Dry City

Lagos
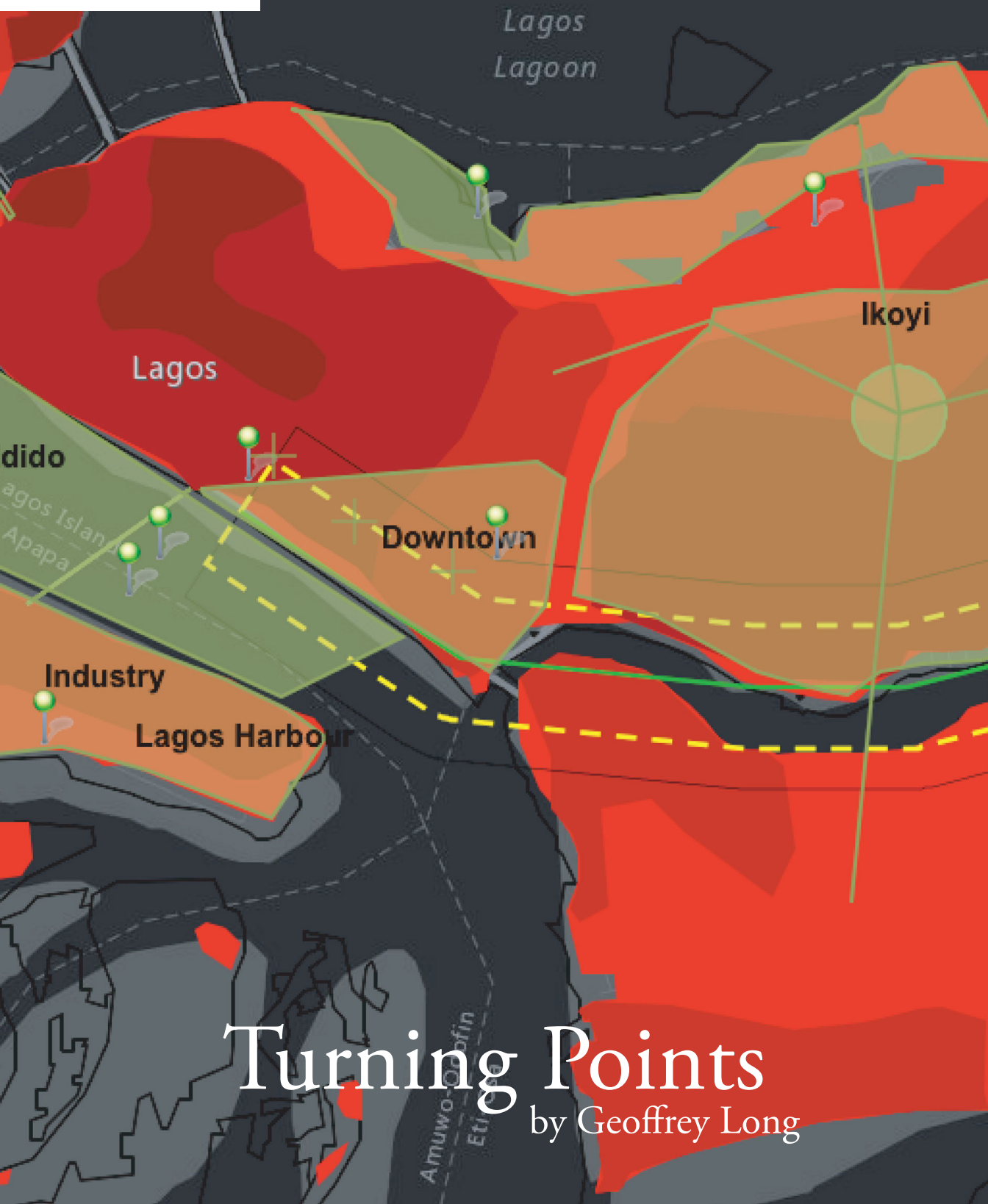Lagoon

Ikoyi

Lagos

dido

Downtown

Industry

Lagos Harbour

Turning Points

by Geoffrey Long

Dry City imagines a future in which water has been privatized, commodified, and transformed into currency in the wake of global economic disaster.

Inspired in part by the award-winning work of Kunlé Adeyemi and his architecture, design and urbanism company NLÉ, the 2015-2016 world building class of student architects, interactive media designers, musicians, engineers, urban planners, animators, filmmakers and artists chose to focus on the Nigerian city of Lagos and its neighborhood of Makoko in the mid-2030s due to Lagos' rapid urbanization, Nollywood influence, booming economy, and growing population. Most intriguingly, Lagos now is water-poor despite being a port city on the Gulf of Guinea, an irony doubly true for the floating village of Makoko on Lagos Lagoon. The first semester course focused on Lagos in 2035, and the second semester's course honed in on Makoko in 2036 to more completely evolve the world.

Following the WbML's world-centric narrative design methodology, the students collaboratively envisioned multiple interlocking and holistic aspects of this future world, deeply grounded in research into real present-day Lagos conducted through texts, videos, articles, and interviews with guest speakers from Nigeria, Lagos and Makoko and experts in various fields. A deep research dive exploring the possible ecological state of 2035, including a potential rise in sea level, revealed that Makoko, as a traditional fishing village raised on stilts over a floating body of water, might be better equipped than inhabitants of the mainland to adapt to this state of affairs. The current economic and political tensions between Makoko and Lagos hinted at how this impoverished community might reinvent itself in the coming years, as it has been forced to do repeatedly since its creation in the 1700s. Other aspects of this insular community promising for future speculation included a process they created for terraforming the lagoon, their access to cellphones, their aptitude for repurposing technology, and the social networks they have formed for recycling raw material. These led the second-semester team to imagine that by 2036 Makoko has been cut off from the power grid and Internet by the government of Lagos, but that it has not been destroyed due to its self-sufficient nature and growing awareness and support from the world community.

