

From “cycle-view” to “the bike path to death”: The social life of urban infrastructure

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“The world’s most beautiful bike path”

“IT IS CERTAINLY the world’s most beautiful bike path”.¹ With these words the Mayor of Rio de Janeiro at the time, Eduardo Paes, inaugurated the bike path known as the Ciclovía Tim Maia, on 17 January 2016. The event, which attracted hundreds of cyclists, concluded an 18-month construction period, crowning an important phase of the project to integrate the city’s South and Western zones with 39.8 km of bike paths. The portion inaugurated consists of a 3.9- km long structure that, built over the rocky coast at the edge of Avenida Niemeyer, links the neighborhoods of Leblon and São Conrado, offering cyclists a spectacular view of the sea along the entire route. The new equipment had appeared to awaken optimism among *cariocas* (as city residents are known), justifying the mayor’s optimism.² Associated to new possibilities for urban mobility and new forms of fruition of the landscape, the Ciclovía Tim Maia was a welcome novelty among the many transformations that took place in the city during the preparations for the Olympic games that were held in the city in July of that year.

The enthusiasm did not last long. On 21 April 2016, only three months after the inauguration, a portion of the bike path collapsed, killing two people. In February 2018, another break occurred in the most recent portion of the equipment, which linked the neighborhood of São Conrado to Barra da Tijuca. In 2019, two more collapses occurred along Av. Niemeyer, leading to the interdiction of the bike path for an undetermined period.

This article examines events that involve the Ciclovía Tim Maia, from its construction until today, to reflect on the many forms of producing the city that the social life of this equipment reveals. Based on the materiality of the bike path, the intention is to analyze the symbolic investments that are accumulated in it; and the various forms of experimentation of urban space that are anchored in it. Using a processual perspective, the objective is to think of the Ciclovía Tim Maia as a target of disputes between different projects for the city, and simultaneously as a producer of practices that conform the city with lived experience in the plane of daily life. In this sense, the concrete beams, metal pipes and iron

structures that give shape to this equipment – whether they are standing or in the debris of successive collapses – are central elements for thinking of the many mediations through which the city is constantly (re)produced.

Based on the analysis of articles published in the press and of interviews conducted with users of the bike path, the article is anchored in practices and discourses by politicians, technicians, and users, in an effort to interlink the materiality of the equipment to promises, expectations, failures and routines that it embodies. To do so, it especially mobilizes two fields of theoretical-conceptual discussion: urban anthropology and infrastructure studies. By establishing a dialog between these two fields based on the case of the Ciclovía Tim Maia, I believe it is possible to weave a reflection about a key moment of urban intervention in Rio de Janeiro, and more broadly, about modes of producing the city in metropolises of the Global South.

On a first plane, it should be emphasized that this reflection is based on the idea that, as Michel Agier (2016, p.38) defends, the city should not be considered as a given, but as a “human and living *processus*, whose complexity is the very matter of observation, interpretations and practices for ‘producing the city’”. In this sense, by considering the bike path as an entrance to an analysis of the dynamics of production of urban space in Rio de Janeiro in the past two years, two analytical categories are highlighted: the ideas of *process* and *scale*. The processual dimension here refers not only to the concept of city, in the terms proposed by Agier, but also to the bike path itself. Therefore, it is based on the principle that, as Graham and McFarlane (2014) suggest, infrastructures should not be considered as things or systems, but as processes that engender certain forms of living (in) the city. This means that they cannot be an object of linear analysis, based on a teleology of a material nature, but as sets of socio-material processes in constant mutation.

To think of the bike path from a processual perspective also requires a multiscale analysis. This is because, by thinking of processes and temporalities that accumulate in the social life of this equipment, we encounter subjects and agencyings that, each in their own way, affect its materiality, and not to a lesser degree, its uses and meanings. I refer, for example, to the need to reflect on the political and economic processes that the bike path embodies and mobilizes and simultaneously on the daily uses that confer it form and meaning. Far from suggesting a polarization between two scales – macro and micro – the proposal is to think of the interlinking between the different levels of experience and intervention that the bike path combines.

This involves an effort to overcome an analytical separation between physical and symbolic aspects of urban space, joining here what Larkin (2013) called the politics and poetics of infrastructures. The politics refers to “forms of political rationality that underlie technological projects and which give rise to an “apparatus of governmentality””, and the poetic, in turn, relates to the im-

portance of focus on the formal dimensions of the infrastructures, “understanding what sort of semiotic objects they are, and determining how they address and constitute subjects, as well as their technical operations” (Larkin, 2013, p.329). Defending the inseparability between these two dimensions, Larkin highlights that the strength of the relationship between people and infrastructures is “an important part of their political effect”. (ibid 334). After all, he says, roads and railways (like bikepaths I may risk to add) are not only technical objects, given that they also operate “on the level of fantasy and desire” (ibidem, p.333).

