I entered Cai’s tilespace, and inverted her Tenfold Gate debris on the first try. Sitting upright in parallel scanner beds, the memory of what happened in there was already gone. But that was just sandcastles. The expression of clarity and relief on her face, that’s where I could have lived forever. The tryptamine remnants were beep-buzzing tunelessly, muttering crazy things in my ear. *I never knew my own cells*: every one a treasure filled with treasures filled with treasures, a translucent iridescent music box, transcription whirring away in frenzied melodies, the taut and sensual ritual of mitosis. *I never knew my own mind*: all those layers never peeled back, all those unknown corners never turned. But Cai Yuhui did. For ten seconds the image of me that existed inside her was realer than I was. The locus of myself was in her eyes.

“You should be careful,” I whispered. Deng might have been just down the hall. “I don’t know if I’ll be able to do that again.” But I would, of course. Ten times in the next six weeks. I didn’t know if Cai had a real use for Tenfold Gate, or if she was just addicted to the subtle pleasures of graph homeomorphisms. But I didn’t ask. I was addicted to her relief. Besides, some vantablack subself of mine was learning to pilot the diving-bell. I (she?) was doing it better and faster. Perhaps I (it?) was the only person alive both willing and able to operate the Deng Bridge.

I said nothing about this to Deng.

Cai and I: things changed between us, but maybe not how you’d think. Back at the flat we still didn’t talk much. We had no friends in common, which is to say that she had a million and I had none. But maybe she sensed that I was no longer so resentful, but genuinely, gently curious, about her Ripplechasing life. And gently, she began to let me in. Departing one night she pressed a slip of paper into my hands. In shanzi, in triple-knotted phono-semantic rebus, she had written something like: *the entire city is a great coral reef.* There was also a doodle on the page, a spiderwhorl of never-intersecting lines which clung to my mind even and especially when I looked away. I knew enough about Ripplechasing, at least, to know that this was called a sigil.

*The entire city is a great coral reef.*

It was not exactly actionable information. But nor was Cai the only one saying it. I heard it, muffled, in the voices of newscasters and flower-sellers, trying to break free. And I saw it, that sigil of it. I saw that everywhere: in Sharpie on ward-gates. In ink on skin. Most of all: in chalk on everything else. It welled up like a dull wet pressure on my forebrain. Days and days later, tiling out of a long loop-lock session, I felt the mental logjam break. I took a long walk around campus, soaking in the blue hour. Wondering: how did I fail to understand her meaning then?

On Beiwan Ward’s main street, I stopped in front of one of the displays. I could always just barely make out the Ripples; that night, I finally saw them clearly. Their motion was sensible and predictable. Their boundaries were crisp. They were the color and texture of coral that night, and unusually visible against their surroundings. I watched for a long time; others lingered in the twilight, watching with me. Home was barely two blocks away but the walk took an age, unpeeling myself over and over from the screens. Upstairs I grabbed Cai and repeated her meaning back to her. Not these words, never directly, but their silhouette:

*The entire city is a great coral reef.*

She grinned, and fetched me an oversized parka, violently fluorescent, with the texture of brain coral, only chopped-up and fragmented. I ran my fingers over the deep, stuttering grooves. “I printed this for you,” she said, with a touch of apology. “because I didn’t know your size.”

We set out on foot. Cai was wearing a kind of trypophilic purple jumpsuit made of wavy coral sprouts and smokestacks. She pointed to her eyes as her Contecs blinked red. “Everyone say hi to my flatmate Mona,” she bubbled into the mic. “She’s going to help us tag some Ripples tonight.” I waved, sheepishly, to fifteen thousand viewers.

