of Traffic and Transportation.

Besides these, contact was also made by letter and telephone with the Secretary of Assistance and Social Development, the Secretary of Social Communication, and the Secretary of Security. The multidisciplinary character of the intervention served as a guideline to establish a dialogue with the involved secretariats, considering that the action or non-action of each one of them could create a positive or negative impact throughout the development of the project. The purpose of the official documents was to formalize the partnership signed with the municipal management, in addition to requesting and confirming the feasibility of contributing to the realization of the intervention in various aspects, such as tree pruning, whitewashing of guides and walls, patrols by the municipal guard during the activities along with the volunteers, interdiction of stretches of street, among others. An inspection report was also made by the member Eduardo Venanzoni, together with the Coordinator of the SARC - Specialized Social Assistance Reference Center, in Lorena (at the time), with the mapping of street furniture and inspection of the areas to receive the intervention.

3.3 Participation Process: Local Commerce

In addition to the funding received by Lab.MaP, the Team sought contact with local merchants, in order to bring entrepreneurs closer to the citizenship actions and establish mutual support among those involved. The project established a partnership with the Varejão das Tintas store in Lorena, which contributed with the purchase of paints, paintbrushes, etc; with Umind Filmes, which provided aerial photos using a drone; with the Madeirama company, which provided slats to help in the execution of the painting; and with Councilman Jair Painter, who supported the project regarding various technical issues.

3.4 Participation Process: Volunteering

Coreografando Ruas reflected on the importance of bringing the population closer to the proposal, so that they could appropriate the space in different aspects; in addition, due to the dimension of the project, the participation of more people could contribute to the realization of the painting and the propagation of similar actions throughout the city. Thus, the Team opened a call for volunteers, with training made possible remotely by the Google Meets tool - avoiding, as far as possible, face-to-face contact due to the pandemic. The training sessions aimed to clarify the motivation of the project, as well as to qualify the understanding of the team

regarding the importance of data collection; presenting the tools that would be used on the day of the execution, guidelines in accordance with health recommendations, bureaucratic issues (volunteer terms for participation) and the format of the action on the day of the execution of the project.

More than 30 volunteers participated in the actions of the Team, among undergraduate students from various areas, Architecture and Urbanism and Engineering professionals and enthusiasts who followed the effort of the project, being the participation of the volunteer team fundamental to the success of the actions. The intervention happened in two stages, where the volunteers were grouped and identified in teams for better organization of the action. The support of the Secretary of Culture and Tourism also occurred through the availability of space in the municipal library for access to the pantry, toilets, and a safe place to store the team's belongings. The volunteers were issued certificates of participation for their great contribution to the Collective.

4 INTERVENTION PROPOSAL

At first, the proposal was thought to be carried out in 3 (three) stages, considering the size of the area that would receive the intervention - approximately 600m², as well as the presence or absence of volunteers to assist in the execution of the proposal. The first stage, entitled "Materialization of the invisible sidewalk and connection of the old with the new", had the purpose of placing in the physical plan and demarcate the space that intuitively and unconsciously was already used by pedestrians and cyclists; the second stage, "the pink paths", aimed to connect the surroundings with the square through safe crossings for pedestrians, considering their desire line, making walking more inviting, in addition to directing and encouraging the use of a more playful path inside the square; The third stage "colors and games, crossings and permanence" proposed to highlight the pedestrian crossings that cut the railway line, as well as to make the permanence in the square of Conde Moreira Lima Square more playful and pleasant to all users, contemplating the presence of children of all ages, with games and colorful strokes. The main elements proposed to activate the place were painting and delimiting elements, such as transit safety markers, creating more safety in the pedestrian areas.

Figure 9 – Intervention proposal in the city of Lorena, SP.



Source: COREOGRAFANDO RUAS TEAM 2021.

Due to some externalities, the intervention occurred in two moments, being the first stage, on July 18, 2021, the execution of painting the "invisible sidewalk", the pedestrian crosswalk on the desire line already made by pedestrians, and the cobblestone path inside the square, the "connection of the old with the new" (Figure 10), joining issues more focused on road safety to the actions of occupying the idle space, promoting permanent spaces that stimulate the appropriation and coexistence of the population.

Figure 10 – Intervention proposal in the city of Lorena, SP.



Source: COREOGRAFANDO RUAS TEAM, 2021.

The second stage took place on November 6, 2021, and the paintings were done by the Coreografando Ruas Team and volunteers, only in the inner space of the square, reinforcing the goal of promoting the appropriation of the space by people. Throughout the two stages, there was support from the involved secretariats and several manifestations of incentive to the actions, especially from people who work nearby and/or have the space as part of their itineraries.

Figure 11 – Intervention proposal in the city of Lorena, SP.