These premises allow analyzing the social life of the Ciclovía Tim Maia, focusing on the various histories and experiences accumulated in it, making it possible to access the production of different decisions and practices around its materiality, and not less importantly, the representation it engenders. They also allow reflecting on how certain events were able to generate new forms of relations between users and the bike path, creating connections and forms of experiencing daily life. In sum, it involves emphasizing a look that focuses simultaneously on the material and procedural planes based on relations and connections in permanent movement.

To do so, the article is divided into three sections. In the next section I address the context in which the process of design, construction and inauguration of the bike path took place, discussing how this equipment condensed a series of technical and political discourses around the production of representations of the future. Taking as an axis the ideas of view and landscape, I show how the bike path mobilized old repertoires about the relationship between man and nature in Rio de Janeiro, emerging as an important part of a broader project to renovate the image of the city.

In the next section, I look at the process of the bike path’s decay, showing how its series of collapses mobilized repertoires and disputes around its materiality and meaning. In the final section, I begin with the current situation of the bike path, to sketch a brief discussion about the temporal plasticity of urban infrastructures (Harvey, 2016), concluding with the suggestion that the case of this equipment allows reflecting, in a broader way, on the many dimensions involved in the process of production of cities.

The future with an ocean view

The first mention in the press of the bike path along Av. Niemeyer was in December 2012. The article, in the newspaper *O Globo*, announced the design of the project that would link the neighborhoods of Leblon and São Conrado, celebrating the closing of a “bike belt around the city” – which would run from Prainha (a small beach in the neighborhood of Recreio) until the Santos Dumont airport (in the *centro* or downtown region).³ In addition to emphasizing that the equipment would be a new form of connection between the city’s South and West zones, the text gave technical details about the project, highlighting its major innovation: the construction of a path over the rocky coastline, using

a system of beams, to avoid narrowing the lanes on Av. Niemeyer for the traffic of motorized vehicles. At the end of the report, the statement of a cyclist set the tone for the new project: “The city deserves it. It will be a beautiful trip”.

In 2014, with the beginning of construction of the equipment, the news began to multiply. An article published in September provided numbers that confirmed the grandiosity of the project: the work was budgeted at 35,9 million reais, which would be spent on hiring 70 workers, 5,300 cubic meters of cement, 3,220 cuts in the rocks, the installation of 6,750 meters of guard rails and perforations up to 6 meters deep. Also according to the article, the conclusion of the work would result in the enhancement of “one of the most beautiful views in Rio” and the rise of “a new attraction for *cariocas* and tourists”,⁴ justifying the large sums of money and work invested in it.

It is important to recall that the work was not conducted in just any space. Avenida Niemeyer, inaugurated in 1916, was the fruit of a succession of attempts to establish a highway link between the South and West Zones of the city.⁵ Its construction took place amid the process of urban expansion of the coastal South zone, when this region came to be increasingly associated to the residences of the elites of the young Republic, for whom proximity to the beach created a lifestyle based on values such as elegance and modernity (O’Donnell, 2013). Beginning with the occupation of Copacabana, over the following decades this expansion continued, bordering the ocean towards the west, passing through the neighborhoods of Ipanema and Leblon and later São Conrado and Barra da Tijuca. Paved for the passage of the entourage of King Albert of Belgium, in 1920, the avenue came to integrate the tourist circuit of the city and its viewpoints came to attract wealthy families (and therefore those with cars) for picnics. At the end of the decade, the well-known architect Le Corbusier, on a trip through Rio de Janeiro, declared: it was one of the world’s most beautiful avenues.⁶

This abbreviated report about the first years of Avenida Niemeyer made clear that its urban function was never restricted to the materiality of a highway infrastructure linking two zones of the city. Since its beginnings the avenue was an important element in the construction of the inextricable relationship between urbanism and natural landscape, which since the early twentieth century has guided the production of a repertoire of representations about the “marvelous” city, as Rio is known.⁷ The construction of the Ciclovía Tim Maia would, therefore, crown the vocation of the Avenue which, on the eve of its 100th anniversary, would be able to surprise *cariocas* and tourists with new views of the Atlantic Ocean, which are no longer restricted to those who travel in motorized vehicles. Not by chance, in some reports about the progress of the work, the equipment came to be called “ciclovista” [a play on the Portuguese words cycle and view],⁸ a codename for its semiotic and aesthetic existence, beyond a purely technical one.⁹

Contrary to what is suggested by the most enthusiastic reports, the construction of the bike path raised questions that reveal the many disputes over ideas of “view” and “landscape” and how they incorporate different forms of belonging and territorialization of urban space. In June 2015, for example, various reports began to indicate the first large polemic involving the bike path: the fact that, alongside the cement bike lanes and the guardrail that composed the equipment, large pipes also appeared, composing a view that contradicted expectations about the appearance of the new equipment, and not less importantly, about its visual function in the landscape.

