I can feel it, the weight of it, just behind the prickle of the last primer tiles. And I have maybe a second to reflect on what I thought would happen to me here. I assumed that tiling into the Mirror Sea would be like stepping into one of the displays, floating peacefully and serenely through its higher dimensions, easier than scuba diving. Instead, *this.* I thumb the allocator switch: a heady, crunchy thrum of glossy red-and-yellow tiles, my mind unfurling, more mind than I remember. Then a firehose of raw data hits me square in the plexus and just keeps coming. Sawtooth panic, grasping at the jetstream with chicken-claw-claws. Feeling trolleys, alley cats, garbage bins, hats, a million such snatches a second, adding up to nothing, lasting no time at all. I feel for the emergency shutdown…

*You just need to do it yourself.*

By the time I realize what *it* is, I’m already doing it. Every Mirror Sea display is fed the hashed-up streams from thousands of cameras: often from a few dense blocks, but possibly from bridges and elevators and alleyways spread thin across miles of the city. Geography is irrelevant to the way the Sea is reconstituted from all this near-noise. What holds it together, what I’m looking for, is correlation.

I braid together a random fistful of streams and find bicycles moving at the same speed. Furrowed shards of the same expression on different faces. Pigeons in different wards, startled by the same noise. Matching motion of brakelights and escalators and wind-blown plastic bags. Matching stillnesses, too: deep and featureless grays of concrete and light pollution, striated with the cold, sober glare of LEDs and the warm, absinthe-drunk gaze of sodium. Tesselations of foliage and windowframes from sister seeds and forgotten five-year-plans. It melds together into a dark, desolate patch of Mirror Sea.

A second, different wave of panic so solid that I feel my own body: *this is exactly what I’m not supposed to be doing.* *The Weather Bureau let me off with a warning.* But for all their warnings, the Weather Bureau is still signing off on hallway displays at YINS and fishbowls above Xintiandi intersections. To what extent, I wonder, is this any worse? So, gradually, I let my guard down. Bringing cameras into and out of the braid, I move through the Sea. Shanghai’s motion makes its currents and riptides, and Shanghai’s stillness makes its crystalline cavern walls. But is it relief or heartbreak that, in the compressed essence of Shanghai, that it’s possible to find such a vast expanse of nothing?

*You’re still not letting yourself see.*

I can tell there are stronger and deeper correlations. I can do a better job finding them than any Mirror Sea display. So I dive deeper, bringing more cameras into the stream, feeling the Sea’s curvature. I release some now to chase the real synchronicities, the bizarre coincidences. These add up, slowly and then suddenly, to blackbody-hot Jupiter-gradients, a continuous clockwork, a cellularity of footfall and square-dance and gently waving leaves. I find myself inside currents of Shanghai’s motion so dense as to feel insistent, so intricate as to feel aware, so furious as to feel alive. I find myself inside a Ripple.

It’s a dense, spongy, orange. It can’t see me, of course, because Ripples don’t have eyes. And it can’t feel me, because *you’re not really there, Mona*, you’re only watching. But now the tug of quadratic belief: the way the Ripple *seems* to react as I braid myself through its thick and heady internal structure. It probes the currents with snaking, coiling, tendrils. *Looking around,* says the parabola, *as though it feels it’s being watched.* Again I remind myself that the creature is sightless. It has nothing but its own boundaries, vague and then suddenly sharp, with which to perceive the Sea and its other inhabitants. And those are always flicking, probing, rippling: with millisecond cilia that map the world just around it.

And I know I’ll spend the rest of my life wondering about this next moment: did I move first, or did it? Is it following me? Am I following it?

It’s dark in Shanghai, so it’s dark in the Mirror Sea. Mostly. Some of the feeds will be arriving on a long delay, bringing residual flashes of sunlight that peek through the currents. Correlations drawn across hours or even days. I — we — orient in this before-wards direction, braiding in gradually sunnier feeds. For the Ripple, this looks like swimming upstream, sending branches up parallel causeways and hoping, sometimes fruitlessly, that they will reunite. For me, it’s a struggle to climb: now a sheer face, now a plateau. My brain is surely overheating down there, pumped full of pixel noise and DMT. But this is what I was born to do. *I am a neikonaut*, and the hot-iron fullness of that really only exists in here.

