

Gabriela Bila Bandeira Advincula

Three women, three informal settlements, and the rituals of the meal as a microcosm of urban life

Gabriela Bila Bandeira Advincula

Bachelor of Architecture and Urban Design Universidade de Brasilia, UnB - 2015

Submitted to the Program in Media Arts and Sciences, School of Architecture and Planning, in partial fulfillment of the requirements for the degree of Master Of Science in Media Arts and Sciences at the Massachusetts Institute of Technology

January 2021

@Massachusetts Institute of Technology 2021. All rights reserved.

Signature of Author **Gabriela Bila Bandeira Advincula**Program in Media Arts and Sciences

January 2021

Certified by

Kent Larson

Principal Research Scientist, City Science group
Thesis Supervisor

Accepted by

Tod Machover

Academic Head

Program in Media Arts and Sciences

Three women, three informal settlements, and the rituals of the meal as a microcosm of urban life

Gabriela Bila Bandeira Advincula

Submitted to the Program in Media Arts and Sciences, School of Architecture and Planning on January, 2021, in partial fulfillment of the requirements of the degree of Master of Science in Media Arts and Sciences at the Massachusetts Institute of Technology.

Abstract

Shared transnational challenges are connecting people in unprecedented ways. Crises such as the 2020 pandemic proved that the world is a single organism and no issue is only a local issue. If social and technological trends continue toward increased globalization, people of different cultures must find new ways to better understand the needs and values of communities that we are unlikely to experience first-hand.

To build this understanding, this work conducts a natural experiment to increase cross-cultural awareness through a medium all can relate to: food and its attendant social rituals. The goal is to create a novel way to understand and communicate urban specificities by using the table rituals as a microcosm of community. The research looks for a connection between the act of procuring food, preparing food and eating together and the structures of the communities people live in.

This thesis is a two-part inquiry comprising: (1) A comparative study conducted with field research at rapidly urbanizing areas of Port Harcourt, Cairo and Guadalajara, and (2) an immersive video installation and multimedia book for communicating this content.

Thesis Supervisor: Kent Larson Principal Research Scientist

Three women, three informal settlements, and the rituals of the meal as a microcosm of urban life

Gabriela Bila Bandeira Advincula

The following person served as a reader for this thesis:

Accepted by **Glorianna Davenport**Thesis Reader

Visiting Scientist, MIT Media Lab President, Living Observatory



Three women, three informal settlements, and the rituals of the meal as a microcosm of urban life

Gabriela Bila Bandeira Advincula

The following person served as a reader for this thesis:

Accepted by **Hiroshi Ishii**Thesis Reader

Professor of Media Arts and Sciences, MIT Media Lab

Acknowledgments

It's said that once you eat someone's food, you become part of them too. I am for sure a different person after this thesis. It was a life-changing event and I am nothing but immensely grateful for the opportunity to have lived this work.

Kent is a real visionary. "What is your big view?" He challenges us with the difficult task of imagining the future, with purpose in what we do, and he does that by giving us total creative freedom and support in every possible way. He encouraged me to go much further than I could ever have expected. Thank you for bringing me in, Kent.

Being in the City Science group was a privilege I embraced over these past 2 years. I was inspired every day by the talent and passion of my peers, who were always ready to share and help. Thank you to the City Science family for teaching me so much and making life in a new country feel like home.

Thank you to Glorianna and Hiroshi for the insightful feedback you gave as the readers; it helped the ideas grow much richer.

Thank you to Luis, Maitane, Guada, Thomas and Nico, for all the commitment you put into developing our With(in) installation and inventing something new together despite the big challenges we faced this year.

Thank you to Maggie and Jason for reviewing this thesis so carefully and helping me translate complex events into words.

Thank you to Pedro and Lucas, for the dedication you brought to the long process of developing a video language for our work.

Thank you to Holger for translating the project into music.

Thanks to the local teams that trusted me and so kindly welcomed me into their communities. No effort was spared, and this work benefited greatly from the communal spirit they brought to it.

Thanks to my flatmates. Writing this thesis during a quarantine was much more fun because of your presence.

I'd like also to thank my family. Thank you to my mother and my sisters, for being my primary examples of womanhood. And thank you to my father, whom we lost during the course of my studies here, for being a true appreciator of beauty.

Finally, I'd like to thank Eva, Gihan and MamaG, for the immense generosity with which they brought me into their homes and showed me, with a lot of pride, the poetry of their everyday lives.

Gabi

Contents

Introduction	16
Three cities, three women	19
Webisodes Ezbet Khairallah Gihan Port Harcourt MamaG Lomas del Centinela Eva	21 24 36 40 52 56 66
Work day meals	69
Webisodes Commute Food production Craftsmanship Work meals	71 72 84 90 98
Rest day meals	115
Webisodes Food markets Religion Homes Rest day meals	117 118 136 142 150
Special day meal	165
Webisodes PapaG's death Path to Eket Family house Sacrifice Vigil Funeral Special meal Final rites	167 168 170 172 180 186 188 192
COVID-19	199
Immersive installation	207
From plate to place	215
Concluding remarks Future work	222 224
The local teams	227
Credits	235
Bibliography	237

Introduction

This work presents an immersive window into the worlds of three women in three rapidly urbanizing areas of the world: Eva in Lomas del Centinela, Guadalajara, Mexico; Gihan in Ezbet Khairallah, Cairo, Egypt; and MamaG in Port Harcourt, Nigeria.

In 2050, 3.5 billion people may live in informal settlements without access to conventional infrastructure and buildings. As extreme urbanization unfolds at an astounding pace, all three locations reflect the chaos and the importance of community. One woman's journey can be both individual and global when viewed in the context of the others. We ask ourselves, how does rapid urbanization impact the community we seek, and how do intimate domestic activities such as food preparation and celebration reflect a larger cultural context?

This work is composed of 2 parts:

Part 1. The field research

1a. Meeting the communities: The team of researchers at MIT City Science group who are studying informal settlements reached out to contacts in each location from various collaborations and were able to connect with local hosts from NGOs and institutions to introduce our research to the context and culture of each location. This work sought to connect with one family in each place, and within that family closely follow the person who is most responsible for the food decisions. Not by chance, in each location we were directed to meet with a woman. Eva, Gihan and MamaG's leadership roles led to their identification as suitable representatives for their communities in this work.

1b. Framework: The research was conducted during a two week visit at each place. The three women would be followed during two different occasions:

- Their most important meal on a day they work;
- Their most important meal on a day they rest. For each of those events, the women were accompanied during the acquisition of the food or ingredients, the preparation and eating.

1c. Video documentation: The field research was mainly documented through video. Local film crews added expertise to both the cinematography of the piece as well as help navigating cultural nuances. Each of the local hosts and crew members were critical to the success of the piece.

Part 2 - Visual storytelling

2a.The immersive installation: The research conducted in the field was organized in an immersive installation, comprising wall projection mappings, a soundtrack and a physical 3D model of the cities. The stories of the three women and their cities are edited in a 20 minute narrative that crosses these worlds, highlighting the commonalities and singularities of

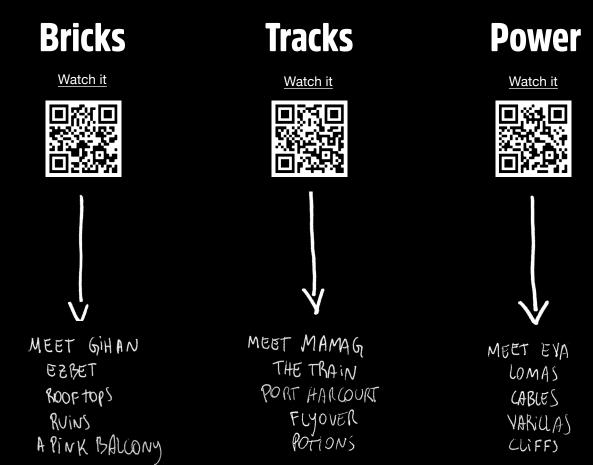
2b. Multimedia book: This book itself is part of the media exploration for conveying the content. It's organized in a combination of a graphic novel and short video clips that complement each other and are equally important.

Whenever you see a QR code in this book, point your mobile phone at it or click on the link to access the webisodes and 360° videos.

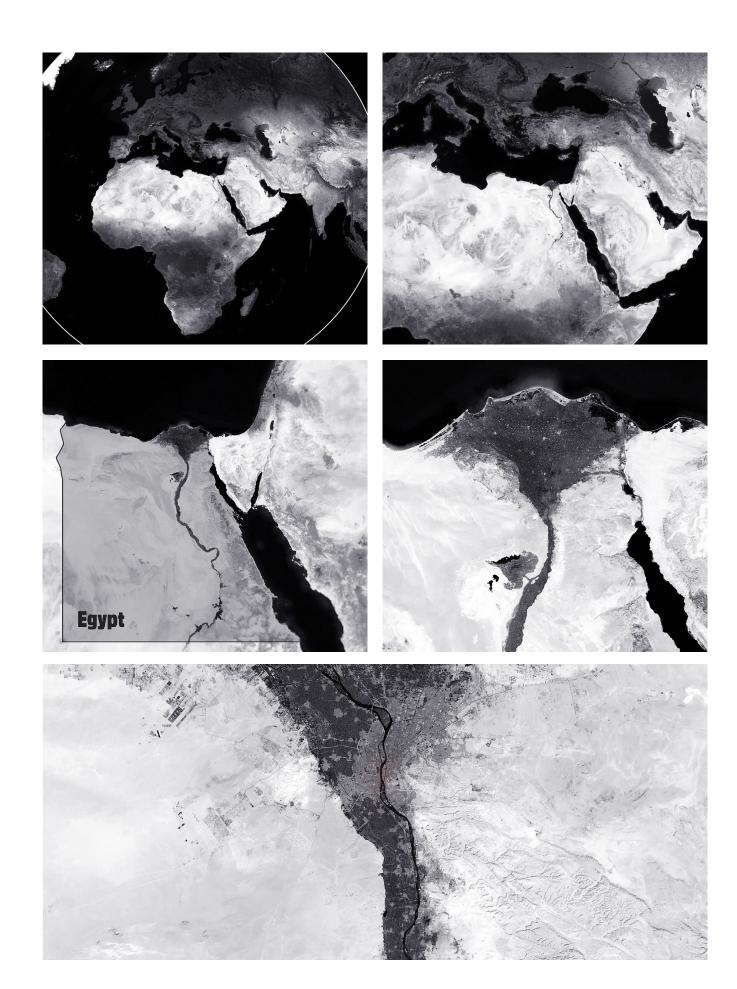




This thesis approaches extreme urbanization through the lens of food culture. It explores a new framework to understand communities and communicate its specificities by using the table rituals as a microcosm of the communities where they are performed.







Cairo is red. An ocean of bare brick buildings flood along the Nile's margins from the North to the South. Millions of housing units are built informally in private agricultural land and state-owned desert areas to house the inflow of migrants coming from upper Egypt and the Delta, seeking for better opportunities in Africa's largest metropolis. The government's incapacity to provide affordable and viable housing for the vast majority of Cairenes leads to a rapid and relentless process of unplanned urban growth. Driving along the Ring Road, the dense mass of red buildings extends to the horizon. The size and population of those areas are difficult to precisely measure; it's estimated that 62% of the Greater Cairo Region population lives in the so-called Red City, also known as the al-ashwaiat, a term which in Arabic means haphazard. This naming reveals a lot about Egyptians' perception of those areas. Official policies Ezbet of demolition and relocation to unaffordable social housing, as well as mandates to paint facades facing roads, try to deny a reality that is already in place. Khairallah. Although the al-ashwaiat may seem carelessly unfinished, the practice of leaving the facades unfinished is done to avoid taxation. The structures Cairo are solid, and the standards of construction are high. These buildings usually have a minimum of 4 stories, growing up to 15 floors in some areas. Buildings are largely owned by families that bought small parcels of land from local brokers, and negotiated themselves with local constructors to raise the building as an investment in their future. Floor by floor, room by room, additions are made as the family grows and external newcomers increase the demand for rental apartments. The incremental nature of the al-ashwaiat's architecture is resilient as it leaves space for adaptation. Informal Cairo is a contemporary phenomenon in a city that has a much longer past. The origins of present-day Cairo can be traced back to the year 641 AD, at the founding of Al-Fustat by Muslim conqueros, an area known today as part of Old Cairo. The south of Al-Fustat remained an inhabited desert plateau until the mid 1970's, when a group of newly arrived migrants started occupying the area. This empty plateau, with no urban infrastructure or services of any kind, meant the possibility to have a piece of land to settle down and begin to dream of a possible future. They delimited parcels with stones and built shelter with materials found in the area. Despite many attempts by the government to dismantle this settlement, those migrant families firmly resisted. Today that desert plateau has become the large community known as Ezbet Khairallah*, home to more than 650,000. The bustling streets of Ezbet, with their high rooftops, vibrant food markets, and the energy of children at play, prove that toughness can be The spelling of Ezbet Khairallah built on sand. It's a symbol of human resilience, displayed side-by-side differs. This work adopts the spelling with ancient monuments that also persist, reminding us of the vast and indicated by participants in the field unknown desert that is our collective journey of civilization.