The pipes, installed concomitantly with the construction of the bike path, belonged to the state sanitation company Companhia Estadual de Águas e Esgotos do Rio de Janeiro (Cedae) and were part of a project to reduce pollution on the beaches of Leblon and São Conrado. Accused of tarnishing the landscape,¹⁰ the presence of the pipes was attacked in news reports and letters from readers, who judged them to be an unacceptable eyesore in the view of the ocean from the avenue. In response to the critics, GeoRio, the municipal entity responsible for administering geological risk (and therefore for the technical administration of construction on the coastline), issued a note affirming that “the main point considered for the implantation of the bike path was the height of the pipes of Cedae”, given that placing the bike path below the level of the pipes would leave them subject to the direct action of sewerage waste at any leak”.¹¹

It is worth noting that although they are infrastructures with different objectives and materialities, the bike path and sewerage pipes shared a temporal and spatial concomitance. The reports indicate that while from the perspective of the users their coexistence appears absurd, from the perception of technicians their mutuality was not only acceptable but was also a fundamental part of the construction process of both elements. In this regard, Larkin (2013, p.329) affirms that infrastructures can be defined as “matter that enable the movement of other matter” and that their “peculiar ontology lies in the facts that they are things and also the relation between things”. In this sense, the bike path and the sewerage pipes arise as equipment for the circulation of people and waste, respectively, establishing new and symbolic movements in the city whose relationship with each other raised disputes about what should or should not be seen.

Note that visibility and invisibility are not opposite or apriorist categories, but possibilities within an interplay of relations between the materialities and their different uses.¹² In the case analyzed here, the images and the statements of technicians make clear that the bike path and the sewerage pipes were planned in a regime of material mutuality. However, the signs mobilized by each one of them move in opposite directions in the imaginary that establishes frontiers between what should or should not compose the urban landscape, referring on one hand to what can (and should) be shown – the ocean view – and what cannot (and should not) be shown – the sewerage system.

Another polemic that gained space in the press during the construction of the bike path was the perception that, once concluded, the equipment would interfere with the view of those who travel by car along Av. Niemeyer – given that, because of the sewerage pipes, the structure would be above the level of the cars. Among those who raised this issue, the argument prevailed that the Master Plan for the Municipality of Rio de Janeiro¹³ calls for the preservation of landscape, and that the bike path does not respect this principle. The statement of one user, published in a section for letters from readers, offers a good summary of the complaints:

I would like to congratulate the brilliant engineers and architects who designed the bike path at Av. Niemeyer. Since it was built higher than the highway, we were finally able to block the horrible view of the Carioca sea for those traveling there by car. Drivers and tourists will no longer have to be stunned by the sea and can enjoy the view of the exotic community that proliferates on the other side. First world is something else.¹⁴

The author of the letter ironically establishes a clear opposition between what should be seen (the “carioca sea”) [which is not a formal or even popular way to refer to the Atlantic Ocean in front of the city] and what should be hidden (the “exotic community” [community can be a euphemism for a favela]),¹⁵ attributing to the incompetence of the responsible technicians (“engineers and architects”) this undesirable inversion in enjoying the landscape by the “drivers and tourists”. By doing so, the author establishes a hierarchy, presented as self-evident, between what should or should not compose the landscape, and evokes the principle of maintenance of the right to a view that until then was guaranteed to users of cars. In this respect, a few days later, then president of the Commission of Cycling Security of Rio, Raphael Pazos, argued that these criticisms reveal a dispute between different concepts of city, emphasizing that the polemic was triggered by “those who want to privilege cars”. However, without questioning the principle of hierarchy of views, he defended that “a small sacrifice is needed to improve the quality of life and conditions of urban mobility”.¹⁶

In this regard, it is important to recall that a few years earlier, in 2012, Rio de Janeiro had been the first city in the world to receive from Unesco the title of World Heritage in the category of Cultural Landscape. According to the dossier that informed the candidacy process, entitled “Rio de Janeiro: paisagens cariocas entre a montanha e o mar” [Rio de Janeiro: Carioca landscapes between the mountain and the sea], the title is justified by the fact that

