

# Tarde

Issue 01

# GLITCH

# INFRASTRUCTURES

Tarde, a handbook of minimal and irrelevant urban entanglements  
Sept-Oct 2023 - ISSN: 2941-4393

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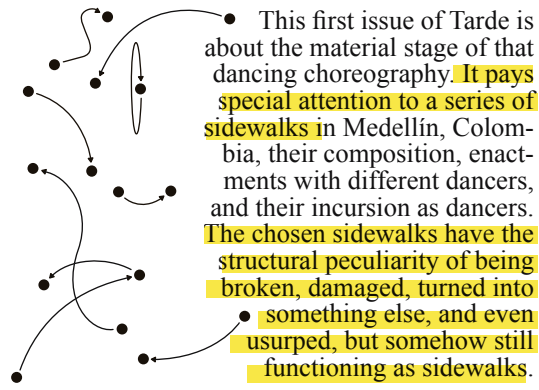


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# WALKING ON A MOSAIC OF FAILURES

exploring glitch infrastructures

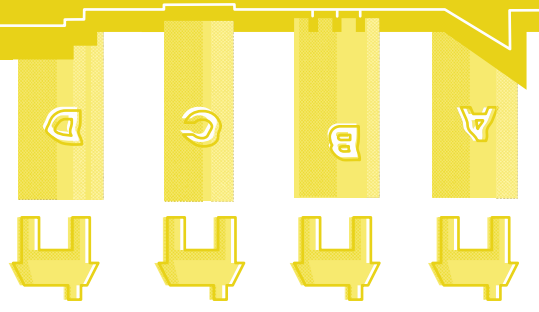
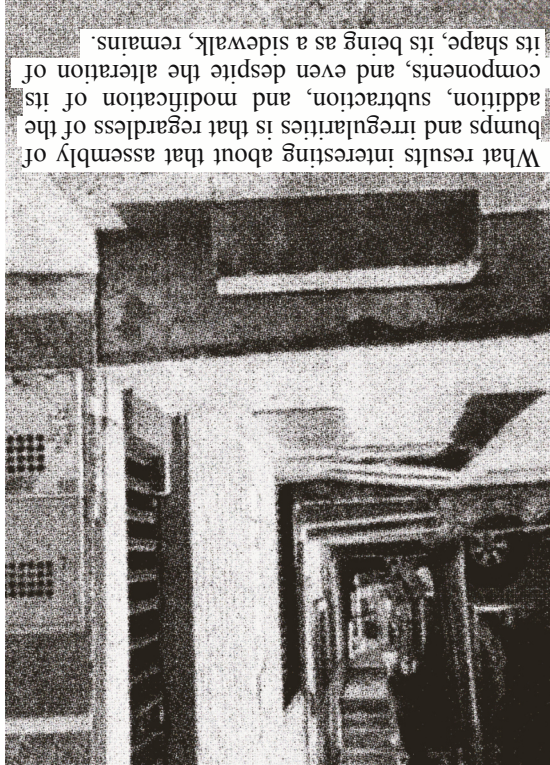
Jane Jacobs [1] imagined sidewalks as unique spaces of circulation and improvised assemblages among people. The collective being on the sidewalk, she wrote, was like an intricate ballet full of movement where everything flows and everyone has their own part.



This scenery is what I like to call glitch infrastructure. In computing, a glitch is defined as “a small problem or fault that prevents something from being successful or working as well as it should” [2]. Translating that concept into urban studies, a glitch infrastructure is an irregular mosaic made of individual failures that, arranged together and looked at from the *outside*, give the sensation that they work. And they do, although neither for everyone nor all the time.