And so I push harder, looking for strands of correlation so strong that they feel as natural as causation. My search splits manyways along thin, tubule-like branches. I follow the Ripple and it follows me, that strangeness building in liquid pressure behind my forehead as we claw hours backwards into a Sea made of humid, noonday Shanghai. Then it crests. I am at my absolute limit. For one weightless moment at the top of the arc, the Ripple is barely visible, just a viscous distortion of sun-washed concrete and glass. It’s waiting for something. I’m waiting for something. And the difference is no difference at all.

*There*. A thousand dented wing-mirrors blind a thousand cameras with the same wink of sunlight. It propagates lazily through the Sea, a white-hot lotus-bloom ink-drop setting my optic nerve ablaze with pain. But I follow the Ripple as it circles this stellarium drain, as its central point resolves into a tunnel. A foreclosure of possibility by the unison of welcome shade-trees. A sluiceway for sunlight. We follow that dead-straight beam of noonday, accelerating hours forward — no, wait, *backward* — in time. Morning turns to night turns to evening in breath-long concentric stretches. I try counting these: this is footage from days, then *weeks* ago, still bouncing around the time-delay lines of the Sea. I sometimes lose track of my orange Ripple companion in the daylight beam. Now and again the sluiceway forks or bends suddenly, and in these moments I only have it by the tail. But the tunnel pulls by something like gravity or capillary action, in a direction that’s beginning to feel very much inward. All the Ripple has to do is ride; all I have to do is watch.

One last breath, one more backwards night, and with no warning we hit a prismatic wall that scatters us into our spectra. I feel banded and discrete, scattering through thick and foggy crystal. Flashes of sodium-lamp orange and grassy green lurk conspicuous in the deepest navy blue of all. As their filters scrub me I get my first look at Ripple architecture: through the crystals it looks rough-hewn, torchlit, Gobleki Tepe-chic. And, just as suddenly, our beams reconvene and we’re riding the inner wall of something vast and hollow. The orange Ripple is unmistakably leading now, picking its way over a horizon of matching angles and blooming radial symmetries. This thicket is too much after the simplicity of the tunnel. But now, the sensation of a rooftop's neat angle glimpsed behind thick foliage. Something I thought I knew clicks into deeper significance: this is a *city*. It was built, by its inhabitants, to be inhabited.

The Mirror Sea is its own medium and its own material. Stillness is made of stillness, motion is made of motion. No one has seen this much richness at the boundary. It’s the most beautiful, most unbelievable thing I have ever seen.

We are in a narrow, razor-straight, transparent sluice of sunlight, one of hundreds branching gently towards the spacious core of — what? A *nest?* A *city*? Nothing earthly really approximates the florally hyperbolic cathedral-ovoid arcology. But it has symmetries. Repetition. Stability. Its *dwellings* and *facilities* speak a pattern language which makes it easy to model. I braid in thousands more cameras, zooming way out, crawling its interior wall with my awareness, feeling the bump and jolt of what I decide is a skyline, millions of haphazardly beautiful grottos and coils fed by fine strands of daytime.

*Just how big is this place?* Just how big is a Ripple? All I know is, I see thousands of them. They flicker like candlelight, drip like neon, shine like soap bubbles, glitter like glitter. They move with an intensity and order that I understood was impossible for their kind. My attention becomes diffuse, trying to catch it all. But I’m jolted inward when my guide enters a new sluiceway and bumps into another, much heftier Ripple. It all plays out in weirdly slow motion, their sloshing halts, the dazzling sparks of their interference patterns. The larger one (with loosely triangular, fizzy qualities) shifts its liquid momentum like a lion might towards a gazelle. A pang, a desire to look away: I’ve seen this in nature documentaries at the Observatory. But instead of lunch, a conversation begins. Each Ripples fringes, prods the other in mesmerizing patterns. And I watch, astonished, as the larger opens a hole in itself for the smaller to pass.