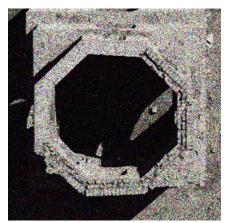


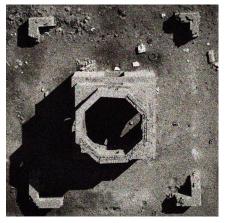






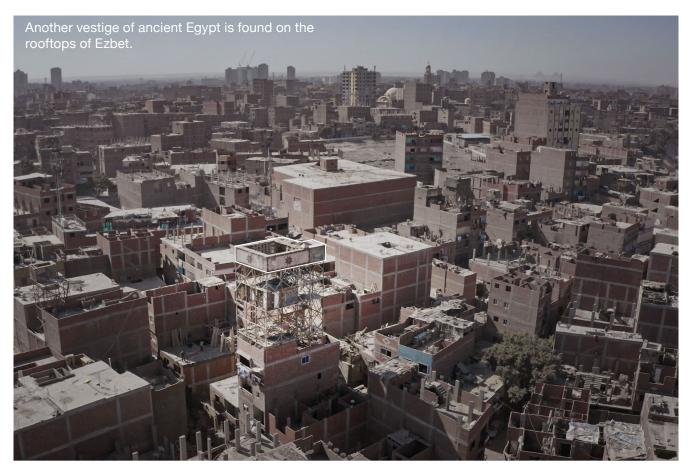
















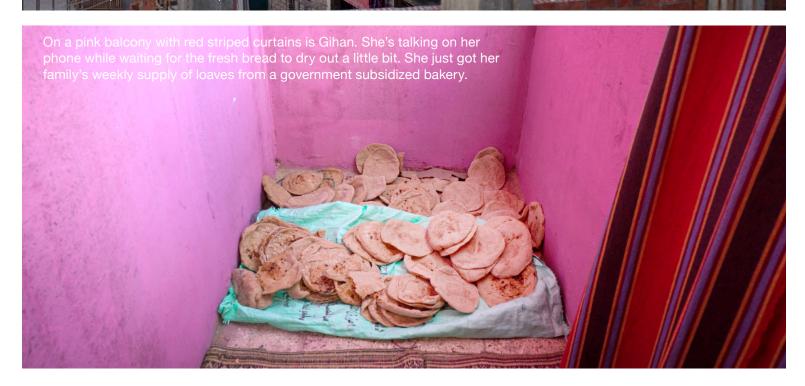


Appearing as water tanks from far away, these curious wooden structures are actually dovecotes where the men of the community keep pigeons for racing. This popular sport consists of trying to trap other racers' pigeons, a competition that extends across neighborhoods.

At sunset, the **pigeon racers** put their birds to fly and call them back whistling and waving pieces of cloth, hoping to lure them back to the cage with a couple of neighbors' birds.

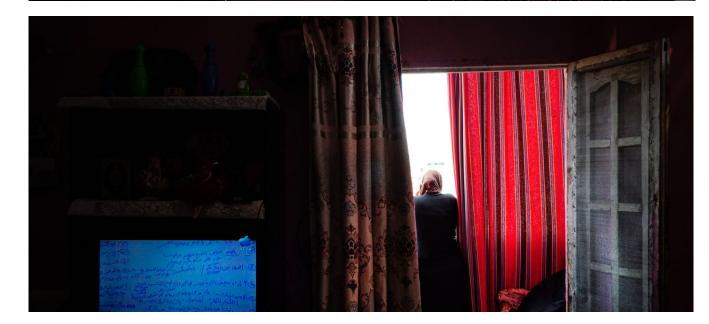














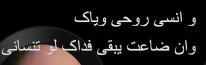
Gihan moved to Ezbet Khairallah not long ago. Escaping from an abusive marriage, she bravely left home in upper Egypt with her three kids — two boys and a teenage girl — with faith she would find in Cairo her chance of a new beginning. A friend of a friend mentioned that a catering kitchen was looking for cooks, and Gihan didn't think twice. She took the job and rented a flat just a few steps from work. This proximity protects her and her children from too much exposure in an Islamic community where a divorced newcomer, especially a female one, is quite unusual.

She found a vacant unit in a family-owned building, a common setup at the *al-ashwaiat*. The two bedroom flat would be enough. For the moment she shares one room with the boys while her teenage daughter, soon to be engaged, sleeps in the other. Their pet turtle stays in the living room. After painting every wall in bright pink and covering every inch of the floor with carpets, Gihan could start a home on her own terms.

Every morning before going to work, her red dyed hair is gently tucked into her purple hijab. She walks down the dark winding concrete staircase into the street and crosses the road to her workplace. The Dawar Kitchen has become a home away from home to Gihan and other women in vulnerable conditions — some Egyptian migrants, some Syrian refugees. Their work has offered each of them a new life. The Kitchen is their community. For Gihan, this fresh start means that her mark as a divorced woman has not held her back, and here, in this community, she is accepted.

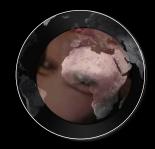
When things get more settled she might be able to pursue an old dream: to become a professional singer. Gihan has a powerful voice and everyone around her knows it. With a bit of push she uploaded her version of a classic Egyptian song online, *Ahwak — I love you*.









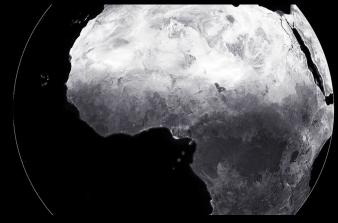


Gihan uploaded her songs online.















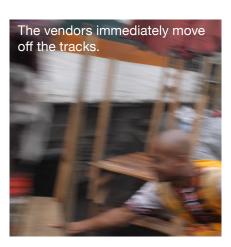












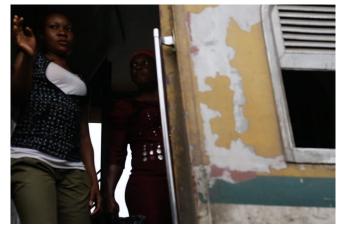








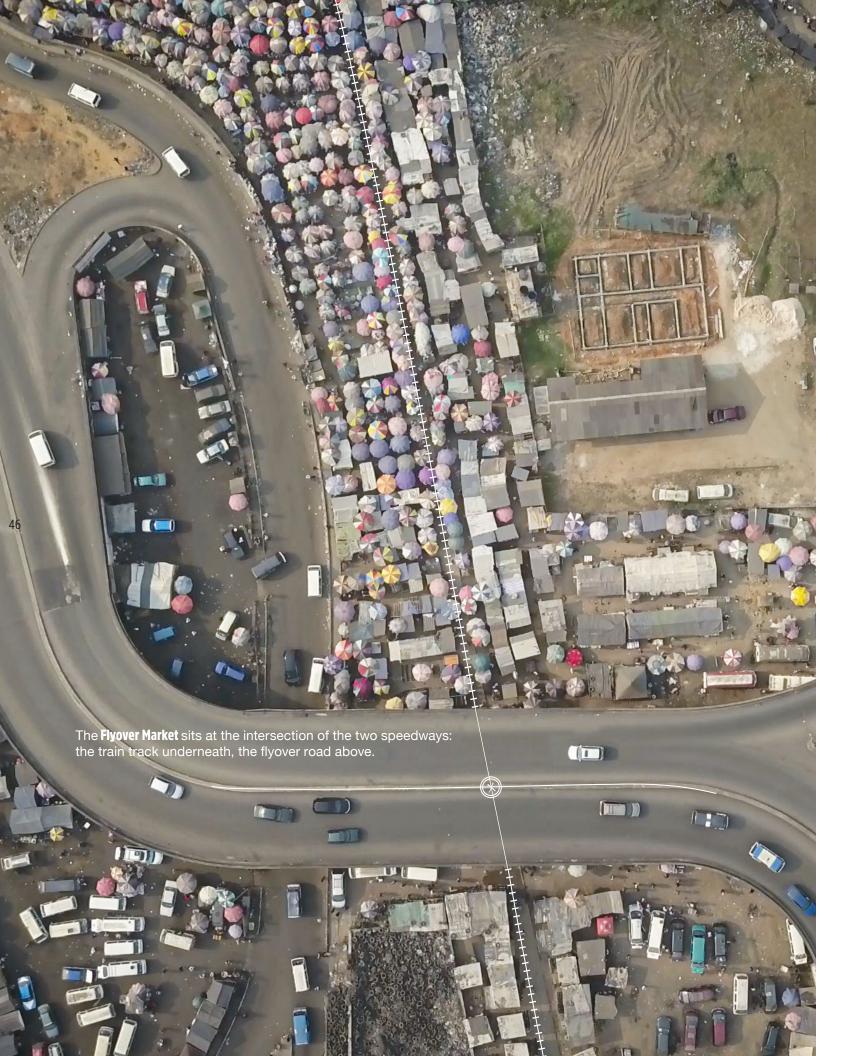




The **train** from Port Harcourt to Aba cuts through the market four times a day.

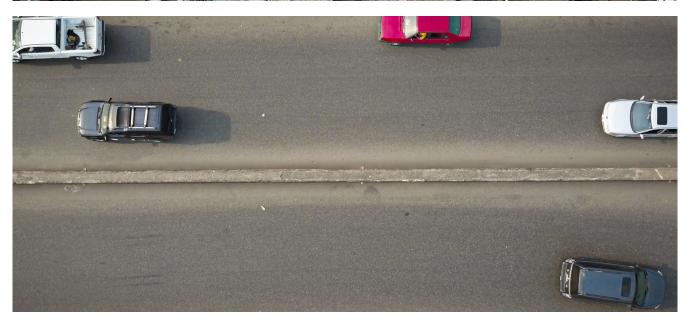


We caught the train on its way through the market by chance. As we wanted better images, we prepared the whole team for an adventure to document the train very carefully later that week. Half of us would stay at the market, half would be inside the wagons. We checked the schedule the day before and early in the morning the nine of us headed to the station. After waiting there for more than one hour from the time the train was supposed to come, a guard informed us: "it won't come today". The train was under maintenance. When would it be back? In two weeks. Or three, or four.