Keeping a human lens firmly at the center of the world build, each student developed a character and then envisioned a day in their character's life, imagining everything from the contents of a character's purse to their daily routine from hour to hour. This bottom-up speculation enriched the students' understanding of Makoko, Lagos, and the larger world in 2036.

While our 2036 Makoko shares conditions, elements and topography with the real Makoko in 2016, our Makoko's fictional status allows us to imagine myriad possibilities for the culture, future, technology and landscape while exploring themes, issues and possible futures of body image, food, education, media, VR/AR devices, medicine, desalination, synthetic biology, smart materials, vertical farming, war, water parks, banking, informal urbanism and water economics. These explorations use a wide range of media and platforms, including app prototypes, physical artifacts, photography and web-based graphic design, fictional blogs, a film festival and experimental social media storytelling.

Dry City: Turning Points is Geoffrey Long's final project for the course, an 8-page photocomic that tells the story of a very important day in the life of a citizen of Makoko. The story is original; the art is collaged together from online photographs.

Excerpts from *Dry City: Turning Points* and other student projects were showcased in USC's IMAX theater at the end of the fall 2015 and spring 2016 semesters, and in Kunlé Adeyemi's Silver Lion-winning Makoko Floating School replica at the 2016 Venice Biennale.

To learn more, please visit http://worldbuilding.usc.edu/projects/dry-city/

Classmates

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Teaching Assistants
Brandon Cahoon
Laura Cechanowicz

Students
Alexa Acuña
Ruslan Akun
Ronaldo Bello
Teresa Bosch
Nicholas Busalacchi
Brian Cantrell
Jose Cisneros
Joshua Dawson
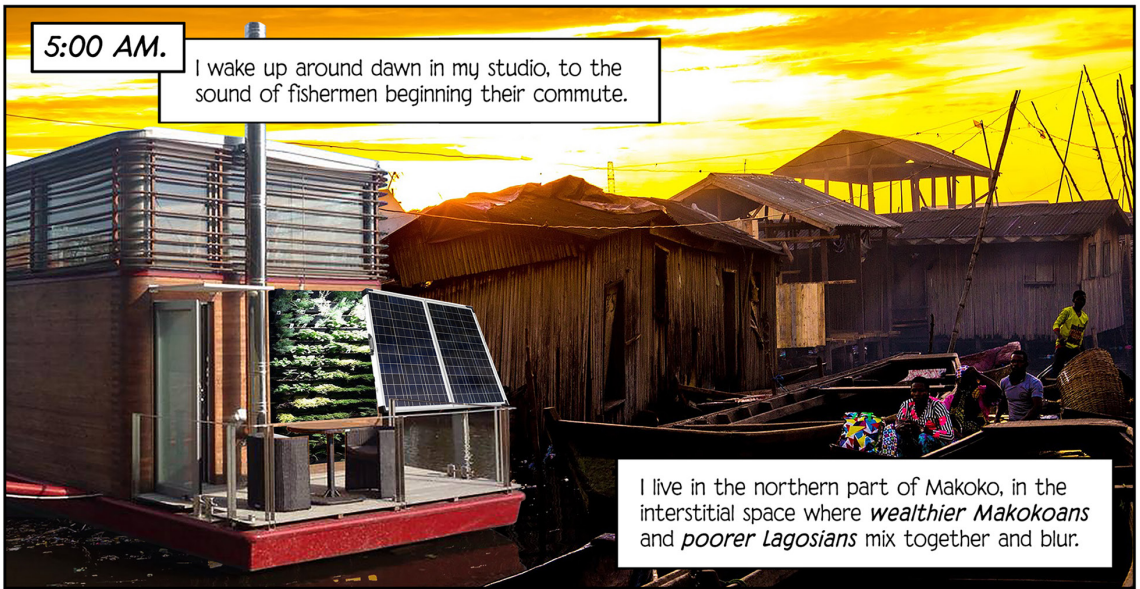Ilani Fay
Anwesha Kundu
Xin Li
Geoffrey Long
Eduardo Oliveira
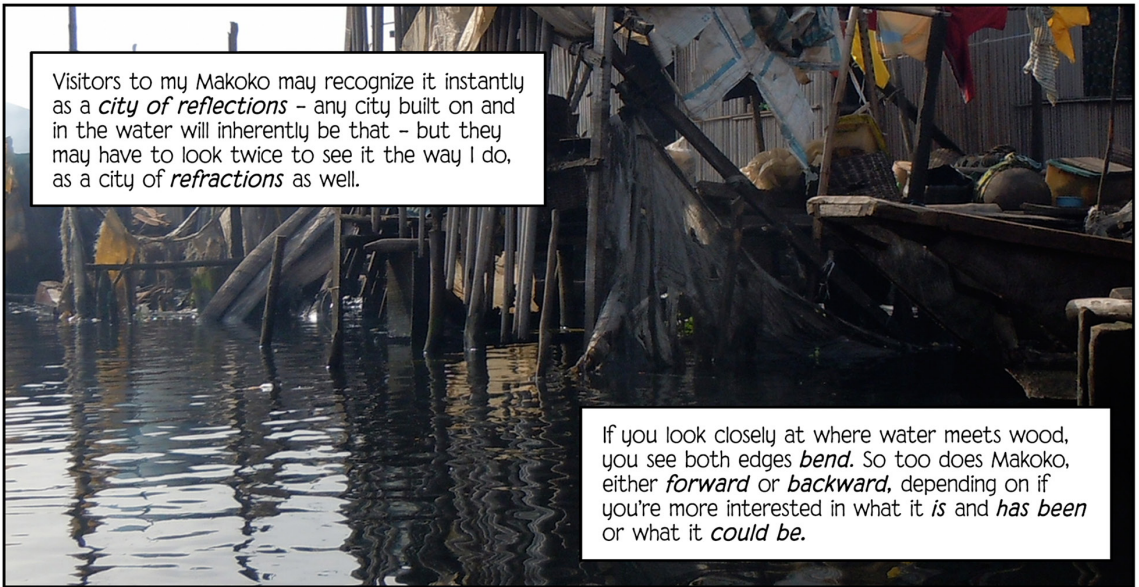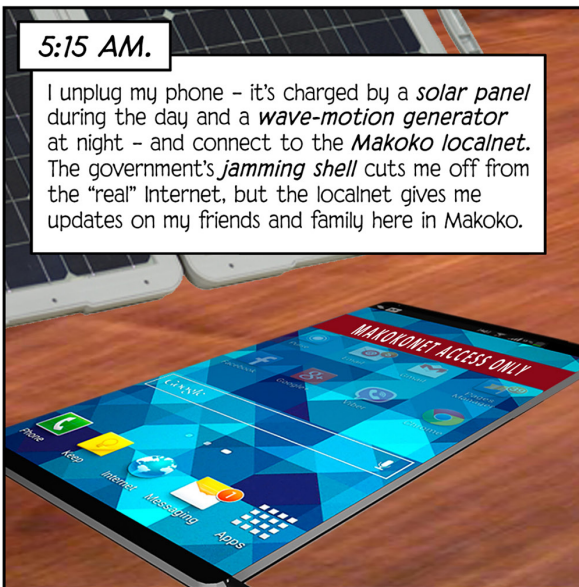John Shaff
Elijah Steenhoek
Yining Zhou