The city developed a special form of dealing with nature, worked with by man. Whether through the process of reforestation of the mountainside, or by the redesign and treatment of the landscape of its coast and by the use of its beaches, nature has a special place in the city. In this sense, the relationship between man and nature in Rio de Janeiro is unique and constitutes the soul of the city. (Iphan, 2012, p.24)

The bike path arose amid the city's preparations to host the 2016 Olympic Games, when government and the private sector came to act in an articulated manner in an "attempt to create a new image for the city to attract tourists by protecting its landscape as a preserved global heritage and with large architectural and sporting investments" (Malta, 2017, p.95). This means that, for the administrators of the city, the Olympic Games come to represent the opportunity for construction of a legacy of urban transformation with a focus on the value of Cultural Landscape, considered as a result of actions and social development practices.

In this context, the construction of the bike path emerged as one more effort to consolidate the principle of "equilibrium between natural and constructed elements", justifying the idea that as the dossier presented to Unesco emphasized, "the urbanization of the coastline is inserted in a singular manner in the broader global movement characteristic of urban reforms of the twentieth century as an apology for the idea of a healthy mind in a healthy body. In a tropical city, bathed by the sea and circled by exuberant vegetation, the interest in sport is driven by strong appeals linked to the use of public spaces" (Iphan, 2012, p.9). The bike path was, in this sense, a central element in the process of treating the urban landscape as a spectacle amid a broader process of "recomposition of the Carioca urban identity and image", seeking to "transform it into a sustainable, creative and touristic city which values the preservation of its cultural and material goods" (Malta, 2017, p.91).

Thus, it is interesting to note that the declaration of the Carioca landscape as a heritage site served simultaneously as an argument for and against the construction of the bike path. On one hand, the municipal government would insert the equipment as an important part of an urban renovation project based on the principle of valorization of landscape. On the other hand, many critics see in it precisely the opposite meaning, given that the structure of the guard rail forms a barrier between their car windows and the view of the Atlantic Ocean. Not by chance, a report from 2015 recalled precisely that Rio de Janeiro is a world landscape heritage site, using the title as an argument against the conclusion of the bike path construction.¹⁷

Despite the criticisms, in 2016 the bike path was inaugurated with plans to serve an average of 70 thousand people per day.¹⁸ At the inauguration, then mayor of Rio, Eduardo Paes, cycled the 3.9 kilometers of the bike path that linked Leblon to São Conrado, followed by a group of more than 100 cyclists. Anxious to take advantage of the novelty, many stop on the path to take *selfies* that, instantly posted on social networks, highlight the beauty of the landscape along the entire route. On the days that followed the opening of the path, nearly all the posts from users mentioned the beautiful view that the equipment offered.

Ripe with meaning, the inauguration of the bike path allows perceiving the victory, even if temporary, of the project within which the bike path was

thought, and not less importantly, disputed. After all, the event revealed how its relational potential came to be activated, going far beyond its materiality or its function as a transportation route. The equipment was also, or especially, presented to users as an aesthetic experience, providing passersby and administrators new possibilities for framing the city's natural beauty.

As we can see, the process of construction of the Ciclovía Tim Maia, from its design to inauguration, was permeated by a public debate between government administrators, technicians, and different types of users, revealing disputes between different forms of use of urban space, but also of different models of city. During this process, the equipment encompassed various types of promises: new possibilities for urban mobility, new forms of enjoying the landscape, new tourist attractions. But if recently inaugurated infrastructures gain meaning through promises of the future that they engender (Appel et al., 2016, p.27), it is necessary to question what happens when they fail. This is what we will see below, based on the successive episodes of the infrastructural collapse of the bike path.

“The bikepath to death”

“The bikepath to death”. This was how the Ciclovía Tim Maia came to be called by the press and by users of social networks after the collapse that caused the death of two people on 21 April 2016.¹⁹ On that day, amid a strong storm at sea, a wave crashed into a stretch of the bike path from below, dislodging a support beam and causing the collapse of more than 50 meters of concrete. On 15 February 2018, there was another collapse, this time on a new portion that linked the neighborhood of São Conrado to Barra da Tijuca.²⁰ According to the Secretariat of Urbanism, the cause of the incident was erosion from the infiltration of rainwater”.²¹ In 2019, there were two more collapses during storms, landslides caused the collapse of parts of the path close to the first break, one in February and another in April. Since then, the original portion of the bike path, which linked Leblon to São Conrado, remains closed, no repairs have been made and there is no forecast for reopening.