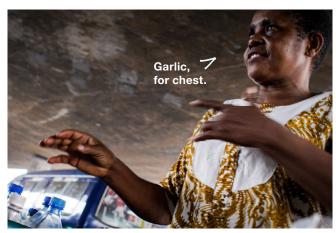








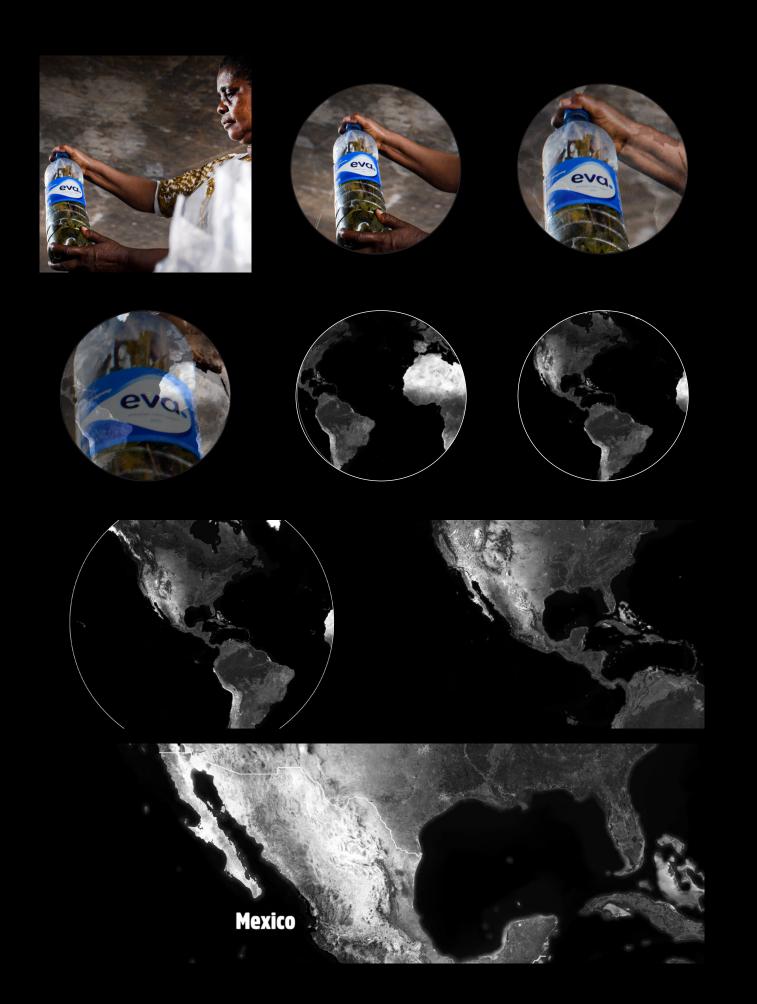


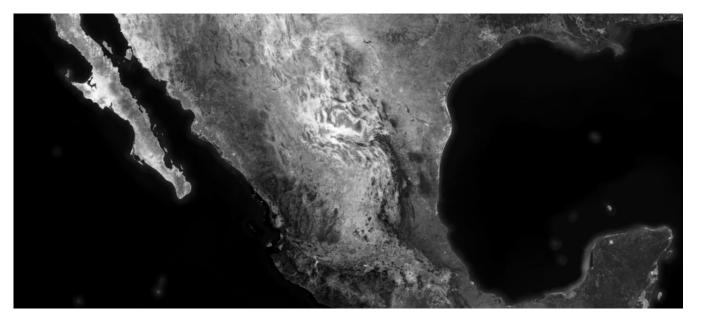


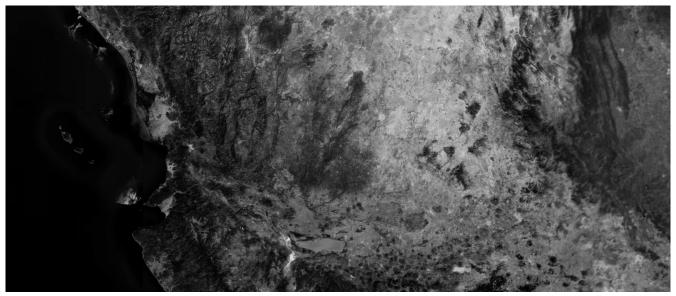




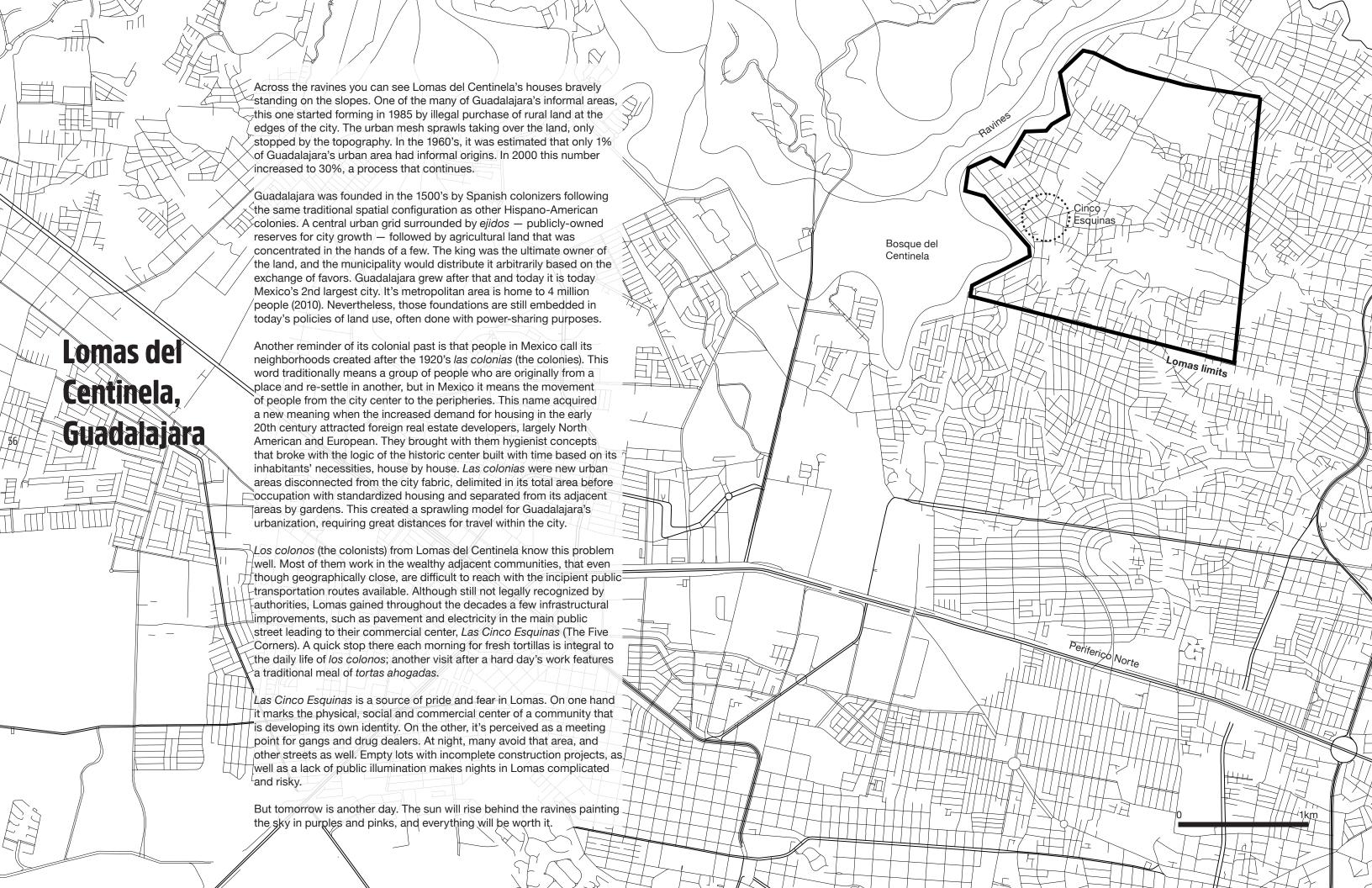






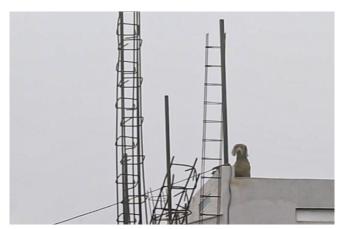












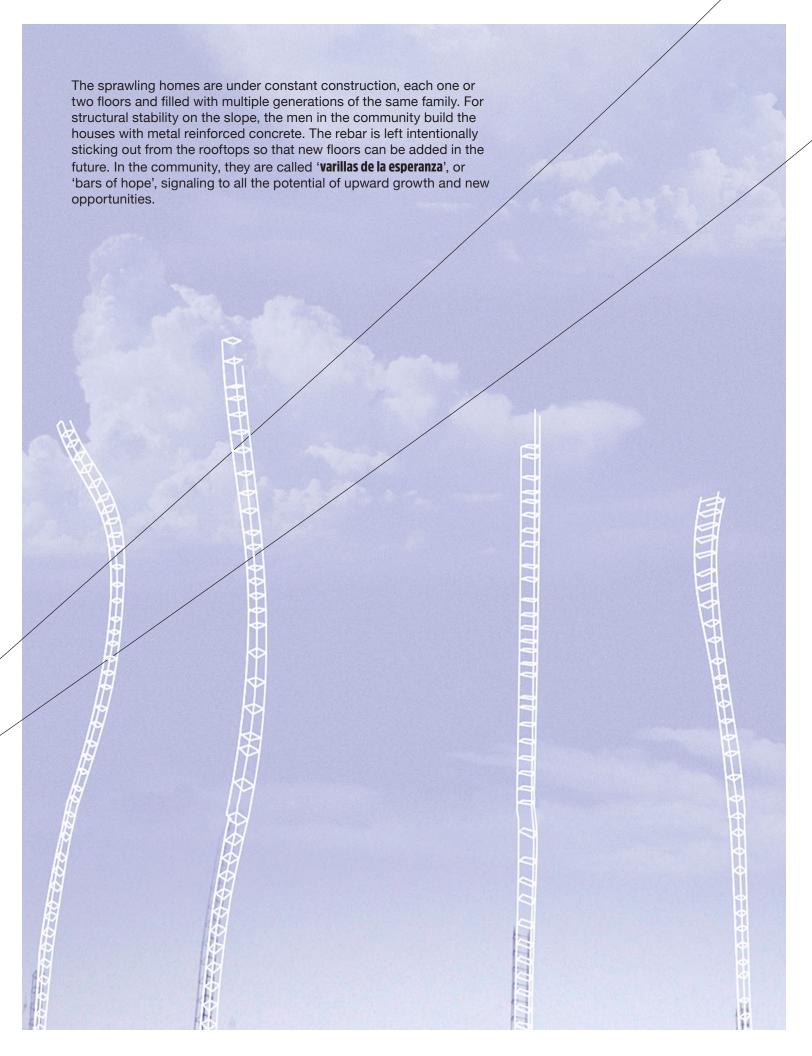


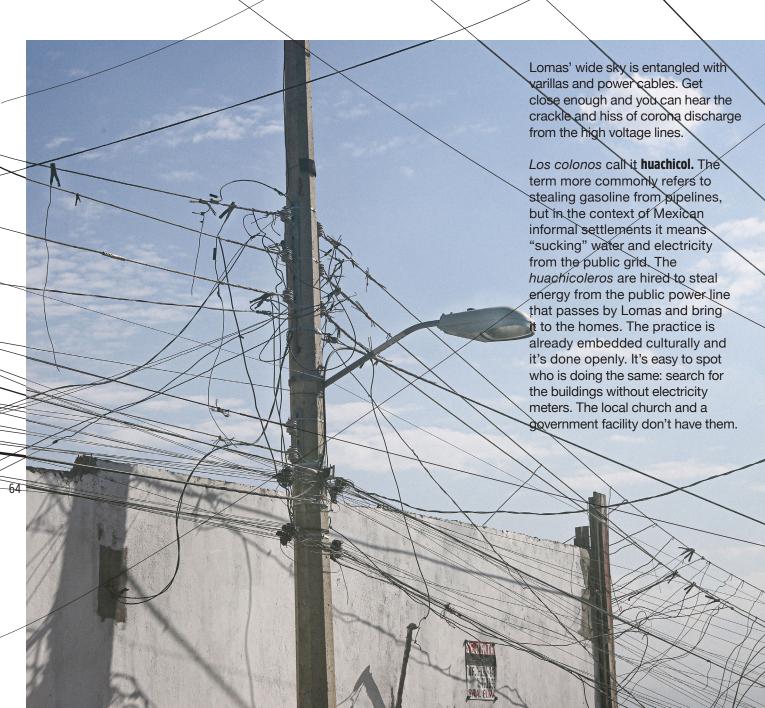


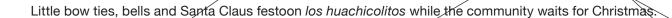


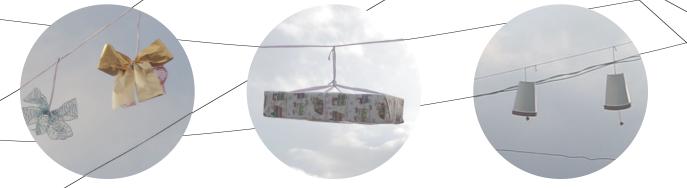


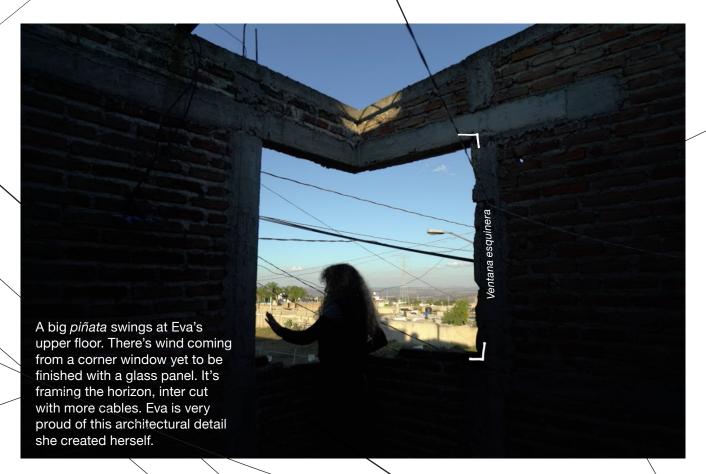


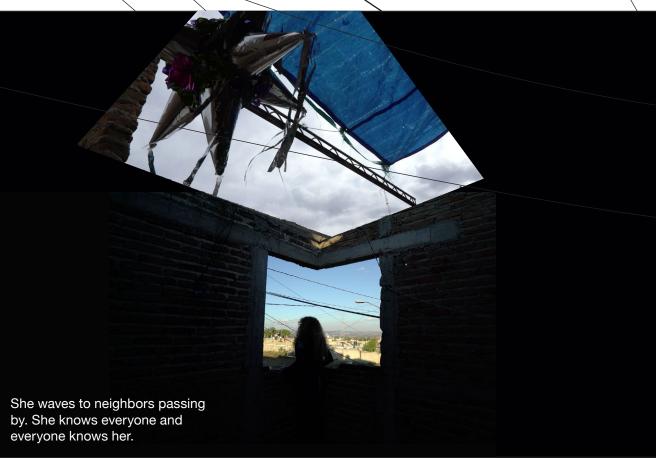














Work day meals

Produce Craft Watch it Watch it Watch it Watch it Watch it Watch it Gi HAN'S MEN AT WORK Faod PRODUCTION Watch it Watch it



