5:00 AM.

I wake up around dawn in my studio, to the sound of fishermen beginning their commute.

I live in the northern part of Makoko, in the interstitial space where *wealthier Makokoans* and *poorer Lagosians* mix together and blur.
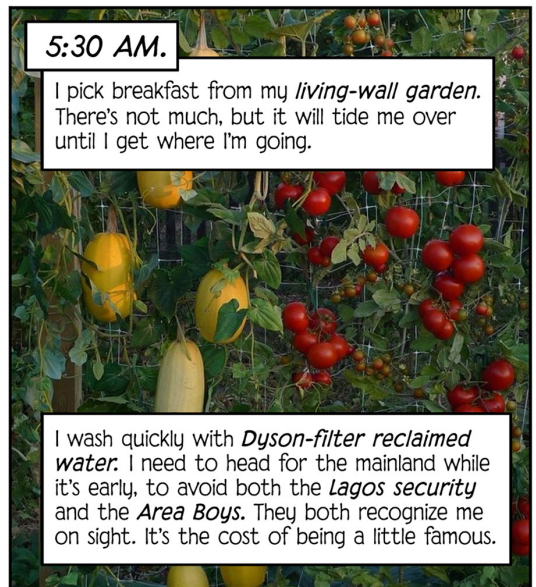
Visitors to my Makoko may recognize it instantly as a *city of reflections* – any city built on and in the water will inherently be that – but they may have to look twice to see it the way I do, as a city of *refractions* as well.

If you look closely at where water meets wood, you see both edges *bend*. So too does Makoko, either *forward* or *backward*, depending on if you're more interested in what it *is* and *has been* or what it *could be*.

5:15 AM.

I unplug my phone – it's charged by a *solar panel* during the day and a *wave-motion generator* at night – and connect to the *Makoko localnet*. The government's *jamming shell* cuts me off from the "real" Internet, but the localnet gives me updates on my friends and family here in Makoko.
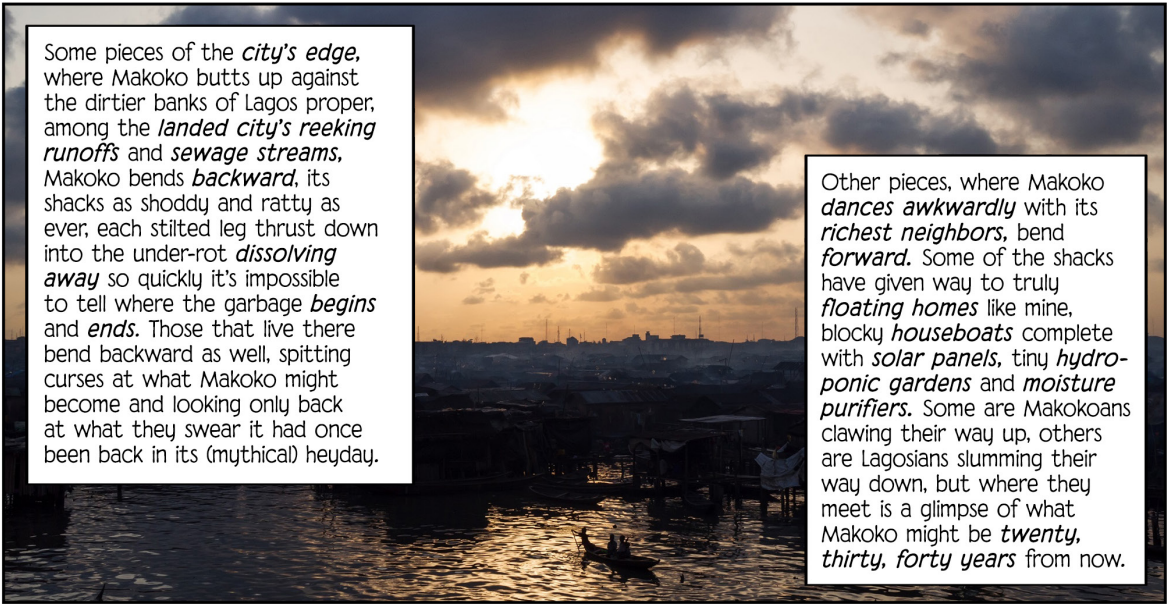
5:30 AM.