The sequence of collapses open a new front of disputes around the materiality and meanings of the bike path, involving, in addition to users and politicians, various specialists. Engineers, judges, lawyers, geologists, and meteorologists were called on at different times, and produced various explanations for the collapses. Each in their own way participated in a process of redefinition of meanings mobilized by the equipment. If during the period from the design to the inauguration the disputes were over concepts of views and landscape, they were now focused on (in)competence and responsibility.²²

But before examining the technical disclosures and the meanings they produce, it is interesting to think of how the successive collapses, repairs and (re)openings of the bike path reveal the limits of a teleological look at infrastructures, which summarizes their trajectory to the linearity of its material rise and fall. Different portions of the bike path suffered different problems, at di-

fferent times, and the equipment often simultaneously had stretches that were closed, stretches that were abandoned, stretches under repair, and stretches that were functioning. This interplay between successes and simultaneities reveals the need to think of infrastructures as open processes, with specific temporal dynamics, simultaneously combining promises for the future and marks of decay (Gupta, 2016).



Photo Author's archive

Figure 1 – Collapsed portion of the Ciclovía Tim Maia

Amid this overlapping of materialities and temporalities of equipment still under construction, but already in ruins, the engineers assumed a prominent role in the production of narratives about the past and future of the bike path. Whether to condemn the totality of the project, or to minimize the importance of the incidents, engineering came to be repeatedly called on as field of knowledge that is capable of issuing technical notes and opinions about the issue. Based on interviews, reports and statements, a diffuse discursive corpus took shape about the bike path, causing to circulate in the press terms such as *viga* [beam], *pilar* [column], *tabuleiro*, *estrutura* [structure] and *risk analysis*, used by specialists as diverse as the diagnoses presented. Within a few months, however, two theses came to compose, in articulation, the main narrative around the problems presented by the equipment: design failure²³ and a failure in execution.²⁴

In January 2017, a group of five engineers and a meteorologist published an investigative report contracted by the Public Ministry [the office of the state attorney] at the time of the first collapse. The report was coordinated by the state's Regional Council on Engineering and Agronomy (Crea-RJ). With 122 pages and 169 photographs, the document listed a variety of structural problems, such as cracks in the support blocks for the pillars, damaged expansion joints with irregular finish, visible points of corrosion on the beams, structural iron exposed in the concrete slabs and damaged contention walls, among other critical items. The report also offered a detailed explanation about the weather conditions on the day of the fatal accident, and concluded that contrary to what was argued by those responsible for the project, the wave that damaged the path was not the result of an exceptionally strong storm, but a phenomenon of proportions compatible with the history of the city. The document concluded that the main problem was the “incompatibility of the materials with the aggressive environment”, foreseeing that “this degradation would compromise the integrity and security of the structure in a short period” (Crea, 2017, p.99).

The collapses, all caused by natural events, reveal the complexity and challenges contained in the theme that earned the city the title of Global heritage: the harmonious relationship between man and nature. This does not indicate, however, a dualist perception between the materiality of the bike path and its natural surroundings, to the contrary. From the design to the collapses, the equipment was conceived in relation to the surrounding natural elements — and that are the very reason for the existence of the bike path. In this sense, more than an opposition between the materiality of the equipment and the waves and portions of earth involved in the collapses, it can be considered how the sea and the mountains are also constitutive elements of the bike path, composing its infrastructural existence, along with the concrete beams and slabs.

The trial of the technicians involved in the construction of the bike path ended more than four years after the first collapse, in August 2020. The judge condemned fifteen defendants for neglecting the “oceanographic study” and for continuing the “unprecedented [project] built blindly from a perspective of marine and coastal hydraulics”.²⁵ The defendants included engineers and executives of the company responsible for the construction (Concremat), Geo-Rio and RioUrbe (Empresa Municipal de Urbanização). This establishes a clear link between technical and administrative agency in the process of conception, construction, and maintenance of the equipment. It should also be emphasized that the sentence was explicitly based on the report produced by the Regional Council of Engineering and Agronomy (Crea-RJ), revealing the exchanges between fields of knowledge and technical discourses that permeate the social life of urban infrastructures in various moments of their existence.