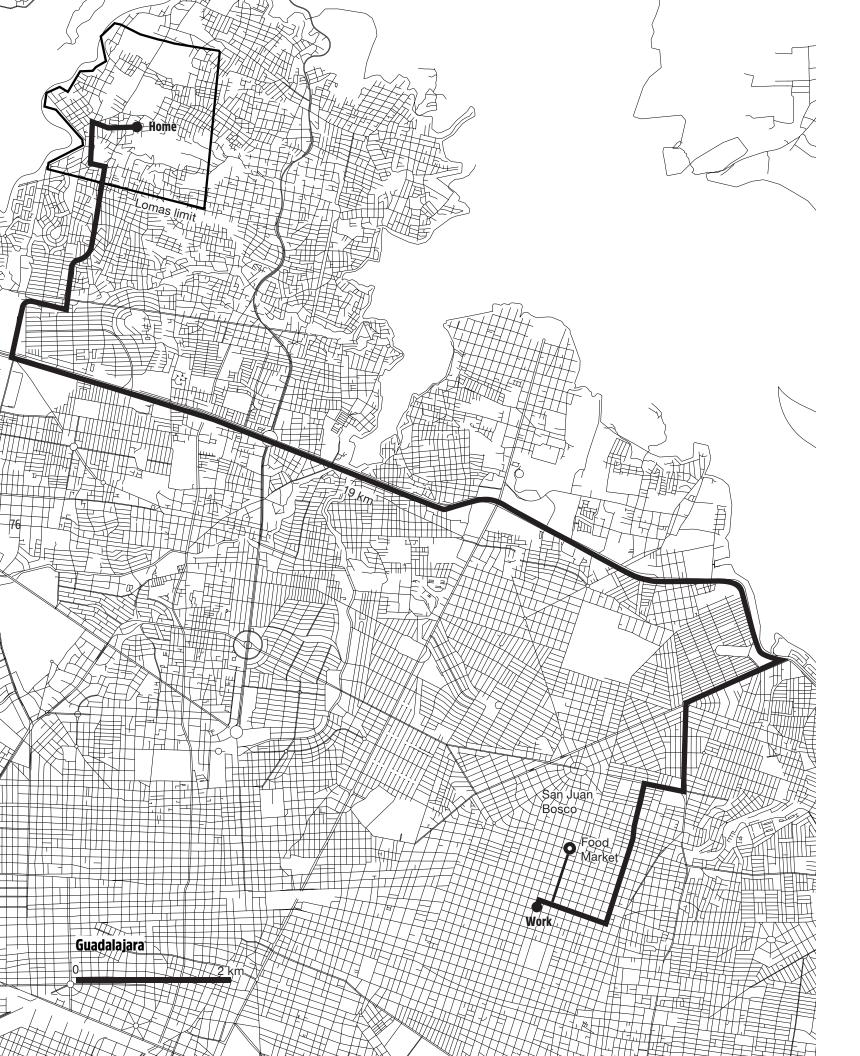


To move around the winding streets of Ezbet Khairallah, Gihan and everybody else rely on lightweight three-wheeled cars. The formal public transportation and app drivers only go up to the community entry point, while the internal transportation is made by the skilled **tuk tuk** drivers who know each corner by heart and the fastest route to get everywhere.

From early morning to late night, the streets are jammed with them, negotiating space among the kids, elderly, fruit stalls and cats. Accidents are not uncommon. These lightweight vehicles are owned by the families and are an important source of income in the local economy. A typical driver would make around 300 EGP a day.

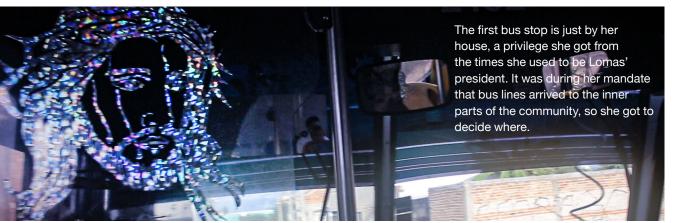


To get to the community I would hop on Ubers at Cairo downtown and jump off by Ezbet entrance street. There, one of our local connections would be waiting for me and we would walk or get a tuk tuk to reach the Kitchen. The Uber cars could physically reach much further inside, but there's a big stigmatization of the area. Once, a thoughtful driver warned me using Google Translator on his phone: "This area is not safe".