I pick breakfast from my *living-wall garden*. There's not much, but it will tide me over until I get where I'm going.

I wash quickly with *Dyson-filter reclaimed water*. I need to head for the mainland while it's early, to avoid both the *Lagos security* and the *Area Boys*. They both recognize me on sight. It's the cost of being a little famous.
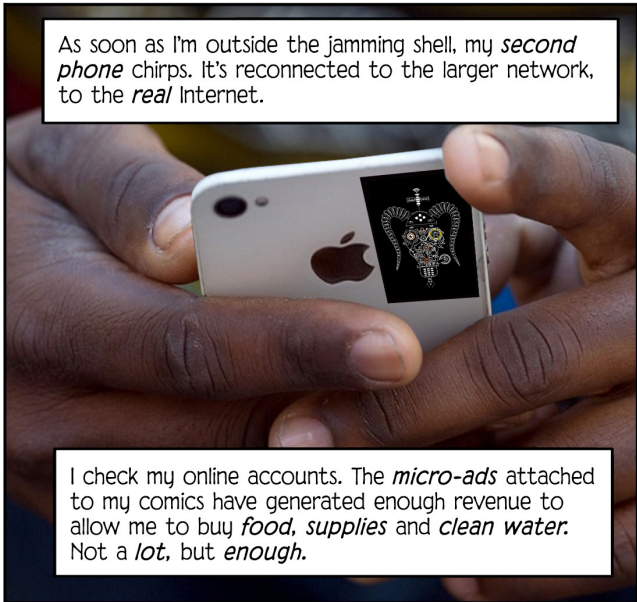
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Some pieces of the *city's edge*, where Makoko butts up against the dirtier banks of Lagos proper, among the *landed city's reeking runoffs* and *sewage streams,* Makoko bends *backward*, its shacks as shoddy and ratty as ever, each stilted leg thrust down into the under-rot *dissolving away* so quickly it's impossible to tell where the garbage *begins* and *ends.* Those that live there bend backward as well, spitting curses at what Makoko might become and looking only back at what they swear it had once been back in its (mythical) heyday.

Other pieces, where Makoko *dances awkwardly* with its *richest neighbors,* bend *forward.* Some of the shacks have given way to truly *floating homes* like mine, blocky *houseboats* complete with *solar panels,* tiny *hydroponic gardens* and *moisture purifiers.* Some are Makokoans clawing their way up, others are Lagosians slumming their way down, but where they meet is a glimpse of what Makoko might be *twenty, thirty, forty years* from now.

6:00 AM.

I steal past the *government security* and head for a tiny cafe halfway between Makoko and the University of Lagos.

As soon as I'm outside the jamming shell, my *second phone* chirps. It's reconnected to the larger network, to the *real* Internet.
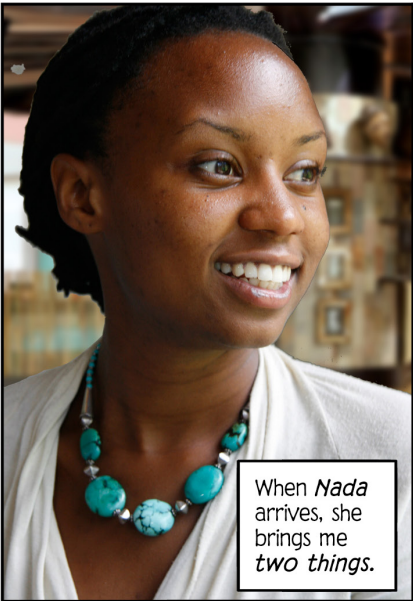
I check my online accounts. The *micro-ads* attached to my comics have generated enough revenue to allow me to buy *food, supplies* and *clean water.* Not a *lot,* but *enough.*
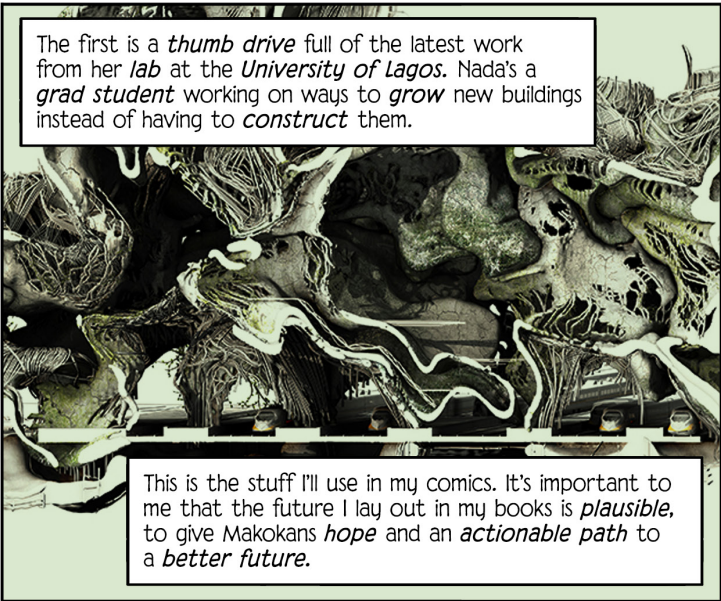
7:00 AM.