The technical conflicts also mark the production of discourses in the political field. In April 2018, the City Council established a Parliamentary Inves-

tigative Commission (CPI) that sought, according to its rapporteur (then city councilman Jorge Manaia), to determine the “technical responsibilities of both the design and execution of the construction of the Ciclovía Tim Maia, which must be broadly clarified for society”.²⁶ Promoting independent inspections and public hearings, the legislative investigation heard specialists, administrators and users, thus composing a space for the production of various discursive registers about the equipment. Among them a new layer of responsabilization was imposed, bringing to light the suspicion that Concremat was favored by the municipal government, given that since 2009 the company had a total of a half a billion reais in contracts with the city government.²⁷ The suspicions questioned the fairness of the public bidding process for the bike path construction, inserting the diagnoses of “design failure” and “failure of execution” in a context marked by moral, political and economic relations.

The discourses and statements that compose the CPI are an example of the porosity that marks the separation between technique and politics in the processes of production of the city (Guimarães et. Al., 2021, p.15). More than an interlinking between two spheres of a disparate nature, what we see is the hybridization of these fields, in a context in which technical knowledge performs and composes politics. This configuration reveals different agents “interconnected by complex agglomerations of power and contexts of interests and conflicts” (Guimarães; Marx, 2020, p.356), revealing the importance of the production of infrastructures in the state dynamics of conformation of spaces. In this sense, it is possible to argue that the successive attempts to repair the bike path during the administration of Marcelo Crivella²⁸ indicated the political importance of reopening the equipment.

In January 2019, after a few months of restoration work, the closed portion of the path was opened with a guarantee from the mayor: “Now it won’t fall again”.²⁹ Crivella’s optimism, supported by a technical report contracted by the city government, conflicted with the recommendation of the Public Ministry [state attorney’s office] (MPRJ), which affirmed that the document was flawed and insufficient. Ten days after the opening of the restored portion, the equipment suffered a third collapse. Despite the fiasco of the attempted reopening and the warnings of the state attorney (MPRJ), in early 2020 the mayor announced a new intervention to the equipment. The technical repertoire, however, had changed: the project would not involve *repairing* the bike path, but *rebuilding* it. ³⁰ Although it was widely promoted in the press, the project was never executed. The portion between Leblon and São Conrado remains closed, without any decision about its future.

The collapses of the bike path led it to be defined based on a dynamic materiality and multiple temporalities, causing its meanings to be repeatedly renegotiated. In this sense, to analyze the brief trajectory of this equipment, from its conception until today, allows thinking about the many agencies that

shape it and that are simultaneously shaped by it. After all, as Ramakrishnan et. al. (2020) suggest, to think of infrastructures by considering processes of decadence, maintenance and repair allows understanding them not as self-contained forms, but as apparatuses that are permanently remade and remodeled, which produce continuous connections between things, people and power dynamics.



Figure 2 – Alongside debris from the bike path, users dispute the highway with automobiles.

Future in limbo

Rusted metal, broken railings, cracked pillars, vegetation overgrowing the structure. This is the scene found by those who travel along Av. Niemeyer, looking at the Ciclovía Tim Maia. At first site the image can refer to a situation of static abandonment, conforming to the idea of a ruin waiting for repair, void of uses or agencyings. This idea can, however, be confronted through two axes that are simultaneously empiric and analytical.

The first concerns the specifically material dimension, which sheds light on the permanent transformation of the different elements that compose and surround the equipment. Arboleda (2017, p.8), by examining “modern ruins” that resulted from unfinished public works in Italy, calls attention to the fact that, given the absence of maintenance, natural vegetation interacts synesthetically with the constructions, reappropriating spaces and redefining the landscape. In this process, various plants enter in contact with metal and concrete, causing the materials, which in principal are foreign to each other, to become parts of a single element. In this sense, the author calls attention to the fact that in contrast to commonly held beliefs, concrete and metal are not static materials.

After all, through the process of degradation they gain new colors, forms, and textures, accumulating distinct marks of temporalities, such as chronological time, the time of politics and the time of public administration – which define, for example, the realization (or not) of maintenance and repair work.



Photo Author's file

Figure 3 – Vegetation invades the bike path.

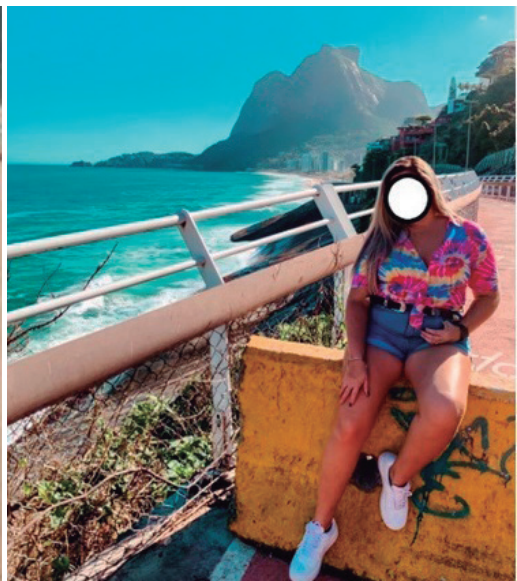


Photo Author's file

Figure 4 – Users pose for photos incorporating the remains of the bike path to the natural landscape.

