

The sidewalks in Lisbon are paved with *calçada*. Black and white stones are cut in squares, hexagons and irregular shapes. Sometimes the stones are arranged in elaborate patterns. The student handbook for the *Escola de Calceteiros de Lisboa* illustrates 15 pages of motifs. In the public squares, the *calçada* patterns are often based on Portugal's nautical identity: waves, mermaids, five pointed stars, caravels.

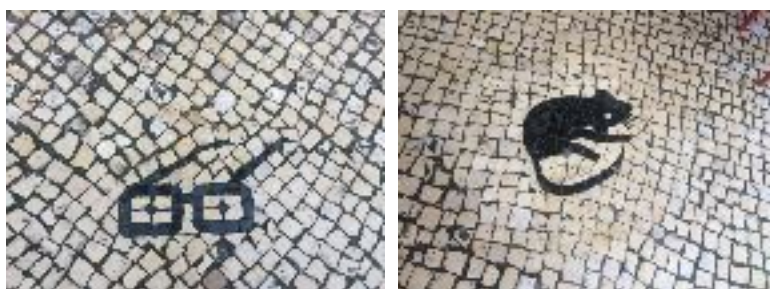
I photograph the undulations in the *calçada* caused by the growth of tree roots. I imagine the tree roots in a perpetual rebellion against the weight of the stone. The first *calçada* was made by prisoners, in the courtyard of a castle. The idea to cover the courtyard with stone *calçada* could have evolved from the floor mosaics in the Roman palaces back when Lisbon was called *Olisippo*. Or from the paved Roman roads leading in and out of Lisbon. No doubt also built by prisoners and slaves.



In a bookshop window, I spot a thick book called *Empedrados Artísticos de Lisboa*. *Empedrados* is another name for *calçada*—specifically the designs and pictures made with the paving stones. Online the book costs 300 euros. I enter the shop. 40 euros, the bookseller says.

The book is from 1985. There are 15 walking itineraries throughout the city, illustrated with black and white photos. Patterns, techniques, neighborhoods and street names are indexed in the back. So much *calçada* has been ripped up since then—the platform numbers at Cais do Sodré train station; the welcome mats in front of businesses that have since folded or merged. Sabena Airlines, Star Travel Agency, Crédit Franco-Portuguese; Banco Espírito Santo.

There's an itinerary for the area where I live: outside Rato metro station, the *calçada* on Largo do Rato is still there. Eye glasses for the opticians, a book in front of the stationery shop and a rat in front of Rato café.



At the *Escola de Calceteiros de Lisboa* a group of German students are taking a month-long workshop. Teresa is the art historian at the school. She said I could participate for a week. I wait in the school's office for Teresa to arrive. Jorge, the *calçada* master, walks in. We've met before. He makes eye contact with me but he ignores me when I say hello. He talks to the secretary. He sounds upset. I ask him in my very basic Portuguese how he's doing. Very bad, he says. I ask if it's his back. It hurts everywhere, he says. Teresa arrives. She talks to Jorge, then he walks away. I'm so sorry Ellie but Jorge can't teach the course. He's not well. *Calçada* has destroyed him, she says.

I follow Teresa through the gardens. The plants and trees for the city's parks are grown here. In the greenhouse, four students are sitting on the ground. Next to each student is a pile of square white stones. Teresa introduces me to the Union Leader. He studied with Jorge for a month, a couple of years ago. He's come back with a

group of young Bavarian landscapers to learn some *calçada* techniques. We do a lot of stone patios, driveways and pool decks, the Union Leader says. But there's no way we can make the ornate patterns in *calçada* that we see here in Lisbon. In Germany, the labor would cost way too much money.

He looks at my camera and tripod. What magazine are you from, he asks?

I tell the Union Leader how I ended up at the school: painted stones, punishment, prisoners, prehistoric stone tools, lost knowledge. He says, in Bavaria the vineyards are terraced with a dry stone wall technique. But the old guys are dying and the young ones don't want to learn it. In Italy—in Cinque Terre—they have similar walls in the hills above the villages. The old men are teaching the technique to refugees from Africa. Those walls have UNESCO protection.