I arrive at the cafe *early,* so I go online and connect with my community of comics artists around the world, who provide *feedback* and *pointers.*
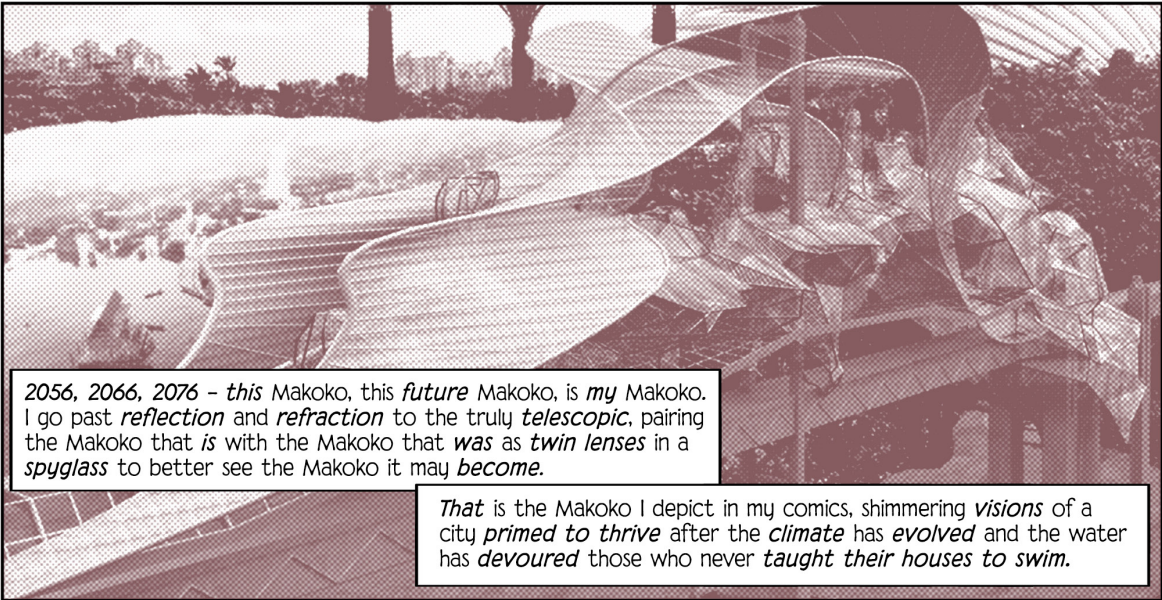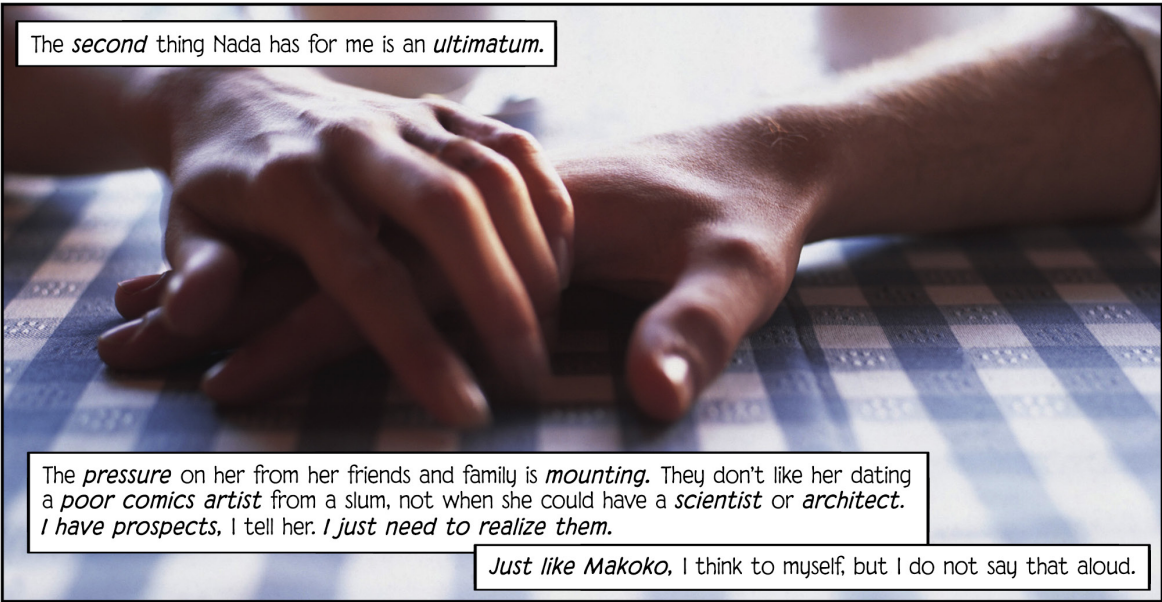
When *Nada* arrives, she brings me *two things.*

The first is a *thumb drive* full of the latest work from her *lab* at the *University of Lagos.* Nada's a *grad student* working on ways to *grow* new buildings instead of having to *construct* them.

This is the stuff I'll use in my comics. It's important to me that the future I lay out in my books is *plausible,* to give Makokans *hope* and an *actionable path* to a *better future.*

2056, 2066, 2076 – *this* Makoko, this *future* Makoko, is *my* Makoko. I go past *reflection* and *refraction* to the truly *telescopic,* pairing the Makoko that *is* with the Makoko that *was* as *twin lenses* in a *spyglass* to better see the Makoko it may *become.*

That is the Makoko I depict in my comics, shimmering *visions* of a city *primed to thrive* after the *climate* has *evolved* and the water has *devoured* those who never *taught their houses to swim.*

The *second* thing Nada has for me is an *ultimatum.*

The *pressure* on her from her friends and family is *mounting.* They don't like her dating a *poor comics artist* from a slum, not when she could have a *scientist* or *architect.* *I have prospects,* I tell her. *I just need to realize them.*