The idea behind glitch infrastructure goes beyond being an aesthetic issue. It is a matter of usability. It pays attention to the interactions,

Mariamne de Lact and Annemarie Mol [3] have already studied this phenomenon following the Zimbabwean bush pump, a device created to get fresh underground water in rural Zimbabwe. One of the main features of the bush pump is its adaptability. Due to the particular conditions of each village, the bush pump is often assembled in diverse ways and using different components. This situation produces many versions of the same device and generates a bunch of practices and enactments regarding its usage and connections. Still, despite the variants, there is a sort of understanding of what a bush pump is. A similar situation occurs with the observed sidewalks. However, what differs between both situations is the intentionality behind the (re)assembly of the infrastructures. Meanwhile, the variations in the elements composing the bush pump obey a collective effort to improve the device, the alterations in the sidewalks are made to favor private agents. Although broadly speaking, the sidewalk is *still there*, bumps and irregularities is that regardless of the addition, subtraction, and modification of its components, and even despite the alteration of its shape, its being as a sidewalk, remains. What results interesting about that assembly of pumps and irregularities is that regardless of its alteration, subtraction, and modification of its components, and even despite the alteration of its shape, its being as a sidewalk, remains.



Although the sidewalks appropriation initiated in Medellin are public spaces they have been colonized by those living near them over the years. Sometimes it is harder to identify where a private property ends and a sidewalk begins. That liminal situation is caused by a process of

# PRIVATIZATION

## case one

That particular piece of the sidewalk is then merged with the private property design, creating an illusion of uniformity between private and public realms. Imagine now the owners of houses/businesses B, C, and D doing the same thing, each one on their own. Suddenly, there is a patchwork of heights, angles, elements, spaces, and usages, proposing different mobilities and frictions, boosting and hindering the pedestrian choreography Jane Jacobs described.




compromises, tactics, challenges, and temporal lization and usage of an infrastructural object damaged causing isolated malfunctions along the whole arrangement. Three cases of glitchy sidewalks will be presented in this introductory number, plus more additional content online.

## case two

# UNSAFETY

Sidewalks are public infrastructures mainly created to let pedestrians safely walk around the city. Of course, as Jane Jacobs, Henri Lefebvre [4], Mitchell Duneter [5], and Manuel Delgado [6] have discussed, those infrastructures also have other usages, rhythms, and enactments promoting social interaction of any kind. Notwithstanding, this vignette focuses on sidewalks as imagined spaces of circulation that let people securely move from one place to another.

The main resource to keep sidewalks safe and guarantee pedestrian mobility is to separate them from the streets. In Medellín, the division between sidewalks and streets is granted, most of the time, by three different design strategies and material divisions:

	Sidewalks are built higher than the streets.
	Sidewalks and streets are constructed at the same level but have a small barrier made of concrete in between them.
	There is a green strip zone, acting as a buffer, between both spaces.

## sidewalk safety strategies

However, people's path is sometimes hampered when a sidewalk is transformed into something else. For instance, a parking lot. Madeleine Akrich [7] wrote that sociotechnical artifacts have *scripts* or perceptive “manuals of instructions” that artifact designers incorporate into those devices to let people know about their functions. But besides utilizing artifacts in the way they are scripted, users also re-script the meaning of the devices by approaching and using them in different ways.

By re-scripting and transforming a sidewalk into a private space, an improvised parking spot in this case, a glitch is produced. This malfunction temporarily interrupts the circulation of pedestrians altering that infrastructure's main function: to allow people to walk safely. It does not matter what kind of safety design strategy the sidewalk has, pedestrians are forced to go on the streets to attempt to surpass the momentary —sometimes even permanent— obstacle.

Although people have to modify their paths and move to the streets to avoid parking cars, even sometimes generating hazardous situations due to the moving vehicles, particularly motorcycles, this glitch is often tolerated because, according to some pedestrians, *it does not happen too frequently, so it is okay*. There is a survey on the perception of pedestrians on this type of infrastructure, you can find it by following the QR code below.



Texts and design: Santiago Orrego  
This number has been curated by:  
Rachel Douglas-Jones & Tomás Sánchez-Criado



Here, find bibliography and related content.