Cai knew all the best lines through Shanghai: she knew which cameras lead to which displays on what kind of time delay. She knew which rooftops were shortcuts across which ward boundaries. She and I and her Ripplechaser friends could traipse slowly across a block in East Xuhui and then sprint through narrow alleyways to catch Ripples bearing fragments of our texture and color on displays in Tianzifang. The delays got shorter and shorter. The Ripples got more vibrant, and the crowds of chasers got thicker. But Cai liked the slow build. She herded cats, leading our orange-purple-yellow stochastic parade from behind. By the time we got our first realtime glimpse of ourselves, of the Ripple we’d become, we were properly warmed up. We felt like we’d earned it.

The Scrambler is an all-ways all-walk crosswalk in Xintiandi, the walls and rooftops packed to the gills with Mirror Sea displays and quasigrams that are famously, despite the Weather Bureau’s grumbling, not on any kind of delay. We arrived panting and sweating from all directions at once. There was no saying how many of us there were, how many paths we arrived by. I had stuck by Cai’s side — but that’s not really how it felt. I felt very loose, very expansive. I was starting to get clear glimpses of myself through strangers’ eyes. Starting to feel like I was on both sides of the camera at once.

“Say it,” one of us whispered into the other’s ear, a hand on a shoulder, another pointing up towards a dripping neon quasigram.

Mouth movements in response, distant, abstract.

And then Mona Xu was gone. At least for the night.

*The entire city is a great coral reef.*

The daytime was still clinical drudgework and long, fruitless meeting with Dr. Deng. But — the order that our minds make of blurs of light and sound in the streets? That simple statement unlocked *more* of it. The movement of the octopus explained the cut of the skyline. The contours of low-slung coral explained the gait of grannies, the timing of trains. I fell deeper into fascinated satisfaction, and the more I invited the thought into my daydreams, the more I was rewarded by what I saw. The things my professors said made more sense, sparked when rubbed together, when seen through this lens. Of course they had no idea, but other people did — I could tell they were tuning their words to resonate with this idea, and I began to seek them out, to reward their attention with my own.

*The entire city is a great coral reef.*

For a while I had to scour the Internet to find it, but soon there was nothing else in my feeds. I gorged myself on the aesthetics of it, making oblique references to it in my Advanced Techniques in Loop-Lock seminar. I knew distantly that I had become involved in something strange. That buying a scaly backpack and stickering my tablet with angelfish marked me with something not taboo, but deeply curious and reflectively impregnable to outsiders. But I didn't care about them. After two lonely years in the city, I felt like I had a hundred thousand friends whispering just out of sight. I could step onto the street, flash my jellyfish earrings or my new tattoo — *where had that come from?* — and run with a pack of strangers like I had known them all my life.

It became too bright to look at directly. Thousands of Doujiang posts and Veeku tracks churned around its gravity well, drawing us into closer, headier orbit. There was art about it, music about it, crime about it. The aesthetic had become an ethos, even a movement, but if it stood for anything at all, it was impossible to put into words. If asked, we would deny it outright — of course the entire city is not really a coral reef. It wasn't true, it was something more than that. It was a key that unlocked a thousand doors, an abstraction so powerful that it subsumed all other thought and rewarded us with shoals of correlations, hidden variables gleaming in the sand.

And that was just the daytime.

“How do you think they reproduce?” I asked around dawn one morning. For hours Cai and I had been walking outside to reup, letting the streetscape dissolve into waves of viscous glass. Now we were sitting in our flat.

“Mona!” she said, scandalized, but her eyes were laughing.

“How do you think the *Ripples* reproduce?” I asked. It was so freeing to hear the word leave my mouth, so right, and Cai’s breath caught when she heard it. Our eyes locked: the apartment melted away and we were back on the street, but with the clarity of conviction we saw the bulge of the world behind the world, our rectilinear reality ripe to burst. We saw the Ripples even where there were no displays.

“I think they…they go like this.”

Then we were back in the flat again, our fingers interlocked across the duvet.

“I think…” I began, already losing my train of thought. Making a face, because I was seeing my own expression through Cai’s eyes, and hers through mine. I looked so — *so right* when she saw me.

“You think?” Cai said, and I could feel her tongue curl in her mouth.

“I think they lay eggs.”