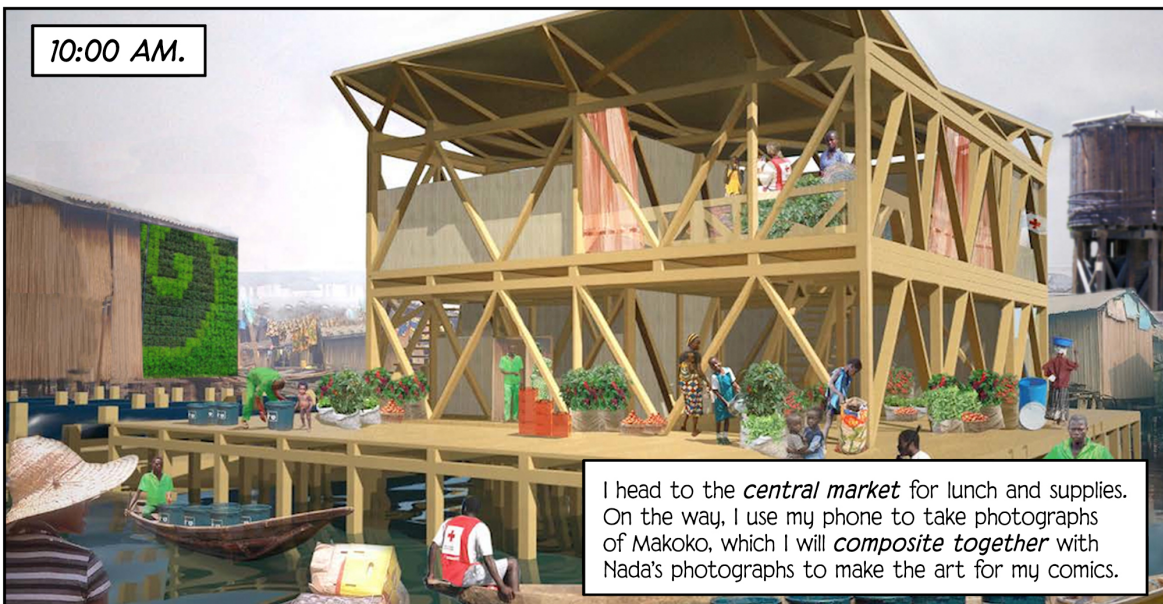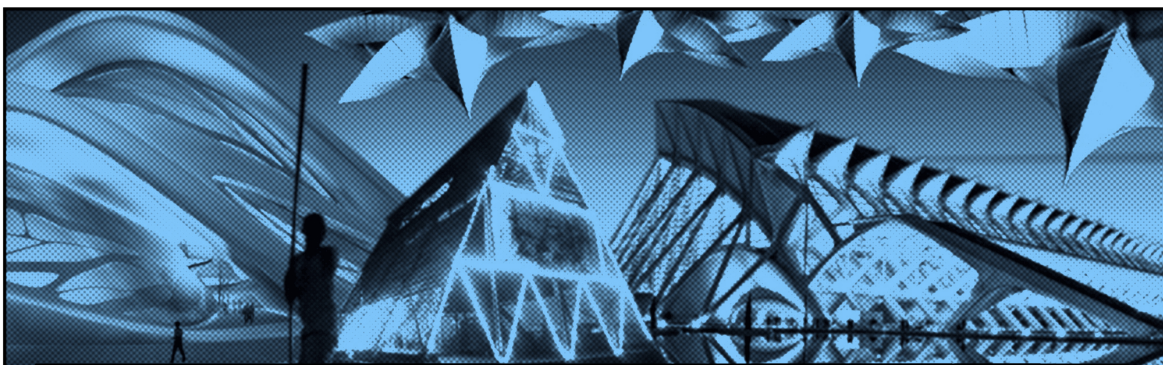*Just like Makoko,* I think to myself, but I do not say that aloud.

9:00 AM.

After breakfast, Nada and I part ways and I return to Makoko. I have a lot to think about.
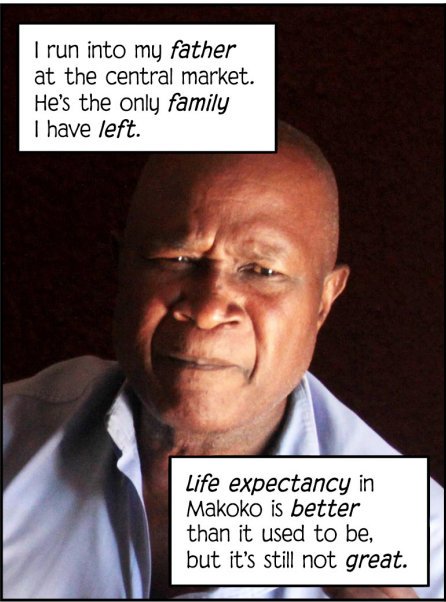

10:00 AM.

I head to the *central market* for lunch and supplies. On the way, I use my phone to take photographs of Makoko, which I will *composite together* with Nada's photographs to make the art for my comics.
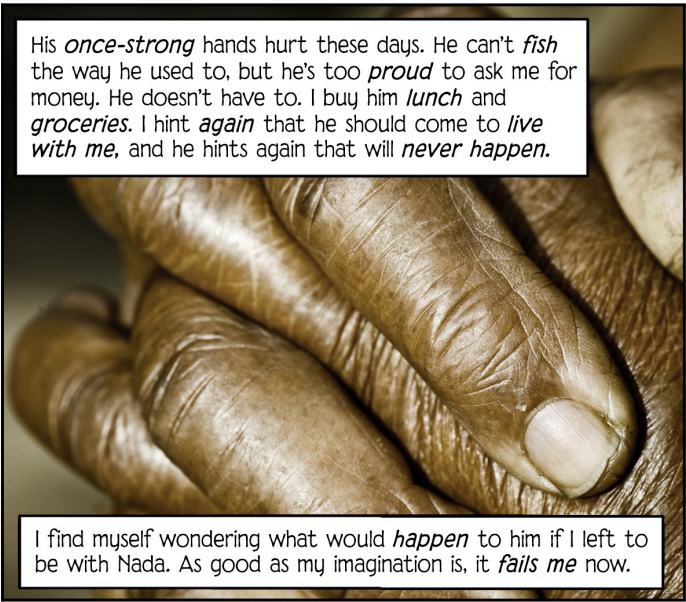