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## case three

# ABANDONMENT

Sidewalks are large and cheap infrastructures spread all over the city. Unlike streets, sidewalks do not require much maintenance since they are not designed to carry heavy objects at high speed all the time. That is why when a part of a sidewalk is broken nobody pays much attention to repairing it. Unless, of course, the damage involves a more important infrastructure such as a water pipeline.

There are many causes of a broken sidewalk. Cheap materials, some one (un)intentionally damage it, a private renovation that did not end well, the roots of a tree going out of the ground, or just lack of maintenance. Regardless of the reason, glitchy sidewalks are everywhere. However, despite their omnipresence and long-term duration, sidewalk glitches are just that, minimal and isolated —although often concatenated— errors people have learned how to live with.

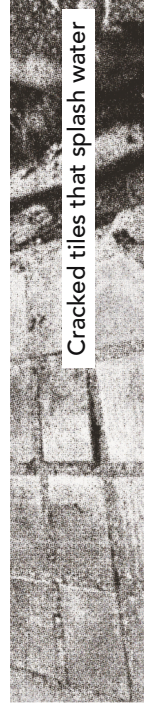
And they had to find out how to deal with those malfunctions because, in practical terms, there is a shift in the responsibility for those faulty elements. In daily life interactions, glitchy infrastructures are perceived more as pedestrian responsibilities —they need to be cautious, watch their step, move around, and dodge obstacles— rather than issues local authorities should fix.

However, as the survey has displayed, the displacement of the responsibility and the glitches causing it were often imperceptible to the pedestrians until they were directly pointed out to them. At least surveyed sidewalk users have already tacitly accepted the presence of malfunctions in their way and modified their user experience around them. After all, it is just a glitch.

## Brief inventory of sidewalk glitches



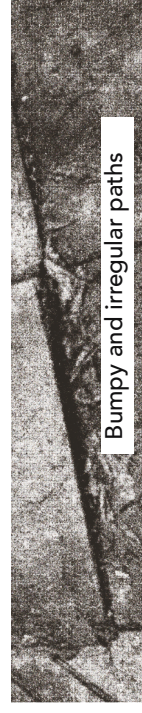
Broken pieces of asphalt/concrete



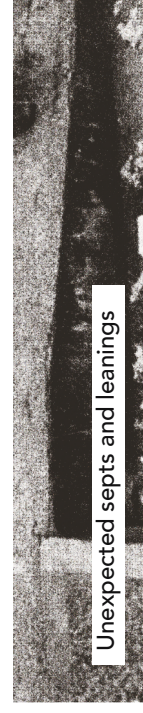
Cracked tiles that splash water



Smooth tiles turned into slippery traps when it rains



Bumpy and irregular paths



Unexpected septs and leanings

GEORG SIMMEL FOR

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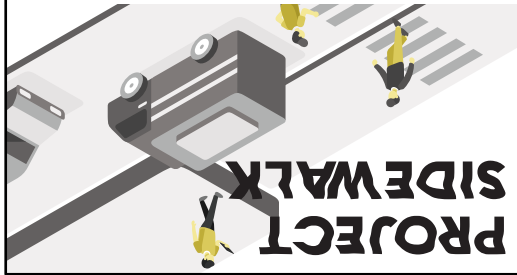
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# Glitch Tarde infra STRUCTURE A DO IT YOURSELF GUIDE TO TRACK GLITCHES

Here, however, you are going to work analogically. We will provide you an empty canvas and a set of instructions to track and map glitchy sidewalk walks. Please, unfold this sheet and let's go to explore!

Launched in 2012, Project Sidewalk uses digital mapping tools, machine learning, gamification, and data analysis, to fabricate tools to identify and analyze problems on sidewalk usability. Their main goal is to create a world wide data collection "to provide increased transparency and accountability about city accessibility, and to support new urban analytics pursuits not previously possible." [8]



Although this number of Tarde was centered on a bunch of sidewalks in Medellín, Colombia, glitchy infrastructures can be seen everywhere. With this mini guide, we want to invite you to walk around your city hunting individual failures entangled to sidewalks. Besides the cases and the inventory of glitches already introduced, there are other possibilities to identify and classify those malfunctions. For instance, one could focus on how some publics—children, seniors, people with physical disabilities—approach sidewalks and frame those practices into a discussion on usability and accessibility. Regarding the last point, there is an example from the University of Washington named Project Sidewalk.