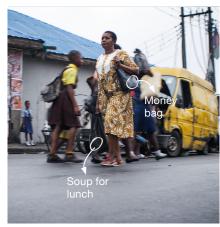


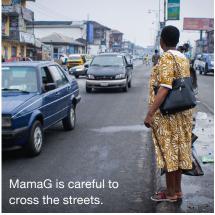




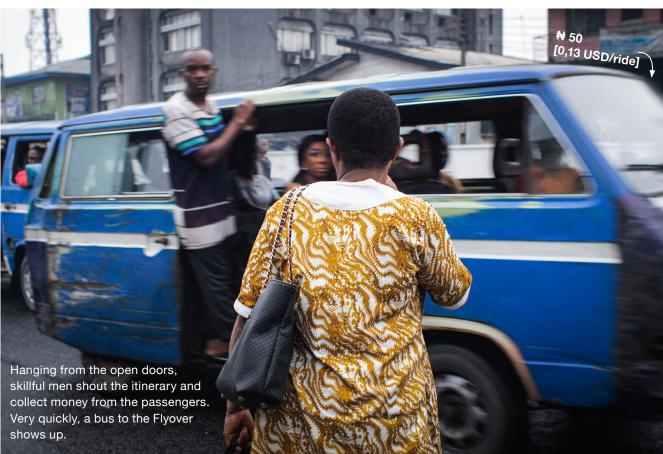


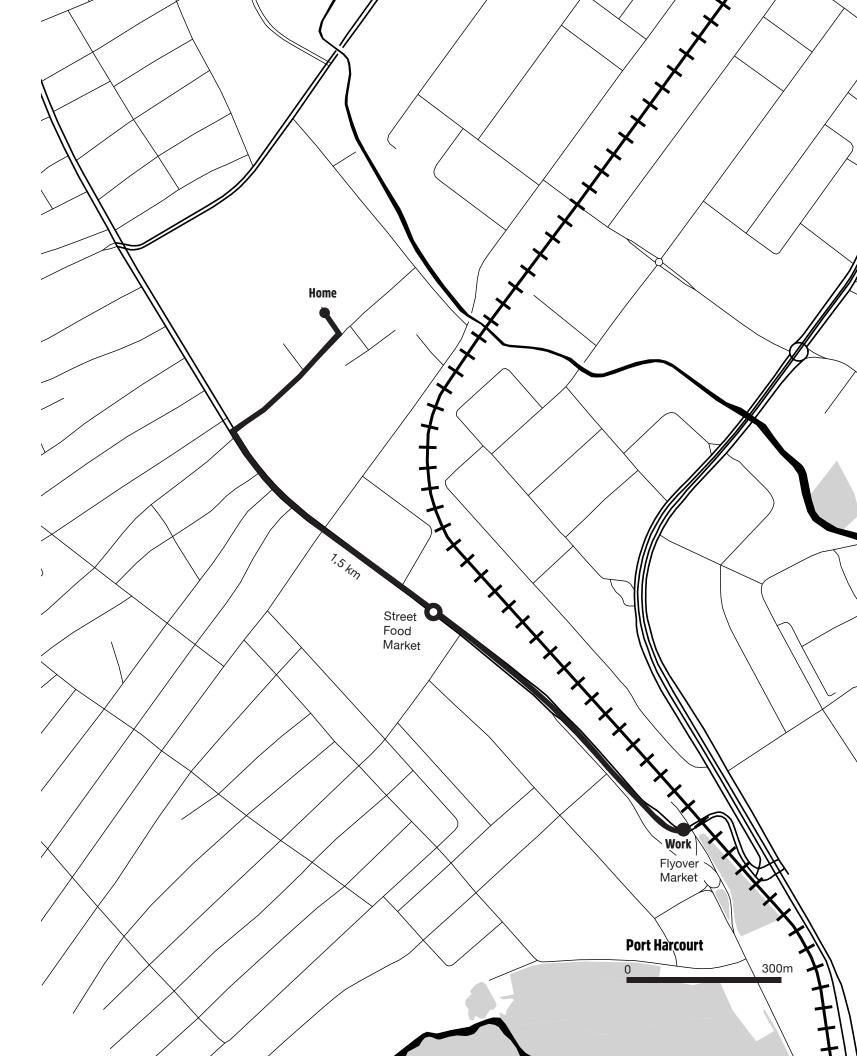


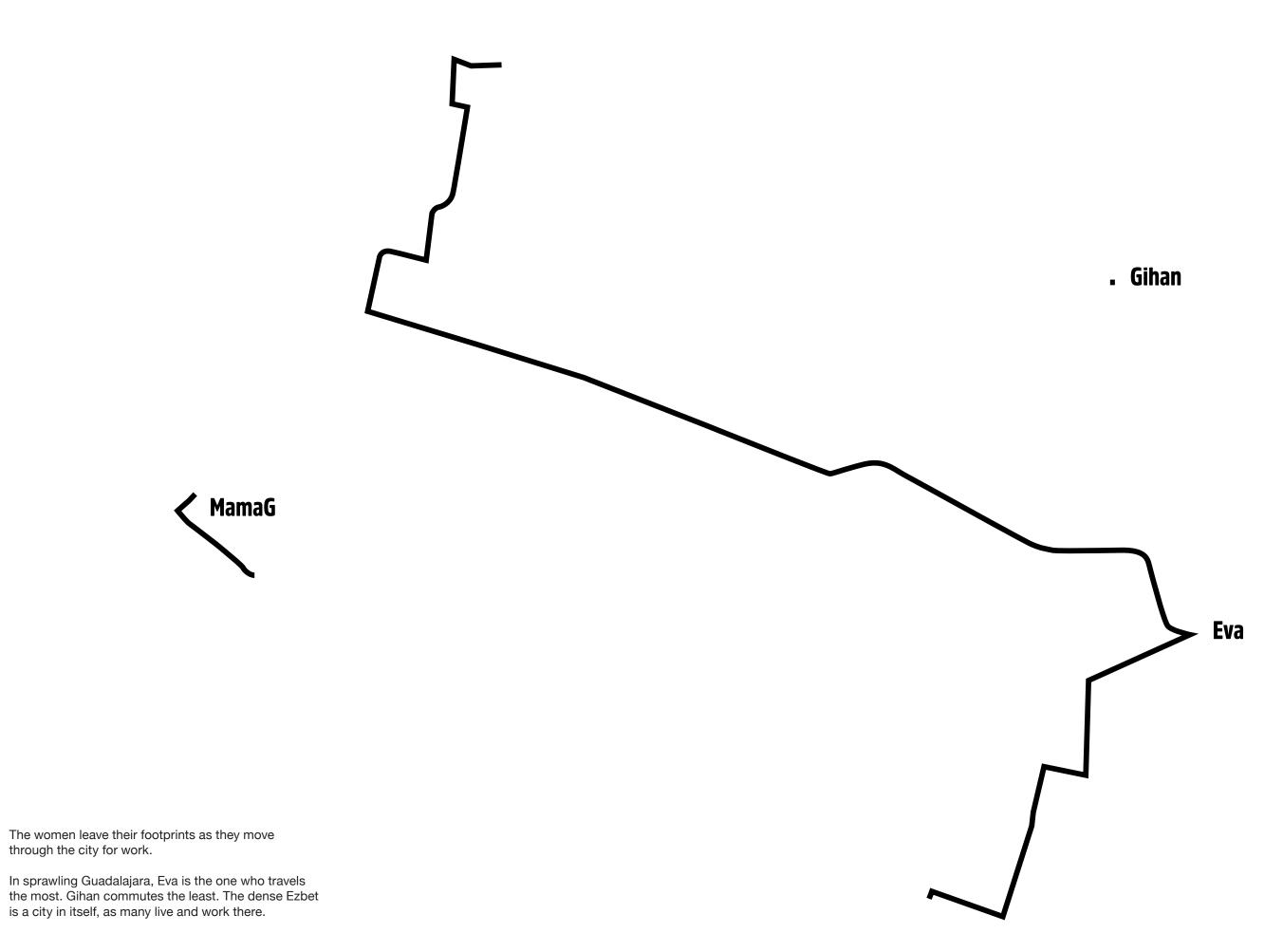


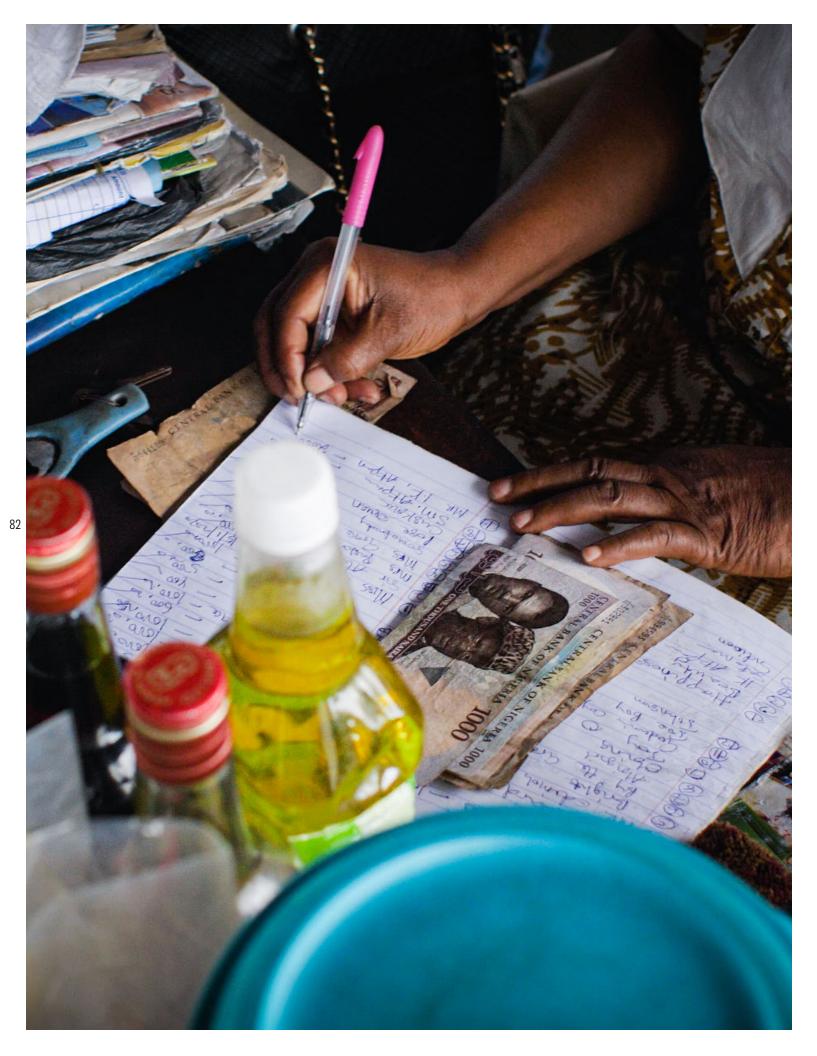












People trust me, they bring money from all over.

I will collect the money. At the end of the service, if you put 200 in a month, for 31 good days, the owner of that money will collect 30 days. 30 days with 200 Naira is 6 000. And the last one, which is the 31st day, 200 Naira is my own.

In 5 minutes, MamaG arrives at the Flyover Market and starts unpacking her stuff. She mops the floor with a straw broom while Harry, her son, washes the glasses in a water bucket.

She unlocks a big chain that is guarding her belongings and begins to put the stall furniture in place. With four wooden benches she delineates her area by a big concrete column. On her table are potions, liquor sachets, candy, bitter kola packs, bus tickets and her notebook. She is constantly taking notes as people come to trade.

MamaG is the head of a collective bank in that section of the market. As she explains how it works it's clear how comfortable she is with numbers:

If it's 100 Naira, it's 3 000 for 30 days. And the last of the 31 days is my own, 100 Naira.

If you put 1 000, for 30 days it's 30 000. The one day which is the 31st is my own 1 000, only.

This system is based on trust. The people commit to keep paying until the end of a pre-established time and trust their peers will also comply with the rules. This is a form of resistance created by those who have been historically marginalized. It tightens community bonds as they know they can rely on each other when they know they cannot trust the institutions.









Food production





It's Harmattan season in Nigeria. The air is hot, dry and muffled. Thirsty mouths empty water sachets.

Port Harcourt doesn't have a running water system. Even wealthy homes have wells to reach groundwater. The business of manufacturing purified water sachets thrives as an alternative to providing drinkable water at affordable prices.

For about ₩15 (0,04 USD) a sachet, kids find a way to provide for their families.





















Bread is the water of Egypt, it's been ingrained in its history since ancient times. The skills to carry huge racks of bread over their heads seems like part of Egyptian DNA. Many do this on their bikes.

Egypt used to be one of the biggest exporters of wheat in the world. Now the situation has shifted to the other end of the spectrum, and it has become the world's biggest importer. With diminishing availability of fertile areas along the Nile and a booming population, Egypt is no longer self-sufficient in wheat, and hence bread production. As the demand grows, prices also rise.

To relive hunger, the Egyptian government issues subsidy cards to ration bread. The price has been fixed since 1989, 5 piasters (0.0032 USD) per loaf, a fraction of the cost of private bakeries. The population is highly sensitive to any changes in this matter. In the 1970's the country was burned down when the subsidy was threatened. In 2020, people went to the streets again as the loaves shrunk from 110 to 90 grams each.

















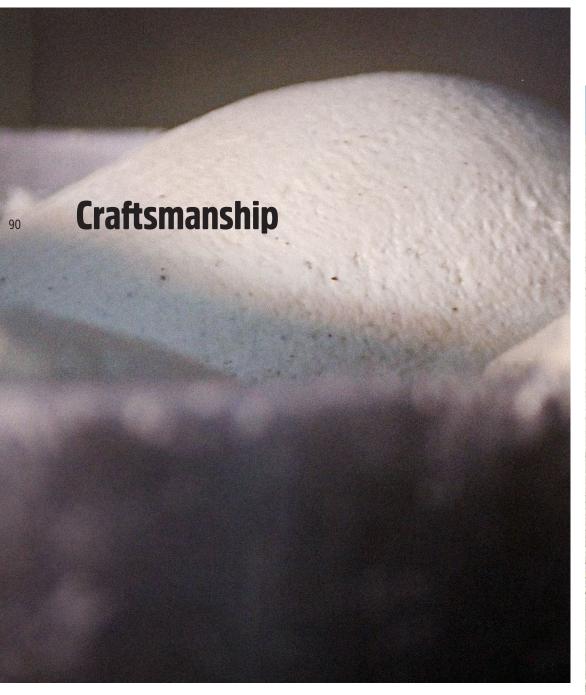






Further down the street, a pile of sand is transforming into concrete blocks. A romantic song plays on the radio while men handle the construction machinery under Lomas' harsh sun. The red bandanas around their necks are lifted to their faces every once in a while, preventing them from inhaling too much of the thin and dangerous cement powder.

It's a common scene. There's still a lot of empty space in Lomas, and new families are moving in. Oftentimes the houses are built by the family men, who work in construction developments around the city, and replicate in Lomas styles and techniques they learn on the job.







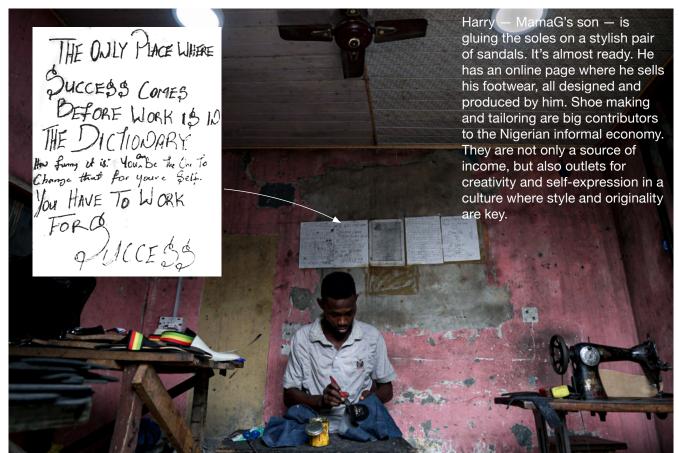
















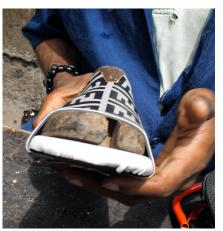






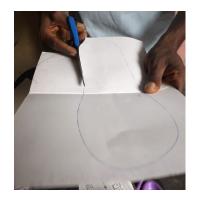
































Gihan cuts a pile of bread in half. It's fresh from the baker downstairs.

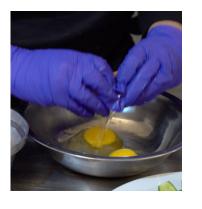
The kitchen is in constant motion as women shift non-stop around a large metal table at the center of the kitchen. They work swiftly and confidently, as they prepare food for some 50 people this morning. The women are inspired by their different cultures and they take great pride in creating unique fusion recipes and dishes. The Syrians learn about the Egyptian seasoning and the Egyptians learn of the importance and care needed for the Syrian presentation style.

They laugh, gossip and sing. They take occasional small breaks in pairs to smoke cigarettes in the stairwell, so as not to be seen smoking outside, since the sidewalks are reserved for men and their big hookahs.









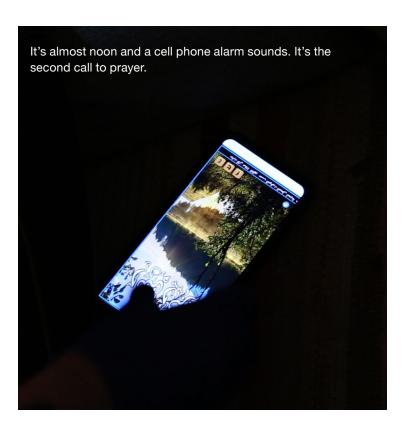














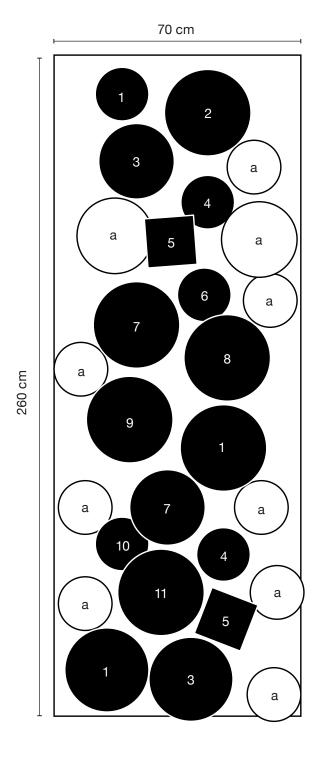
Gihan's work day meal

After the prayer, they start to set up the big table for lunch in the area where earlier they were assembling the crates with lunchboxes. The Dawar Kitchen is a beautiful and warm place to spend time, and eating together is the best part of the day. Every inch of the table is covered with salads, warm dishes and pita bread, all passed around and eaten with your hands. The meals are so beautifully plated that it is easy to wonder if this is some special occasion, but the women deflect this idea. "We like to spoil ourselves" they say and one look at the table and there can be no doubt that they are doing just that.



Gihan's work day table

- 1. French fries
- 2. Carrot mokabbalat
 - 3. Bread
- 4. Domiati cheese
 - 5. Syrian ful6. Pickles
- 7. Omelet
 8. Olive *mokabbalat*9. Arugula
- 10. Onion *mokabbalat* 11. Cucumber
- a. Serving plates



MamaG's work day meal

Around noon MamaG takes a pause from her work. It's time to eat. She positions a plastic table at the very center of her stall, circumscribed by the wooden benches. On the table, there lies the pot with the afang soup she prepared the night before, a water sachet, fufu bought from a stall and a plate of water to clean her hands as she won't use cutlery.

Some people are sitting on the benches around her and, although she considers the market people her extended family, she eats on her own alone at the table. PapaG, her husband, used to be on a chair by her side until a few weeks before.

MamaG covers her head for a second with a perfectly white cloth and thanks God for her meal. She eats her delicious soup rolling and dipping balls of fufu in it. She doesn't take very long though, the business can't stop. As she finishes the soup, she bites a hole in the water sachet and drinks it all.

A client is already waiting.



10/

MamaG's work day table

- 1. Fufu 2. Afang fish soup 3. Water sachet
- a. Disposed bones b. Hand washer

90 cm

90 cm

Eva's work day meal

Eva waits, sitting by a long aluminum counter, for her *flautas de pollo* to get ready. It's another style of preparing tortillas: wrapped around shredded chicken and deep fried. A charismatic man is preparing it while talking to the other clients and inviting passersby to try their specialties.

When Eva commutes to the center of Guadalajara to take care of her parents, she often has a quick meal at the San Juan Bosco market. It saves her time from preparing her own food, as the one she makes for the elderly can't be as rich and spicy as she likes.

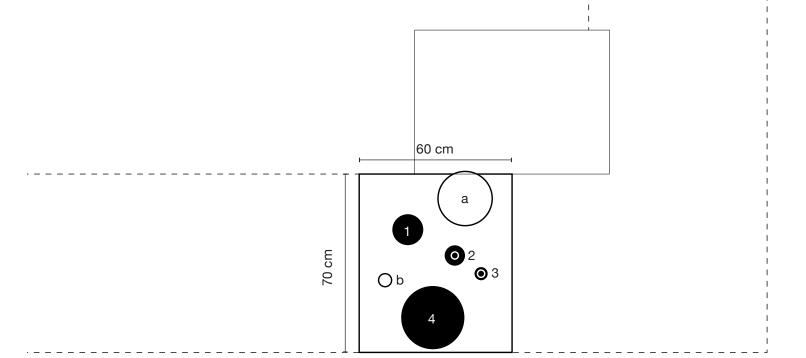
Just like her, many other Mexicans do the same. The public markets have delicious, fresh and affordable food. The good prices are due to the fact they are government subsidized, so a vendor can rent a stall at low cost and use its infrastructure. This policy was an attempt to formalize the traditional street markets, *los tianguis*, and now it has become an important part of the culture. There are two main categories of markets in Mexico: the public markets, which are fixed, open daily and operated in an enclosed building with formal infrastructure; and the *tianguis*, which are temporary, open once a week, and set at different streets open air.