Teresa says, the only way Portuguese *calçada* can be saved is if it becomes a part of UNESCO's Intangible Heritage. Recognition brings money to augment salaries and then people would be more interested in learning the craft. There are no students here at the school anymore. It's practically a dead art already. Has Portugal tried to nominate *calçada*? I ask. Teresa says, several years ago, one of the *calçada* masters started a petition on Facebook. He got 5,000 signatures. The petition was brought to city hall but it still hasn't gotten anywhere. Not everyone loves *calçada*. Many people want to rip it all up. The surface is slippery in the rain. It's impossible to walk in heels and difficult to push a baby stroller over the uneven surface. I broke my foot once, she says. People are right to complain but the best solution is to maintain it. When construction companies rip up sidewalks to access pipes and cables, they don't put the *calçada* back properly. That's how people fall. Teresa bends down and runs her hand over one of the student's practice *calçada* boxes. She says, I would have tripped here here here and here.



A few days later, I receive an email from Teresa. The gardening teacher will take over the *calçada* workshop. She writes that I should come back to the school next week.

I show up before everyone else. Teresa pulls up. Sorry I'm late. I'm putting my retirement papers in order, she says. I got divorced last week and I'm in the process of changing my name back. I've been married three times and every time I've changed my name—you think I would have learned by now.

I ask about Jorge. He went to the hospital. It's advanced-stage cancer. The doctors say nothing can be done. I spoke to him this morning, he was in a good mood. A fake good mood, she says.

Teresa accompanies me to the greenhouse. There are four new German students and four practice *calçada* boxes on the ground. Why isn't there a box for you? she asks. I find a fifth one, on a tall table. It's half completed. Teresa asks the Union Leader to show me some techniques while I wait for the lesson with the replacement teacher. The Union Leader says, first you have to learn to cut triangles. You draw a line with the pointed side of the hammer. You split the square stones on the diagonal. Once you get the shape that fits into your box, you have to trim the

stone's tummy. If you don't trim the tummy, the stone will stick out too much. Teresa laughs. Trim the tummy, that's what Jorge always says.

I cut some *calçada* but I don't know how to trim the tummy, so the stones don't sit deep in the sand. I rummage through stones from the discard pile and try to fit them in my box in diagonal lines. Stop arranging the stones, Teresa says. You can't just make a puzzle. You've got to cut some stones too.

After lunch, I go to Teresa's office. She introduces me to her colleague. Ellie wants to see where the drama—the psychology of *calçada*—plays out in the city. The colleague says, well how about that large beautiful caravel in Baixo—in a tunnel between two cafes. The tables and chairs are on top of it. Imagine, over a beautiful caravel.

Teresa pulls a binder from a bookshelf. Here's a picture of *calçada* masters working in the early 1900s. Sitting on the ground wearing tall hats and crisp white shirts. Impeccably dressed. As you know, at the beginning prisoners were forced to do *calçada*. At the castle of São Jorge, the public was allowed into the courtyard to watch the prisoners work. Like animals in a cage. It must have been humiliating for them, she says.

I ask if Jorge is the last master in Lisbon. She says there are two others who also work for the city. They mostly do repairs. I met one of them when I wanted to know more about the signatures, she says.

Teresa flips through the binder. Here are the signatures of some recent masters. But it's not really a signature. It's not like, "That's me, I did this." It's more like a mark that says "I was here." The *calçada* master knows his work will disappear under our feet, she says. This is Jorge's signature. Four hearts to form a flower. Sometimes he'd insert other marks into the *calçada*, just for fun. You can see some of his marks on Avenida de Liberdade.

I ask Teresa if she's written about *calçada*. I do have something I'm working on. It's probably an impossible idea, but I want to prove that *calçada* is a language— a form of poetry. Do you know Deleuze? I am writing about *calçada* through a sentence from Deleuze. What's the sentence? I ask. I'll show you tomorrow, she says.



I'm walking up and down Avenida de Liberdade searching for Jorge's marks. I have a sloppily drawn map and directions from Teresa. Turn your back to Restauradores, walk towards the statue of Marquis de Pombal. Near a stairway leading underground, but it's not the metro.

The floral patterns on Avenida de Liberdade were made with an old technique called *calçada à portuguesa*. The stones are cut in all sorts of shapes and put together like a turbulent jigsaw puzzle. According to Teresa, it's the best place in Lisbon to see the human drama of the puzzle play out. I walk slowly, scanning the ground. Every single stone on the pavement was cut by hand.