## MAPPING SIDEWALK MALFUNCTIONS

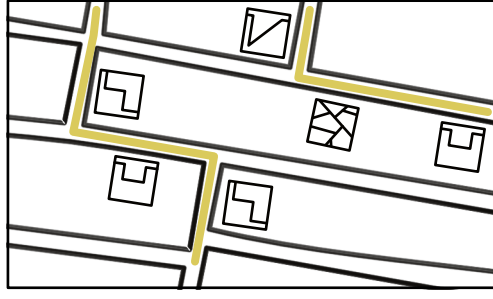
Your map(s) here

## INSTRUCTIONS

This guide is an ethnographic artifact designed to document sidewalk glitches. It is divided into two parts. First, at the top, there is an empty space to sketch and track your sidewalk explorations.

Then, we also have a bunch of glitches already introduced along this number, plus a couple of empty spaces to document new possible malfunction functions you may around.

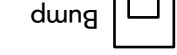
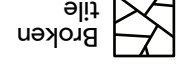
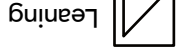
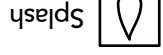
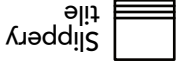
Below, you'll have a map for inspiration, but feel free to experiment with your own techniques and methods.



## MAPPING EXERCISE

Date:	
Place:	
Time:	