In five minutes her chicken flautas are ready. She adds pozole to the plate, along with fried bread and tamarind soda. While she eats, Virgin Mary stands on a corner watching over everyone.



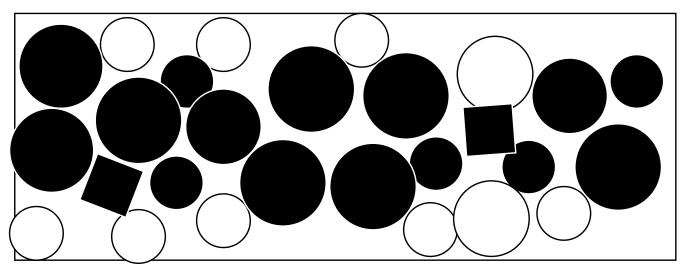
110 Eva's work day table

- Chili
 Salsa picante
 Tamarind soda
 Chicken flautas, pozolle, lettuce salad and fried bread
 - a. Vendor utensils b. Plastic cup

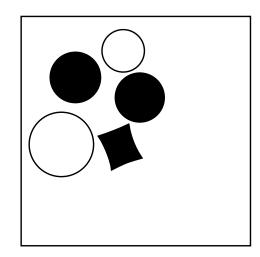


Work day tables

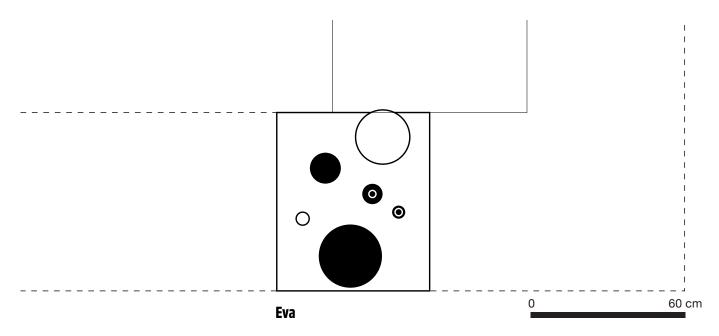
	Cooking time (min)	Meal time (min)	Money spent	People sharing the meal
G	45	60	-	9
M	120	15	₦ 215 [0,60 USD]	1
F	-	20	Mex\$ 40 [2 USD]	1
•				



Gihan



MamaG



Rest day meals





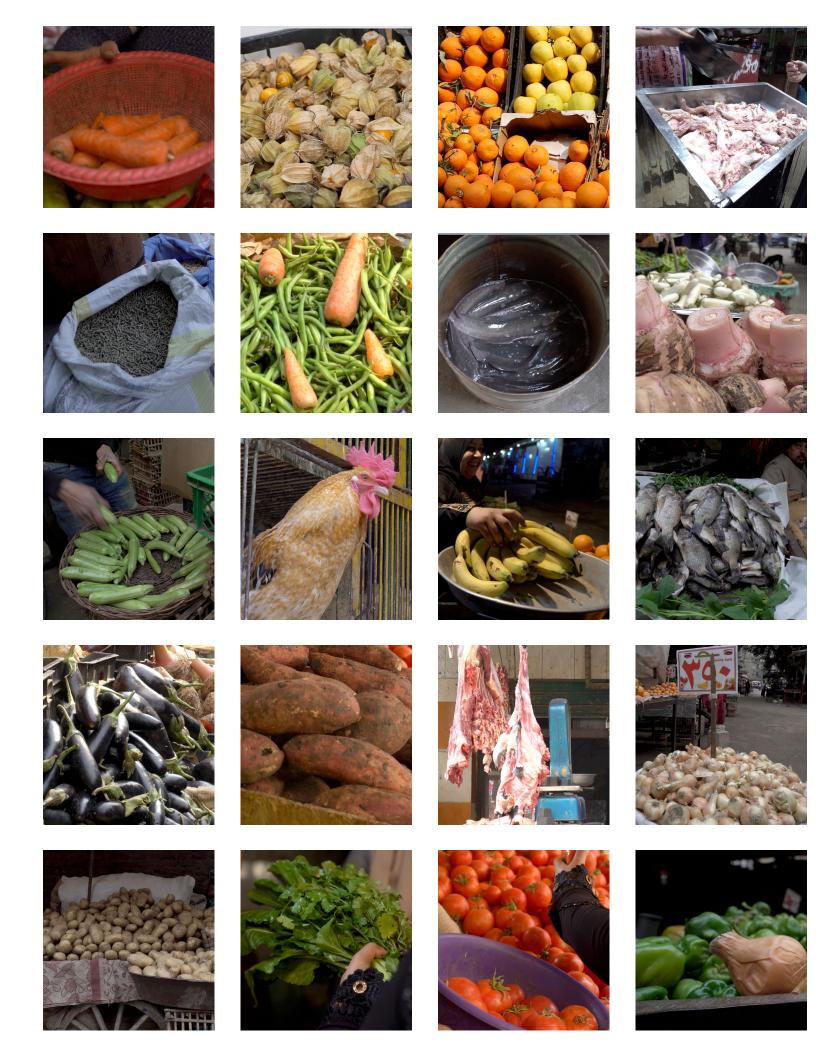
Where there's pavement, there's a market in Cairo. A few meters away from Gihan's place, the food stalls are already popping up. In Ezbet many buildings have little shops and restaurants at the ground level, but at El-Nagaḥ street is where the fresh food market traditionally sits.

It's Tuesday and it's Gihan's day off from work. She's getting ingredients to prepare taro soup for lunch with her kids. She moves around quickly to get what she needs. A new woman in the community shouldn't be seen hanging out nonchalantly.

Shopping list

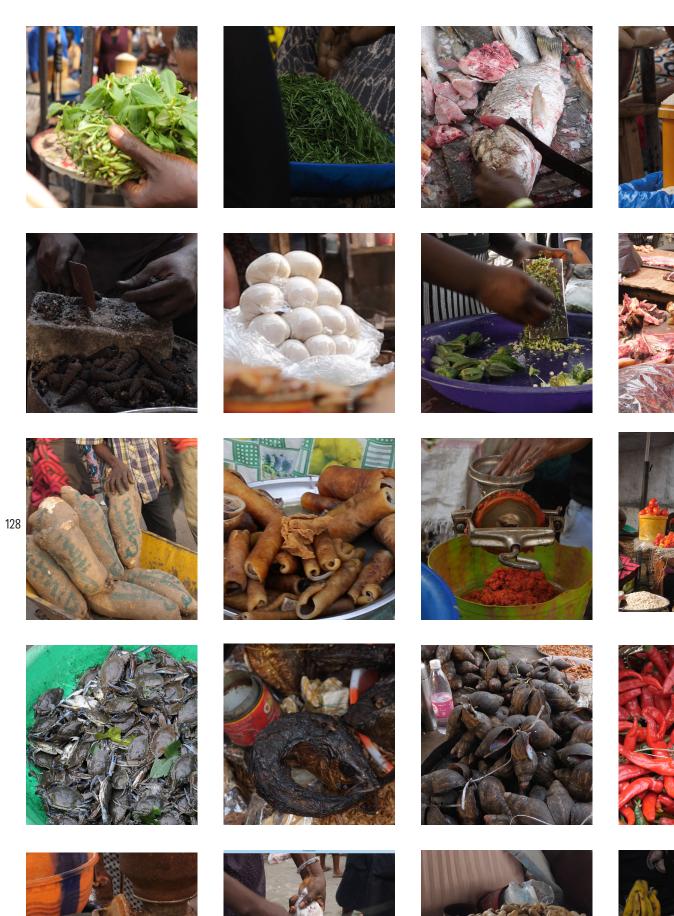
Carrots: E£ 8
Green peas: E£ 10
Tomato: E£ 6
Taro root: E£ 10
Cumin: E£ 5
Greens: E£ 5
Coriander: E£ 5
Chicken: E£ 55

Total: E£ 104 [6,7 USD]











MamaG doesn't have days off. On Sundays, however, she opens her stall later, after church. On those days she skips the cooking and buys food prepared at her market.

On other week days she would get food from the Mile One Market and prepare afang soup at home to last for the week.

Shopping list

Afang leaf: \(\frac{\text{\te}\text{\texi{\text{\texi{\text{\texi\tinc{\text{\texi}\tiex{\text{\text{\text{\text{\text{\tiric}\text{\text{\text{\texi{

Kpomor (cow skin): ₩200 Fresh pepper: ₩50 Goat meat: ₩1400 Periwinkles (shell): ₩ 200

Palm oil: ₩300

Total: 4150 ₩ [11 USD]









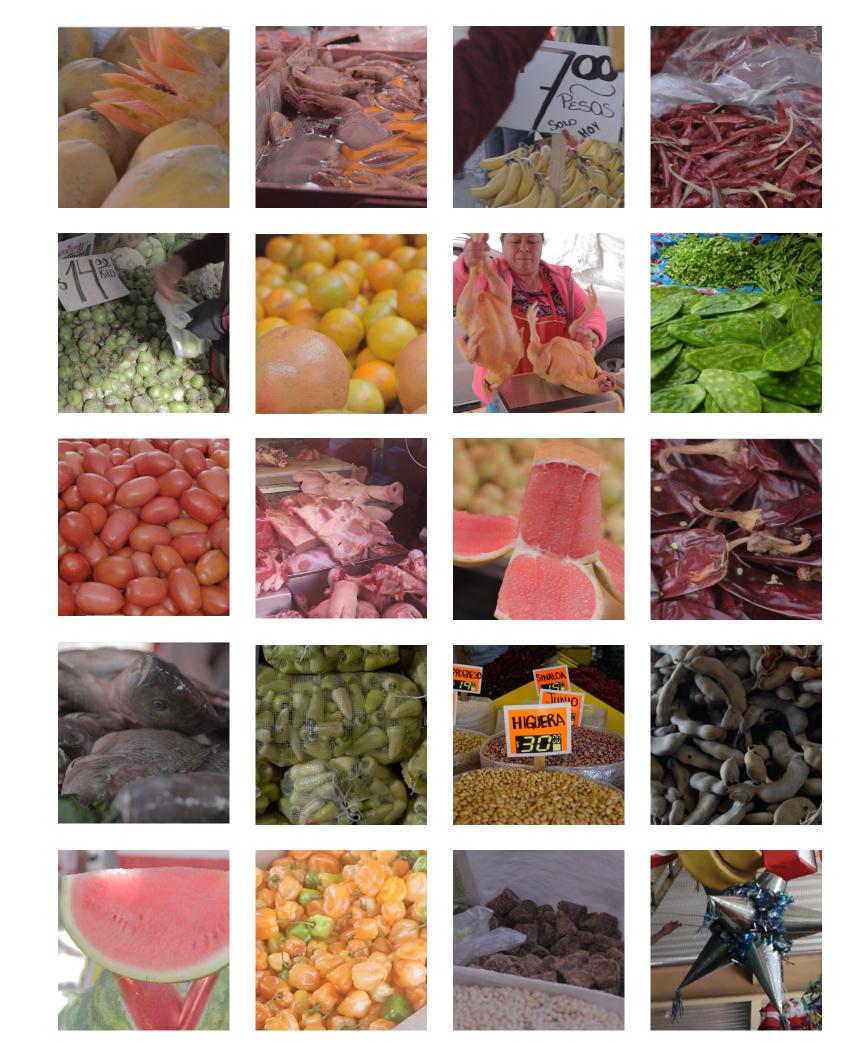


Shopping list

1kg tortilla: Mex\$ 15 Dried chili: Mex\$ 30 Green chili: Mex\$ 10 Nopales (cactus): Mex\$ 10

Garlic: Mex\$ 5
Tomatillos: Mex\$ 15
Tomatoes: Mex\$ 12,50
Pilloncillo: Mex\$ 30
½ kg sugar: Mex\$ 9
Apples: Mex\$ 40
Banana: Mex\$ 15
Small piñata: Mex\$ 25
Big piñata: Mex\$ 50

Total: Mex\$ 281,5 [14 USD]









Eva heads back home carrying two *piñatas*. One is for her grandson, the other is for the kids in the community. During the holiday many will rely on her to create a community which they might not otherwise have.

Lomas' kids strike the piñatas ardently as they hang in the backyard of the church until they eventually succeed and lunge to the clay ground to collect the candy in a flutter of joy.

In this largely Catholic neighborhood, the **Parroquia San Miguel Arcangel** backyard is one of the few communal spaces where kids can play and the moms feel safe about it. It doesn't have a fixed priest, though. Eva arranged for someone to celebrate the mass on Christmas Eve for them.



















Across the ocean, MamaG kneels without touching the cement floor. She's careful with her long tailored yellow dress.