My Makoko is *stellar* in its *beauty*, twinkling with *bioluminescence* from our *floating homes* and *kudzu-ginkgo-mangrove graft-towers*, glinting off s*alvaged antique brass* from *drowned coastal cafes*, populated with *solar harvesters* and *scavenger divers* and *traders* with the *World Above*, those who *exhume treasures* from the cities of the dead, hoist them aloft with *industrial-grade balloons* tethered to *insectoid drones* set on autopilot to return back to their wealthy owners in the *great solar aero-plane-city* of *New Victoria Island* circling above us at *suborbital height,* taunting us below with the knowledge that even as we have learned to float and rise with the times and tides, so too have they learned to sail ever higher above us, eternally bobbing as out of reach as *distant mythical gods.*

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I run into my *father* at the central market. He's the only *family* I have *left.*

His *once-strong* hands hurt these days. He can't *fish* the way he used to, but he's too *proud* to ask me for money. He doesn't have to. I buy him *lunch* and *groceries.* I hint *again* that he should come to *live with me*, and he hints again that will *never happen.*

Life expectancy in Makoko is *better* than it used to be, but it's still not *great.*

I find myself wondering what would *happen* to him if I left to be with Nada. As good as my imagination is, it *fails me* now.
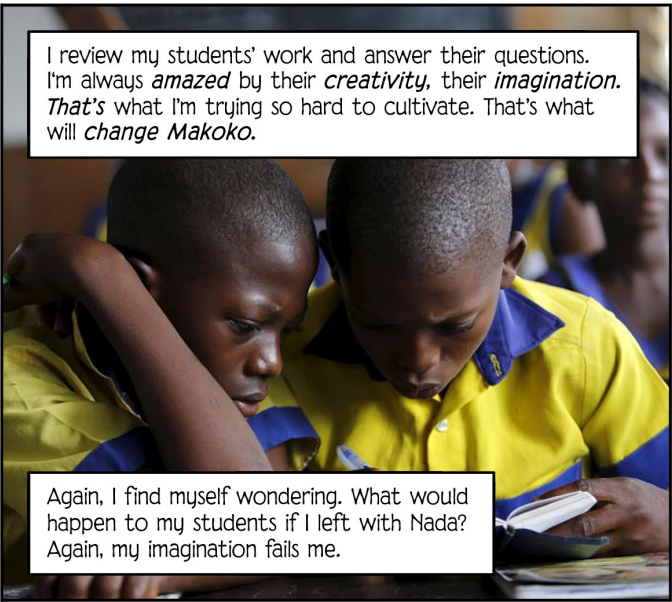
1:00 PM.

After lunch I head to the Makerspace. I *teach a class* there on making comics to younger kids, trying to *pass on to them* the lessons that *I* learned from *my* role model, *Roye Okupe.*

It was Roye that inspired me, both by his own work and by introducing me to *Lance Spearman,* an old Nigerian comic. He made me rethink what was *possible.*

I review my students' work and answer their questions. I'm always *amazed* by their *creativity,* their *imagination. That's* what I'm trying so hard to cultivate. That's what will *change Makoko.*

Again, I find myself wondering. What would happen to my students if I left with Nada? Again, my imagination fails me.

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If I left, would my stories of a possible future Makoko continue to *inspire* people here?

Would they even be able to *experience* it anymore?

How would I share it with them from *outside* of the government's *jamming shell*?

4:00 PM.

I return to my studio and start making my next comic with the resources I've gathered. As I work, I make a *decision*. It's always been important to me that I *not* ask for financial support from my audience, but *now...*

I finish my comic and upload it first to my *internal Makoko server*, for the *Makokoan localnet* inside the shell. Then I head *back to the border*.

7:00 PM.

I reach the edge of the jamming shell. Getting signal, I upload my work to my *external* server, sharing it with the *larger world*.
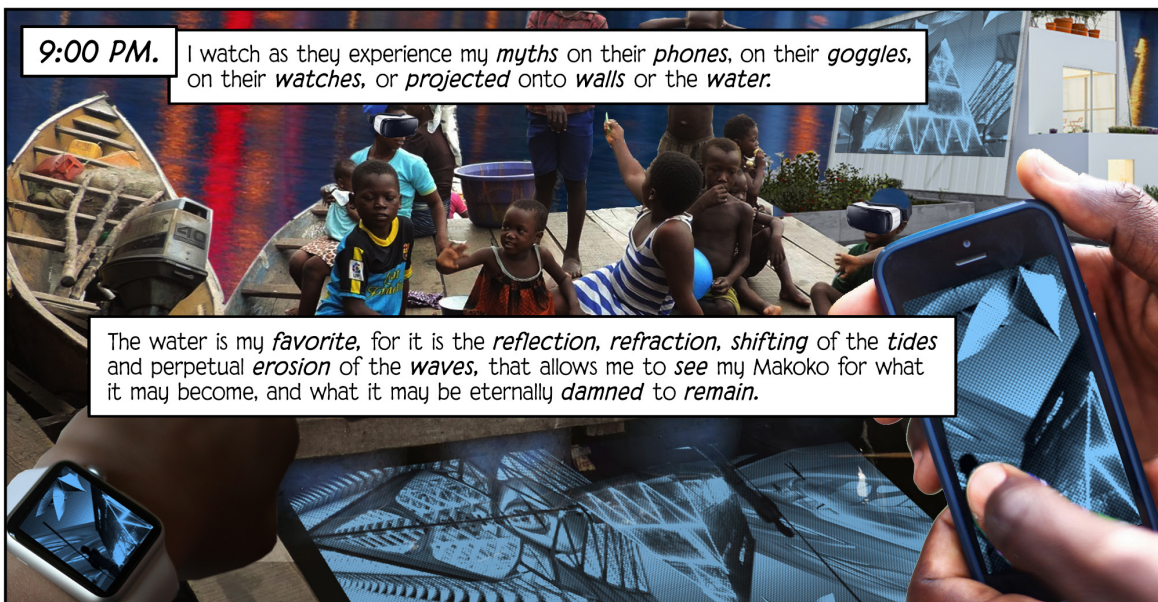
8:00 PM. I head to the local *bar-boat* to socialize with my friends, getting their feedback on my new release as we chat. I *watch* as people experience *what I've made.*

9:00 PM. I watch as they experience my *myths* on their *phones*, on their *goggles*, on their *watches*, or *projected* onto *walls* or the *water.*

The water is my *favorite*, for it is the *reflection, refraction, shifting* of the *tides* and perpetual *erosion* of the *waves*, that allows me to *see* my Makoko for what it may become, and what it may be eternally *damned* to *remain.*

10:00 PM.