The second axis refers to the different uses that the equipment encompasses, despite the interdiction and material conditions. Thus, the abandonment of the bike path by the city government does not mean it has been abandoned by the population. If the cyclists have disappeared, other unplanned uses have gained space on the structure, transforming its urban and social meaning. This is the case, for example, of the residents of the nearby favela that have come to use the bike path as a space for fishing, using the metal guardrail to support their fishing poles. Every day, men of various ages head to various points of the bike path (alone or in pairs) to assemble their equipment and spend time fishing. As Renato, 47, a resident of Vidigal told me: “After it closed it was even good, now I fish nearly every day here. Its leisure and sustenance as well, right?”.³¹ Another activity that gained space after the interdiction was photography. Attracting residents of different neighborhoods, the ruins of the bike path frame previously unexplored angles of the Carioca coast, giving rise to a new repertoire of images of the region. These users, whose registers are posted on social networks,³² incorporate the debris from the structure to frame the landscape, using cement slabs, pillars, and guardrails as props in various poses. We thus see that the current uses of the structure of the bike path escape the project that gave its shape, existing not only in its absence, but precisely due to its collapse.

Six years after its opening and three years since the last interdiction, the future of the bike path remains uncertain. Mayor Marcelo Crivella came to announce that a plebiscite would be held to determine the future of the equipment (reconstruction or demolition),³³ but the proposal was not enacted. Among the various uses of the ruins, the material dynamics that transform it and the promises contained in the original project, the bike path is defined today by that which Gupta (2016, p.74) calls “time of suspension” – a state marked by the temporal opening, which should be thought of as a condition in itself and not as something transitory, challenging the idea that the time of construction obeys a teleological linearity, whose completeness depends on the full realization of the initial plan.

In this sense, more than trying to foresee the political developments related to the equipment (waiting for a “final solution”), it is important to understand how the bike path now combines rubble from a project for the future and practices that construct the city in its daily dimension. The social life of the *Ciclovía Tim Maria* can thus contribute to an understanding of the processes of production of the city, especially in countries of the Global South, where, as Cavalcanti (2021) highlights, the concomitance between processes of construction and collapse impose new analytical challenges to the field of urban studies.

Notes

- 1 *O Globo*, 17.1.2016.
- 2 See, for example, *O Globo*, 17.1.2016, 18.1.2016 e 19.2.2016.
- 3 *O Globo*, 25.12.2012.
- 4 *O Globo*, 14.9.2014.
- 5 The avenue was named in homage of the Commander Conrado Jacob Niemeyer, owner of lands in the region who in 1915 paid for the work to establish the road.
- 6 *O Globo*, 20.10.2016.
- 7 For a reflection on urbanism and landscape in Rio de Janeiro in the early twentieth century see Perrotta (2015).
- 8 See, for example, *O Globo*, 15.3.2015.
- 9 After all, as Larkin (2013, p.329) affirms, infrastructures “emerge out of and store within them forms of desire and fantasy, and can take on fetish-like aspects that sometimes can be wholly autonomous from their technical function”.
- 10 *O Globo*, 22.6.2015.
- 11 *O Globo*, 20.9.2015.
- 12 About this point, it is useful to return to the discussion about the visibility of infrastructure. If, on one hand, Star (1999, p.380) affirmed that infrastructures are “invisible by definition”, and only become visible when they break, Larkin (2013, p336) defends that “infrastructures are metapragmatic objects, signs of themselves deployed in particular circulatory regimes to establish sets of effects”.
- 13 Approved by Lei Complementar n.111 de 2011. The document highlights that “the landscape of the city – nestled between the sea and the mountain – is its greatest asset and should be protected”.
- 14 *O Globo*, 9.9.2015.
- 15 Reference to the favela of Vidigal.
- 16 *O Globo*, 20.9.2015.
- 17 *O Globo*, 22.6.2015.
- 18 Available at: <<http://g1.globo.com/rio-de-janeiro/noticia/2016/01/beira-mar-ciclovia-da-avenida-niemeyer-e-inaugurada-no-rio.html>>.
- 19 See, for example, *O Globo*, 26.4.2016.
- 20 In September 2016 the Rio de Janeiro municipal government inaugurated the second portion, of 3.1 kilometers, linking São Conrado to Barra da Tijuca, while the first portion was still closed.
- 21 Available at: <<https://g1.globo.com/rj/rio-de-janeiro/noticia/ciclovia-tim-maia-desaba-novamente-no-rio.ghtml>>.
- 22 According to a survey by FGV/DAPP, conducted in the days following the first collapse, there were more than 36,000 mentions of the incident on Twitter, highlighted by words such as “vergonha”, [shame] “incompetência” [incompetence] and “culpa” [guilt]. (Available at: <<http://dapp.fgv.br/fgvdapp-faz-levantamento-do-debate-sobre-o-desabamento-da-ciclovia-no-rio/>>).