## CONVENTIONS



Slippery tile

Splash

Step

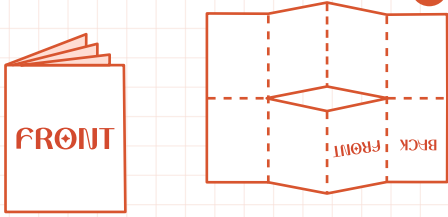
Leaning

Broken tile

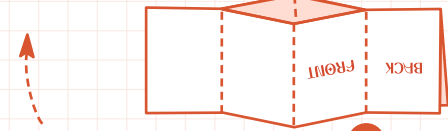
Bump

How to fold the handbook back

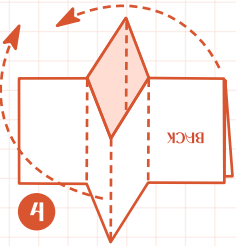
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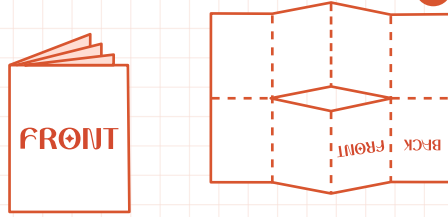
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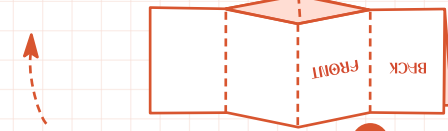
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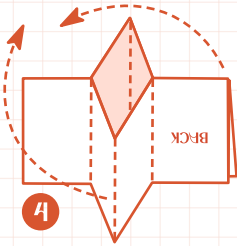
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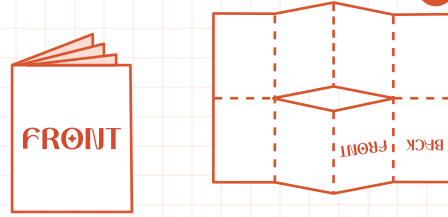
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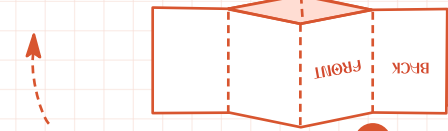
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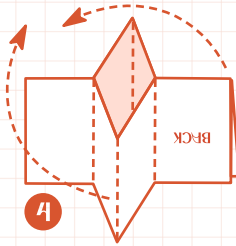
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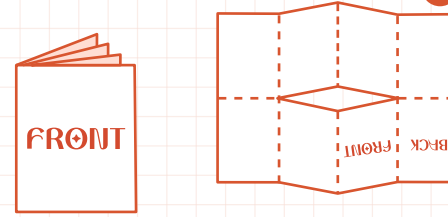
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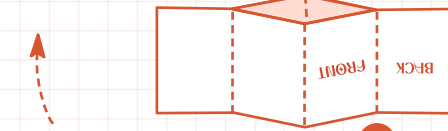
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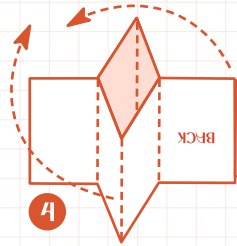
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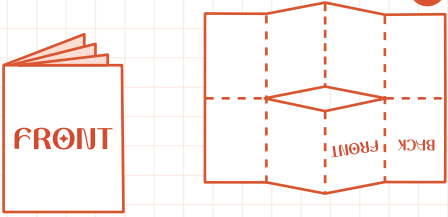
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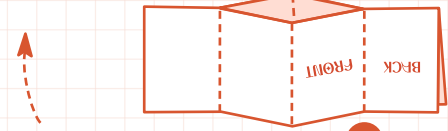
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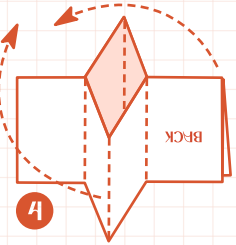
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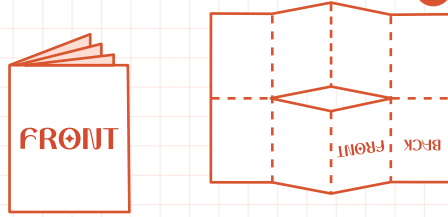
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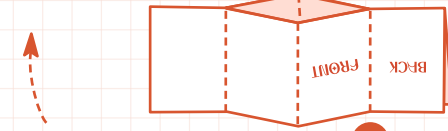
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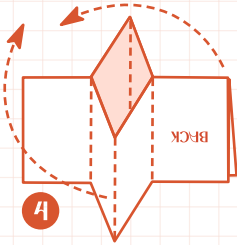
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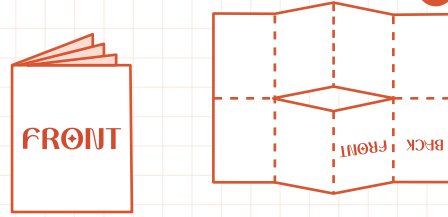
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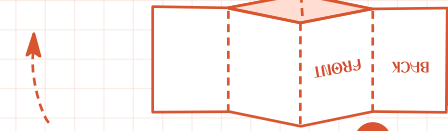
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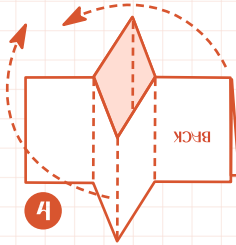
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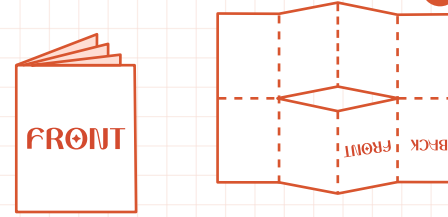
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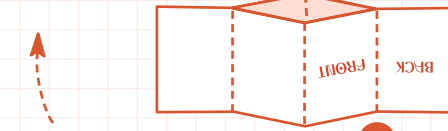
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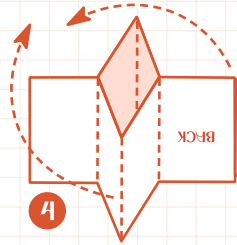
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