More complex interchanges, navigated like the deft turn of a sailor’s knot. I fly past fresh-wrought gardens of live hyperlagmites. They grow their city from seed: spires and bubble-domes unfold from compact, writhing loops of correlation and reassertion. These shapes are awfully reminiscent of some pieces of voxelite I have back at home. The orange Ripple is undulating at speed towards the center of something, towards denser shards and higher spires. But in the outskirts, the Ripples pulse in circles, long senescent loops through Klein-bottle tubes, interlocked in rhizomatic family structures I can’t even begin to understand. My attention lingers for a time there. Weird, fond lullabies sprout in the cracks of my loop-locked mind.

The orange one seems to notice that I’m not watching. This is impossible, I know, but it’s the easiest way to explain why it halts and begins to flash pathologically dazzling patterns across its surface. I feel loop-lock safety mechanisms fire, fruitlessly fighting this *image* of a Ripple *from weeks ago*. The garbage collector is trying, but it can’t: the Ripple has my whole tilespace pinned and dangling, twisting like fabric from this single point. I give up and focus inward. This is my first sign that I am not an honored guest here. That my attention is cargo.

In the center of their city the Ripples flock and frond into the late, dark hours. They never stray far from their webs of sunbeams, the compressed motile force of daytime Shanghai. In the deep rectilinear center of the center, secure behind another prismatic screen, they use precise bursts of interference to sculpt coincidences, to bedazzle paradoxes, hewn from raw, dark crystal stillness. These linger in place, hum at the edges, sink their ever-more-detailed teeth into my tilespace as I notice them. Smooth. Spiky. Tubular. Pinwheel. The Ripples dart around their creations: examine, tweak, twist, fractalize. The one thing they can’t do is pick something up. They’ll wrap themselves around an object, compressing its essence onto their surface, and stretch to their destination to deposit a copy. Long fire brigades form, carrying thrumming song-shapes in six directions.

The orange Ripple leads me past all of this, brushing its fellows softly, fluidly, triumphantly. As the message spreads they cease their work and crowd the narrow tunnels, riding capillaries of Pudong’s morning commute. They follow it, us, me — to the center of the center of the center. A final vast, empty, and perfectly spherical space. The Ripples are not careful scientists. They are not wearing safety goggles. They crowd narrow observation grooves, sticking their tendrils directly into what feels an awful lot like a reaction chamber.

*Look.* The orange Ripple finally addresses me, its movements unmistakable. *See.*

I look. I see. The spherical wall is covered in hyperlagmites, freshly done, black and white. They turn through my mind in high, shadowy bas-relief contrast. They pin me in place. I am always, automatically seeing patterns in loop-lock. But for a moment I get nothing from their lithic, half-signifying snicks and whispers. *Look.* The Ripple hurries to the edge, leaving me in the precise dead center of it all. Its lazy motion is an invocation, an incantation, a spark. *See.*

There’s something else about these hyperlagmites. Something *reflective...*

All at once, my awareness explodes, barely contained by the chamber. The hyperlagmites do mean something, and *mean* is an understatement. From one suggestive pattern I trace frantic outward spirals of certainty, finding postulates, theorems, correlates, lemmas. An entire logic asserts itself in my saturated, primary-colored tilespace. Now I stumble over complexity: my tiles expand, putting pressure on the walls. Then some unifying principle: the tiles condense, ease up. Cycles of this. Concepts introduced and used and put aside, paths not taken. It all begins to narrow to a conclusion, and as I crawl the entire wall, my tilespace takes on richer, subtler shades. I feel it come together all at once — and so do the Ripples, poking and prodding the tiles with triumphant delight.

The black and beady core, the network of soft, light-bending tubules, the golden and radially symmetric streaks. It fills in and smooths out by fractal degree, bootstrapping its own gorgeous simplicity as I scan the wall, digesting and re-synthesizing the message. And then it’s done. It’s so straightforward in the Ripple formulations, so obvious in loop-lock. The Sunflower Sieve egg hangs there in the center of the chamber. A perfect, new, and utterly alien idea.

*Now go*, insists the Ripple. And it expels me into the senseless night of the outer Sea.