I first met Teresa and Jorge a couple of months ago. Luisa, the director of the artist residency program, contacted the *calçada* school on my behalf. Teresa invited us to visit. Jorge showed us former students' work outside the school's cafe. He pointed out the different techniques: *malhete*, *quadrado*, *sextavado* and *calçada à portuguesa*—the most complicated technique. Jorge says, there are very few people alive in Portugal who know this technique. On Avenida de Liberdade, you'll

see that repairs have been done with much simpler methods. Jorge points to the ground. This knife was done by a former sailor. This flower was very well done. The logo for the band AC/DC. An alarm clock. What drives people to learn *calçada*? I ask. A long exchange in Portuguese. Teresa says, there aren't any students right now. The city forced them to come here. They couldn't get their job-training checks if they didn't attend the course. They would show up but there was no real interest. You can make more money driving an Uber.

Jorge says, when I die this knowledge will be lost. I photograph his hands. He turns them over. Sometimes when I eat, the fork slips right through my hand, he says.

He slowly bends down and picks up a stone. Teresa brings over a small wooden box. It's the chair the *calçada* masters use when working in the street. Do you want the little chair? she asks. Jorge shakes his head. Salazar died after he fell from a chair. I prefer to sit directly on the ground.

Jorge says, my boss thinks I'm lazy. I'm too young to have so much pain. I wish I could still work out in the city. I really want to do stuff but I can't bend down. Teresa says, it's just an episode, Jorge. If it's just an episode, Teresa, I will kiss you. If I see myself getting better, I will give you two kisses.

Jorge hands me the hammer. Luísa, the residency director, translates. Your turn lady, he says. I hold the white limestone square in my right hand. I strike the stone but nothing happens. Jorge looks at Teresa and Luisa. She's afraid, he says. He looks at me. The stone's offended. Stones are sensitive. They understand. At the beginning, everyone is afraid of breaking stone. He takes the stone out of my hand. He turns it over a few times. With this stone, I know it will open here because I see a vein. He taps the stone with his hammer. The stone breaks into two pieces, smooth and clean. It's like slicing *marmelada*, I say. Everyone seems perplexed. I look to Luisa to translate. You know, *marmelada*, the blocks of quince jam. *Marmelada*? It's like wiping your child's ass, he says.



Jorge turns over his hands. He shows us his palms. I went to have my fingerprints taken for a new ID. They couldn't read my fingerprints. They asked me what I do. I told them I worked with stone.

That was two months ago. Now I'm walking up and down Avenida de Liberdade, in homage to Jorge, who is dying. I'm looking for his mark, an insertion he made into the official pattern of the avenue's calçada. Maybe his marks are covered by the tables and chairs surrounding the kiosks. I take a break. I stop at one of the kiosks. I order a lemonade. I look under the tables.

In Antonio Tabucchi's novel *Periera Maintains*, the protagonist, Periera, drank sugary lemonades in the cafés around here. In the novel, Pereira is the editor of the cultural section of a mediocre christian newspaper, owned by a higher-up in Salazar's fascist regime. The novel is an account of Periera's transition from an obese lonely widower with his head in the sand, into someone who resisted and has been arrested—and who is now giving his deposition to the secret police of the events leaching up to his arrest.

Periera's first public act of resistance was using the newspaper to translate and publish excerpts of a Balzac novel. It makes it past the state censors. People start buying the newspaper to read the excerpts. The office is inundated with compliments. The fascist newspaper owner is happy about sales.



“Periera had a feeling that the owner would never receive the message in a bottle. It was really and truly a coded message, and only people who had ears to hear it could receive it.”



I finish the lemonade. I walk down Avenida de Liberdade one more time. I change my tactic. I walk as fast as I can. I try to take in the entire pattern of the sidewalk at once. Maybe Jorge’s insertion will jump out at me. I see black *calçada* flowers on a vine with a signature inside. A shadow had been covering it 45 minutes ago. I pass stairs leading underground, but it’s not the metro. I take three steps. In the center of one of the flowers is a black circle—like all the others on the avenue. But in this circle, there is a clock face. I position my body until it reads 5 o’clock. I smile. It’s pretty blatant, right there in the middle of the design. I step aside. A group of people walk over it. I think about what Teresa had said, that the *calçada* master knows his work disappears into the city—but he leaves his mark anyway. Just to say, I was here. I’m apart of this. Tack Tack. Tack. 5 o’clock, time to go. Just the time he left work on that day. My mark stays here for the rest of the life of this *calçada*, even if no one notices it. It’s like the prisoners’ tattoos, have you seen them? Teresa asked. Five dots between the thumb and the index finger. On the front of the hand. Four walls and the person in the middle. I belong here. I belong to the ground.