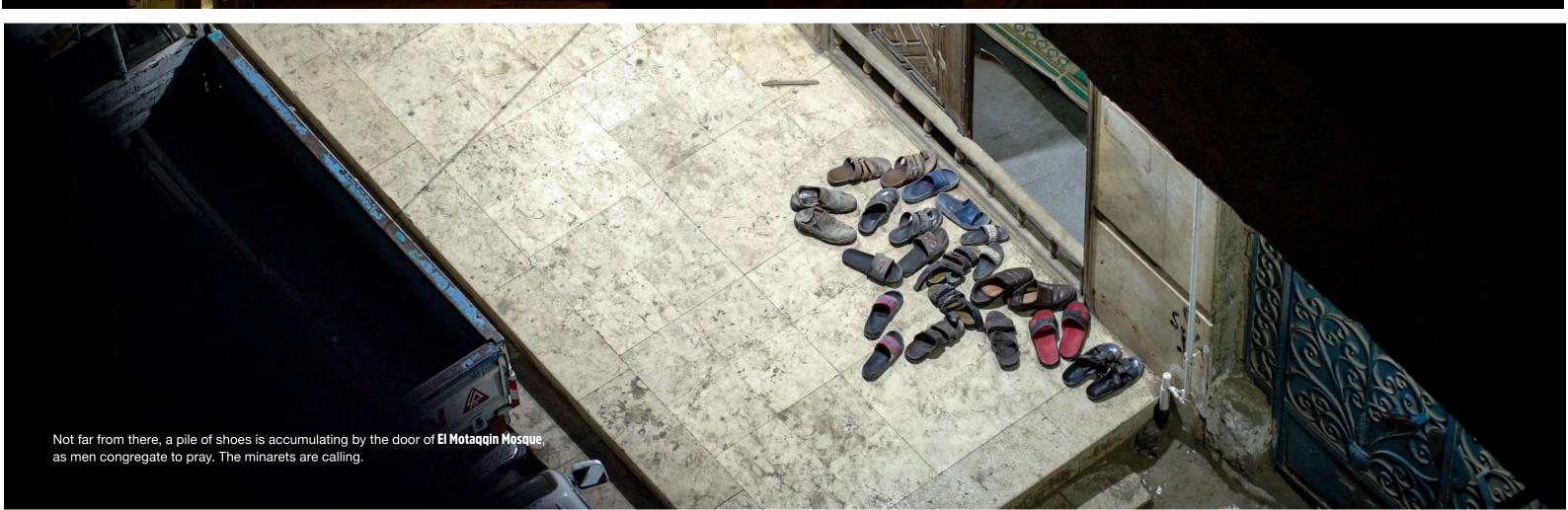


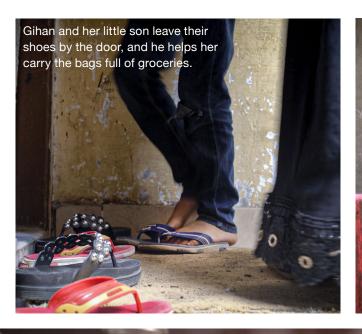


















Balcony Bedroom 1 Hall Living room **□**~ \vee Bedroom 2 Kitchen WC

6,5 m

7,5 m











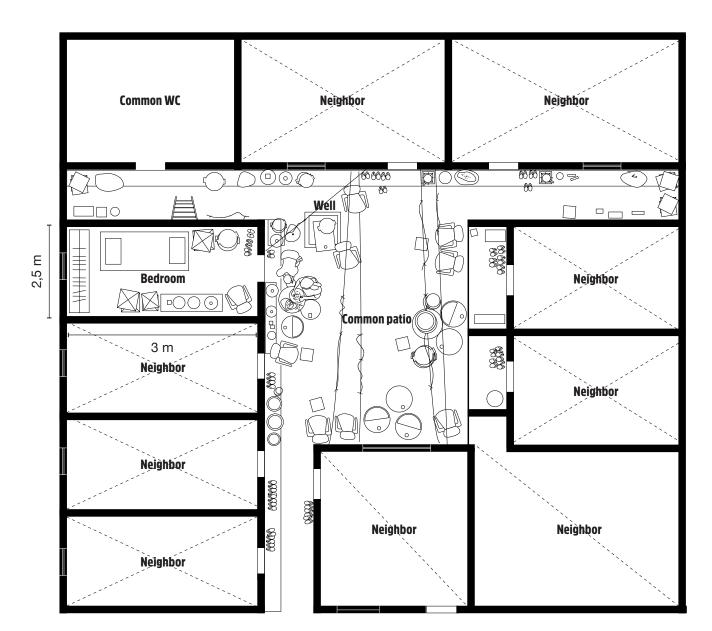


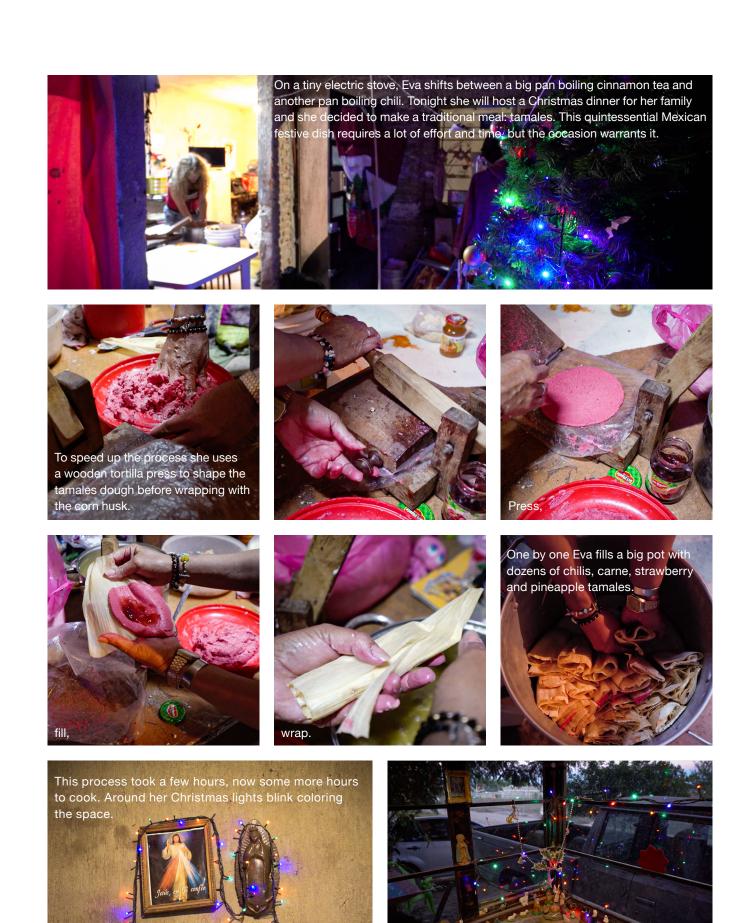


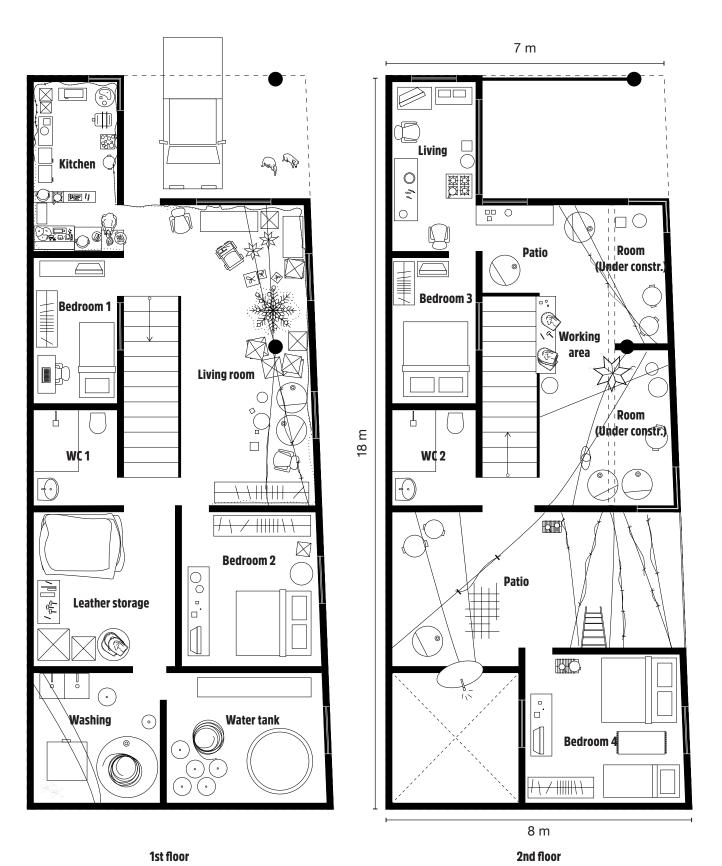








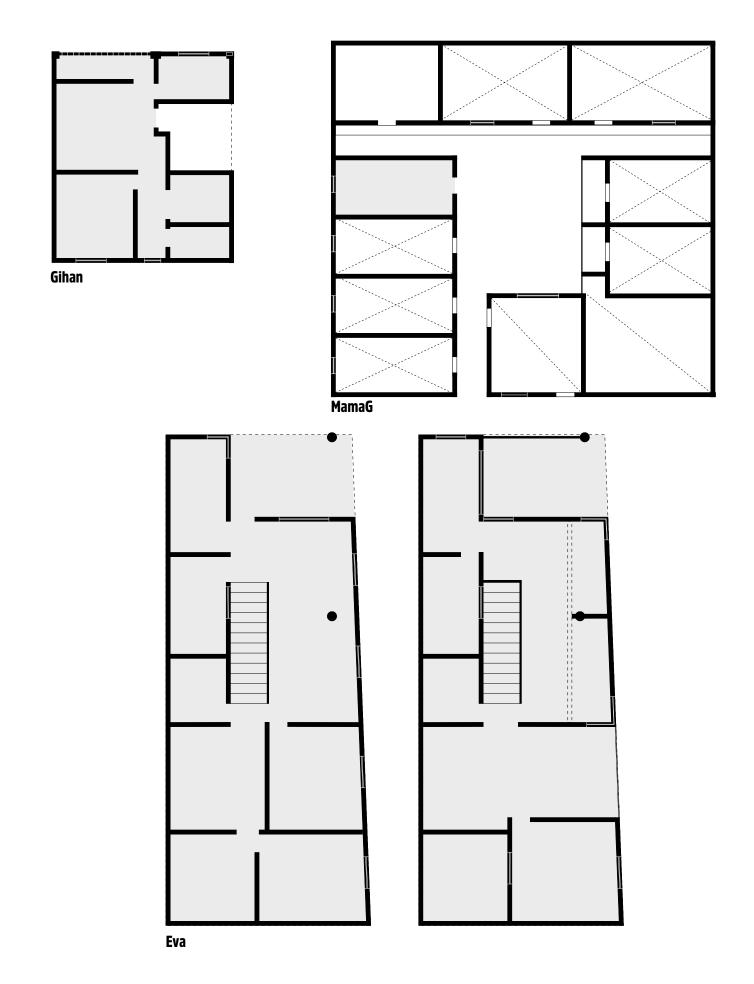




Gihan lives in a rental two bedroom flat. She shares a room with her two boys while her teenager daughter sleeps in a room of her own. They have running water and electricity coming regularly from the city grid, but blackouts and shortages of water are frequent.

MamaG rents a small room and shares it with her 24 year old son. The patio, shared with many other families, is where the cooking happens. There's no running water or electricity, the bathroom is communal, and the neighbors share the costs to have the septic tank emptied when it's full. There's a common well in the place, but each tenant also buys gallons of water from a facility nearby.

Eva and her husband own a two story house, although they don't have the legal title of the land. Her daughter and two of her sons live in the house with their partners. Each couple has its own room, and one of them also lives with their kid in their own room. The water tank is filled from a private truck every other week. They also buy filtered water gallons for cooking and drinking. The electricity is illegally taken from the city grid.