For example, the real world *pushes back.* The *Area Boys* find me at the bar-boat. They read my comic, and they saw me *ask* my fans at last for *financial support.*

They say they'll be by tomorrow for their money.

11:00 PM. Back at my studio, I throw as much as I can carry into a bag.
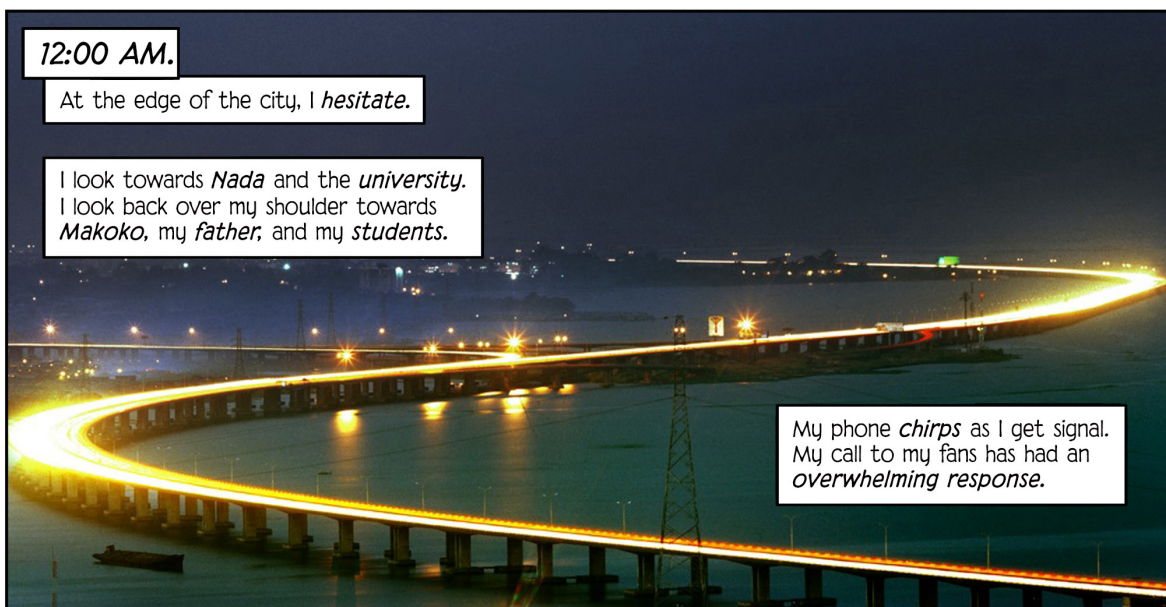
12:00 AM.

At the edge of the city, I *hesitate.*

I look towards *Nada* and the *university.* I look back over my shoulder towards *Makoko,* my *father,* and my *students.*

My phone *chirps* as I get signal. My call to my fans has had an *overwhelming response.*

I take a deep breath, and *make my choice.*

- *Michael Mwonaji, Graphic Novelist, c. 2036*

Geoffrey Long is a storyteller, scholar, designer, and the Creative Director for the University of Southern California's World Building Institute and World Building Media Lab. Previously he was Creative Director and a Research Fellow for USC's Annenberg Innovation Lab; Lead Narrative Producer for Microsoft Studios and cofounder of its Narrative Design Team (where his projects included the HoloLens, the Xbox One, SmartGlass, *Quantum Break, Adera, Ryse* and *Halo);* in a think tank under Microsoft's Chief Experience Officer and Chief Software Architect; a researcher and Communications Director for the Singapore-MIT GAMBIT Game Lab and MIT's Comparative Media Studies Program; a magazine editor and an award-winning short film producer.

Geoffrey's writing has appeared in the extended edition of *Spreadable Media* by Henry Jenkins, Joshua Green and Sam Ford; *The Rise of Transtexts: Challenges and Opportunities,* co-edited by Benjamin W.L. Derhy Kurtz and Melanie Bourdaa; *Revisiting Imaginary Worlds: A Subcreation Studies Anthology,* edited by Mark J.P. Wolf; *The Comics Journal's Guttergeek;* and the *Journal of Transformative Works and Cultures,* and he co-edits MIT Press' Playful Thinking series with William Uricchio and Jesper Juul. His worldbuilding work was included in an exhibition at the 2016 Venice Biennale, and his work on reimagining preproduction processes informed the film-and-VR transmedia project *Wonder Buffalo,* which was showcased at the 2017 Sundance Film Festival and South by Southwest.

Geoffrey holds bachelor's degrees in English and Philosophy from Kenyon College and a master's degree in Comparative Media Studies from MIT, and he is currently finishing his doctorate in Media Arts & Practice at USC. In his various lives he has worked with BET, Cisco, the City of Los Angeles, DirecTV, FOX, Havas, HBO, IBM, Intel, the *Los Angeles Times,* MTV, Turner Broadcasting, Walt Disney Imagineering and Warner Bros.

For more, please visit http://www.geoffreylong.com.