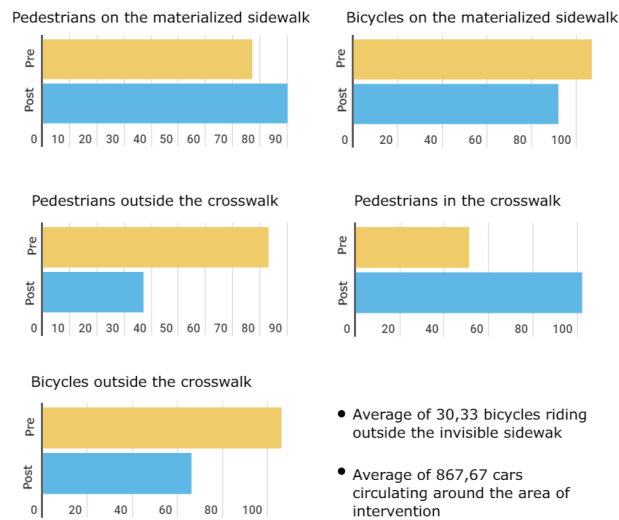


Source: COREOGRAFANDO RUAS TEAM 2021.

5 RESULTS

Fifteen days after the execution of the first stage, new analyses were carried out at the intervention site to check if there were changes in pedestrian and cyclist movements. According to figure 12, the measurement proves that there was an increase of pedestrians using the painted "sidewalk" (as shown in figure 10, illustrated in blue and yellow), as well as a significant reduction of pedestrians and cyclists crossing the street outside the crosswalk, since the new crosswalk implemented at the site was adequate to the desire line already established by users.

Figure 12 – Quantitative research conducted in the city of Lorena, SP.



Dados: Pesquisa quantitativa realizada no município de Lorena/SP. Fonte: Coletivo Coreografando Ruas, 2021.

Source: COREOGRAFANDO RUAS TEAM, 2021.

Using the observation method, it was possible to notice that the square became a more inviting and pleasant space to stay, receiving more movement of various people. Before the intervention, the space was used more for pedestrians and cyclists, especially on the outer edges, and the core of the square was avoided due to the feeling of vulnerability and insecurity that it gave rise to. After the tactical urbanism action, Conde Moreira Lima square started to be frequented by families, who appropriated the space especially in the afternoon (on weekdays) and on weekends, with the presence of children playing all over the intervention area.

Figures 13, 14 e 15 – Before and after the floor demarcation.



Source: THE AUTHOR, 2021.

Figures 16 e 17 – Painting completion, in stage 1 and stage 2, respectively.



Source: BIANCA SIQUEIRA AND KEVIN ALVES DA SILVA, 2021.

PET bottles and cans filled with colored sand were made available for the game of checkers in the square, the items were part of the intervention and remained intact for 03 months - without being collected after business hours. After this period, some items were lost, until there were none left. A few months ago (2022) it was observed the continuous appropriation of the space at different times and days throughout the week, at this moment, to exchange stickers from the world cup album.

Figures 18 e 19 – People at the square, September 2022.



Source: EDUARDO VENANZONI, 2022.

In stage 01, the Coreografando team had requested the city hall to revitalize the lighting in the square, which was very dark at night, causing a higher sense of vulnerability to its users, however, throughout the interventions of the Collective in 2021, nothing was done. Nevertheless, in August 2022, the city hall incorporated new LED bulbs and took the opportunity to maintain the painting of the benches and guides in the square.

Figures 20 e 21 – New lighting at Conde Moreira Lima Square.



Source: LORENA CITY HALL, 2022.

6 FINAL CONSIDERATIONS

The intervention in the city of Lorena, as far as is known, was a pioneering action in the Metropolitan Region of Vale do Paraíba (RMVP) and triggered the interest of other municipalities in performing actions aimed at the welfare of the population. The methodology used in the development and implementation of the intervention considered the sanitary measures imposed by the Covid-19 pandemic and implemented good practices regarding the training of the people involved in the project, as well as in the partnerships established with other actors.

The project drew the attention of civil society so that similar actions could be carried out in other locations in the city, and also indirectly contributed to the public administration to expand its communication about other activities that would be implemented in the urban space,

starting to activate social listening on its official channels in social networks. The action also contributed to stimulate the appropriation of space by the population, presenting different possibilities of popular participation and its impacts on the urban landscape and on decision-making with the public power. The analysis of quantitative and qualitative aspects were of great importance for the diagnosis of the site and the understanding of the usage profile of the area chosen for intervention. In this project, tactical urbanism was used as a tool to understand the potentialities of the site and monitor the need to implement or not, permanent changes in the site.

So far, there has been no progress with the Public Authorities in the sense of carrying out the maintenance of the completed painting or the implementation of permanent works, however, one of the proposed pedestrian crosswalks was contemplated and remains as an element that ensures road safety for pedestrians and cyclists who pass through the site. The maintenance and monitoring of interventions for improvements in urban space is a considerable challenge, but it is a feasible demand that contributes to the implementation of new public policies aimed at the welfare of the population.

The Project further considered the Sustainable Development Goals (SDGs) of the UN Agenda 2030, in particular SDG 3, SDG 11 and SDG 13, seeking to promote well-being and access to a healthier life for all through, primarily, the encouragement of more sustainable modes of transportation, such as walking, with the commitment to "make cities and human settlements inclusive, safe, resilient and sustainable" (UN, 2015).

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