- 23 In an interview on 21.4.2016, the civil engineer and board member of the Regional Council of Engineering and Agronomy of Rio de Janeiro (Crea-RJ), Antônio Eulálio, affirmed that “The problem is that the design did not foresee this exceptional force because the wave raised the bridge. I think that it was a design flaw. There is practically only one central beam, so there is not enough strength for this moment”. (Available at: <<http://g1.globo.com/rio-de-janeiro/noticia/2016/04/acho-que-foi-uma-falha-de-projeto-analisa-engenheiro-do-crea-rj.html>>).
- 24 Both the design and execution were the responsibility of the Grupo Concremat, with supervision by GeoRio.
- 25 Available at: <<https://www.conjur.com.br/2020-ago-10/justica-rio-condena-15-mortes-queda-ciclovias-tim-maia>>. The defendants were condemned to 3 years, 10 months and 20 days for manslaughter for the fall of the bike path. The 32nd Criminal Vara converted the detention into a restriction of rights, fine and provision of free community services or to public or charity institutions.
- 26 *O Globo*, 3.4.2018.
- 27 *Agência Pública*, 14.7.2016 (Available at: <<https://apublica.org/2016/07/concremat-de-braco-auxiliar-das-remocoes-a-queda-da-ciclovias/>>).
- 28 Marcelo Crivella became mayor of Rio de Janeiro on 1^o.1.2016. His administration ended on 21 December 2020.
- 29 Available at: <<https://odia.ig.com.br/rio-de-janeiro/2019/01/5614622-prefeitura-inspeciona-ciclovias-tim-maia-para-reabertura.html>>.
- 30 Available at: <<https://odia.ig.com.br/rio-de-janeiro/2020/03/5879573-apos-reabertura-da-niemeyer-crivella-anuncia-reconstrucao-da-ciclovias-tim-maia.html>>.
- 31 Interview conducted in July 2021.
- 32 Especially Instagram, Where photos are indexed with inscriptions such as #avenidaniemeyer, #ciclovianiemeyer e #ciclovias-tim-maia.
- 33 *O Globo*, 13.2.2019.

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ABSTRACT – The paper analyzes the social life of the Bike Path Tim Maia, in the South Zone of Rio de Janeiro. Inaugurated in 2016, the equipment was hailed for offering not only new urban mobility alternatives, but also new framings for the oceanfront landscape. Such combination made the bike path a central element of a broader city project, with the harmonious relationship between humans and nature as one of its main axes. By following the process of ideation, construction, and inauguration of the equipment, as well as its successive collapses, the paper shows how this particular case allows us to reflect on important aspects of urban infrastructures from an anthropological point of view: their multiple timelines, the inextricable relationship between technique and politics, and the different cumulative city projects.

KEYWORDS: Tim Maia bike path, Landscape, Urban infrastructures, Global South.

RESUMO – O texto faz uma análise da vida social da Ciclovía Tim Maia, situada na zona Sul do Rio de Janeiro. Inaugurado em 2016, o equipamento foi saudado por oferecer, além de novas alternativas de mobilidade urbana, novos enquadramentos para a paisagem da orla oceânica. Tal combinação fazia da ciclovía um elemento central de um projeto mais amplo de cidade, que tinha da relação harmoniosa entre homem e natureza um de seus eixos principais. Ao acompanhar o processo de idealização, construção e inauguração do equipamento, bem como seus sucessivos colapsos, o texto visa discutir como esse caso peculiar permite refletir sobre aspectos importantes das infraestruturas urbanas a partir do olhar da Antropologia: suas múltiplas temporalidades, a relação inextricável entre técnica e política e os diferentes projetos de cidade que elas acumulam.

PALAVRAS-CHAVE: Ciclovía Tim Maia, Paisagem, Infraestruturas urbanas, Sul Global.

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Received in 10.12.2021 and accepted on 7.7.2022.

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