150

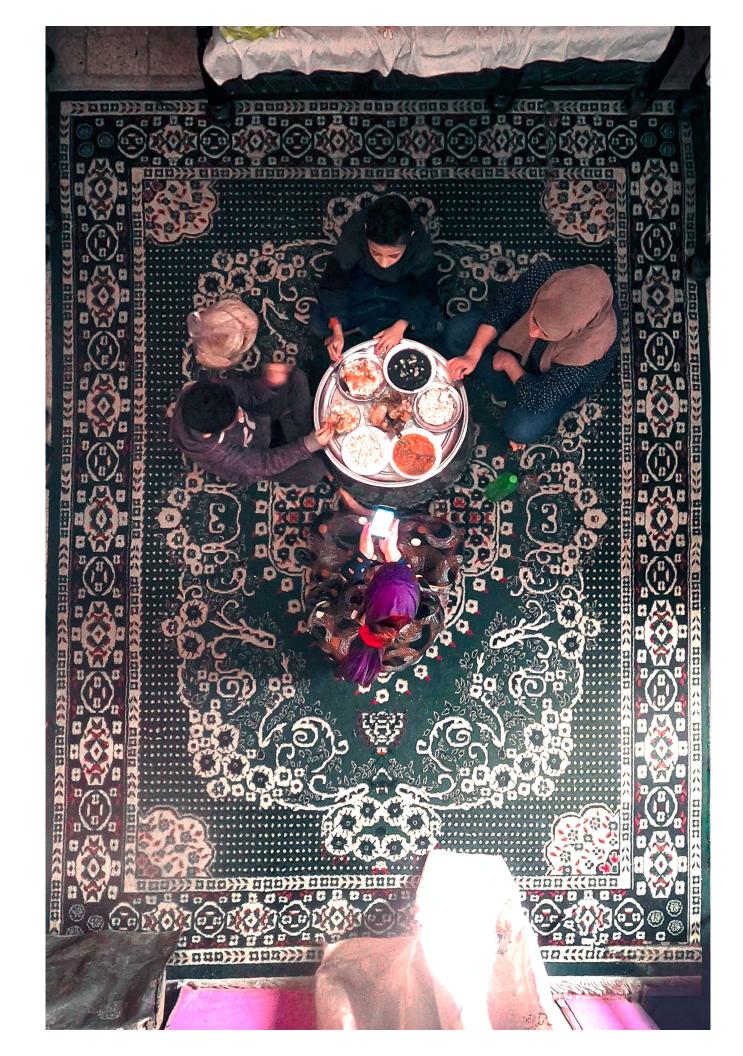
Gihan's rest day meal

Gihan serves the soups, fried chicken and rice on a big circular tray, and lays it on a pillow on the carpet in the living room, where the TV is playing an Egyptian soap opera. Next to the tray lies a bag of flat bread.

Half way through the meal the electricity blacks out and suddenly the room is quieter for a few minutes. The city hums from the balcony window and the clinking of plates on the tray is more prominent.

The family eats very close together, with their hands, while the spirals and finials of the carpet swirl out beneath them.

Rest day meals



Gihan's rest day table

152

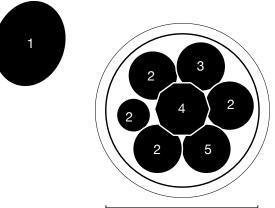
1. Bread

2. Rice

3. Kolkas stew

4. Fried chicken

5. Carrot and peas soup



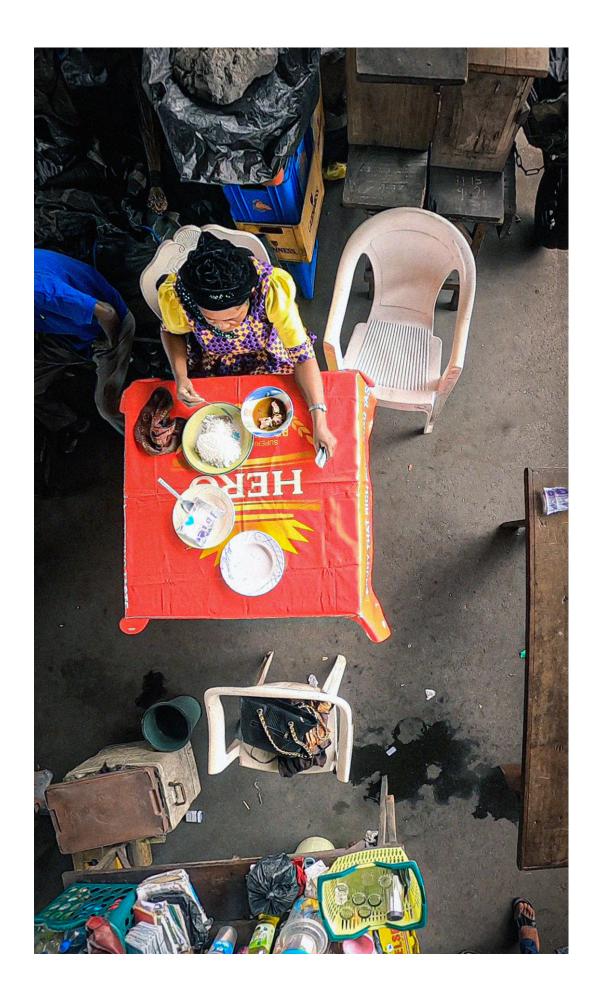
60 cm

154

MamaG's rest day meal

After church MamaG is back to her business at the market. She opens her stall later on Sundays, around 1pm. On those days she doesn't bring her food from home, instead she buys it prepared from a stall nearby.

A vendor brings MamaG a plate of spicy goat soup with rice and a water sachet. She eats it alone on the plastic table set there, as she avoids leaving her belongings unattended. MamaG has a quick meal, just like on her working days and quickly returns to her business.



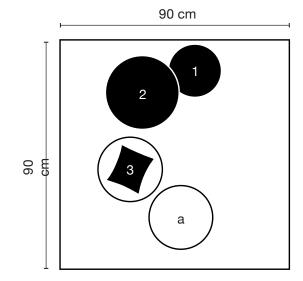
MamaG's rest day table

156

1. Spicy goat soup 2. Rice

3. Water sachet

a. Hand washer



Eva's rest day meal

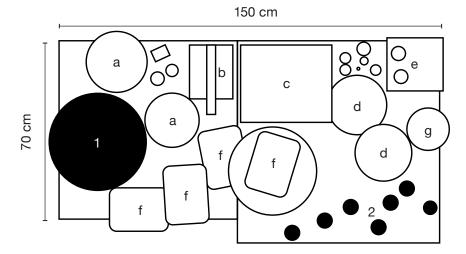
Eva pushes aside her sewing machine and extends her working desk with a plastic table borrowed from the church to make space for a massive pan of tamales. It is finally time to eat. Eva, Martin, her kids, the step daughters and grandkids stand around the table. After everybody has had at least two tamales, one savory and one sweet, Eva allows the family to head to another house across the street to visit their extended family. They drink tequila and listen to music until the late hours. Outside, many families are doing the same, swapping houses from one party to another, from one group of loved ones to the next. This barely resembles the dark empty streets of yesterday. Tonight is a celebration of Christmas and tomorrow brings a new day.





160 Eva's rest day table

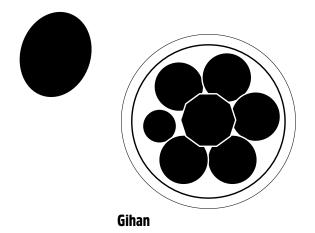
- Savory and sweet tamales
 Cinnamon tea cups
- a. Disposed corn husk
 b. Tortilla press
 c. Box
 d. Extra tamale filling
 e. Sewing utensils
 f. Disposable serving plates
 g. Pan

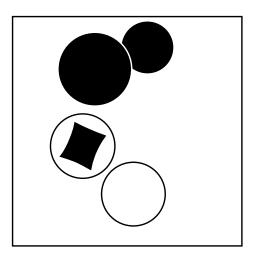


Rest day tables

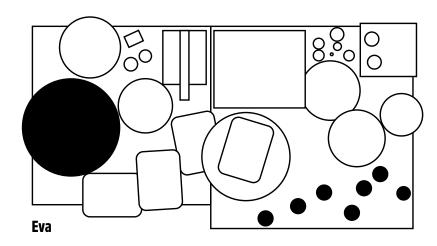
162

	Cooking time (min)	Meal time (min)	Money spent	People sharing the meal
G	120	20	E£ 110 [7 USD]	4
M	I -	10	₦ 315 [0.90 USD]	1
E	480	35	Mex\$ 360 [18 USD]	10





MamaG



60 cm

168

PapaG's death

Only a few weeks before the trip to meet MamaG in Port Harcourt, we learned of her husband's unexpected death.

Our plans quickly shifted to help support her as she planned for the funeral, a public five day event welcoming hundreds of guests, to be taking place in PapaG's ancestral village outside the city. It was difficult then, and still is, for me to understand the funeral arrangement since it's radically different from the introspective and private western mourning. Were we organizing for a wedding or a funeral? But what intrigued me the most was what was going on with the body during all those days of planning. How come it was not buried immediately?

As soon as I arrived at Port Harcourt, we went with the local team to the market to visit MamaG and be introduced to the Chief. Very charismatic and elegant, dressed in a black embroidered tunic, this gentleman is in charge to look after PapaG's family in their village. The chieftaincy is a traditional Nigerian hierarchy institution, where men — occasionally women too — are appointed to a position of power within a group. The Chief would consider our presence at the funeral celebration and discuss our contribution with MamaG.

After an hour of talking, note taking and calculations, we had a list of our support to PapaG's funeral:

Fee for days of the body in the mortuary (about 31 days): ₩ 10 000 Ambulance to transport body from Port Harcourt to the village: № 45 000 Coffin: № 50 000

Suit with no shoes for PapaG: ₦ 15 000

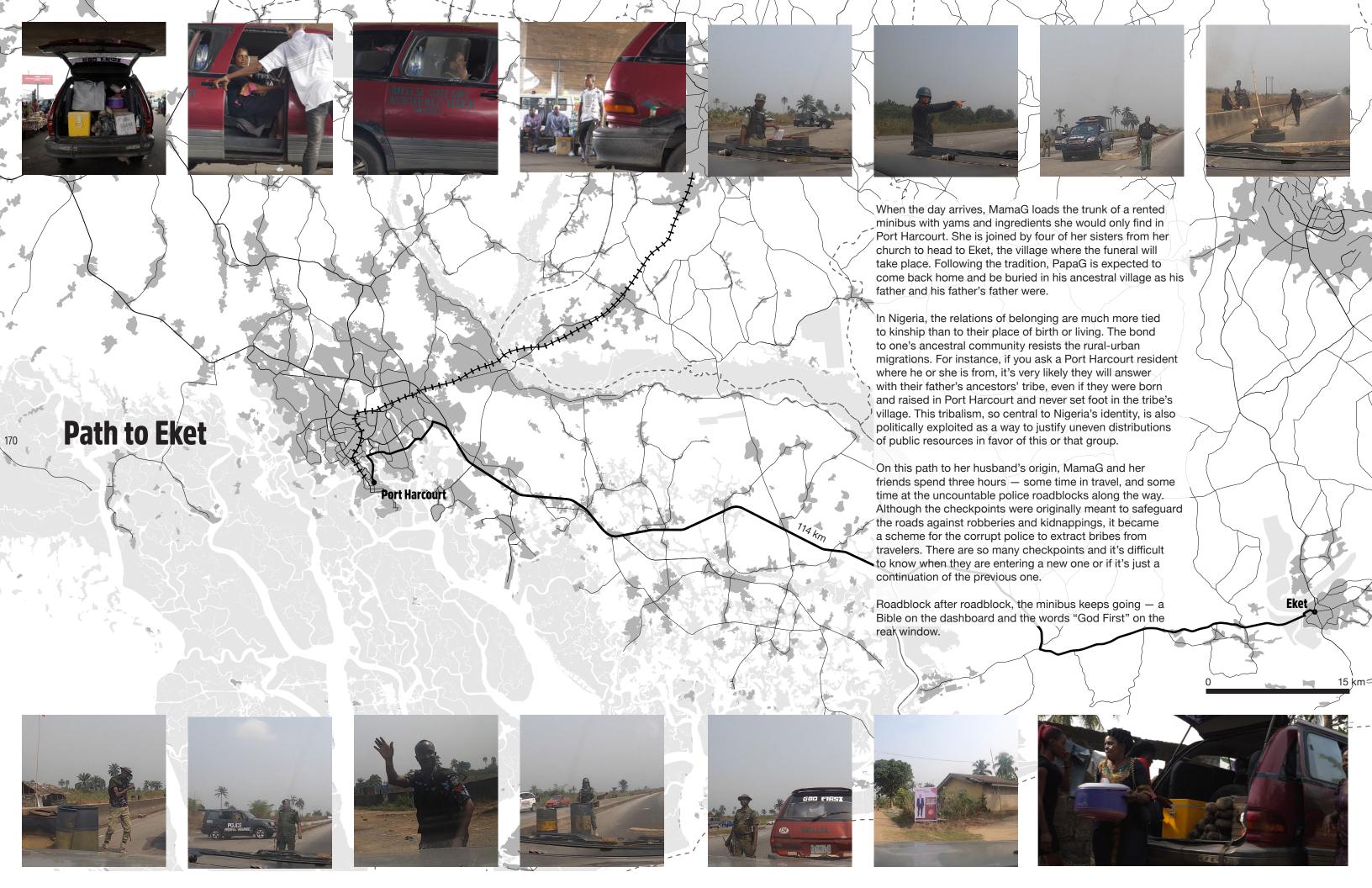
4 Goats: ₦ 50 000 2 bags of rice: ₦ 40 000 Water: ₦ 10 000 Soft drinks: ₦ 15 000 Posters: ₦ 5 000 Extras: ₦ 10 000

Total: ₩ 250 000 [660 USD] = 50 x MamaG's rent

In addition to this list, MamaG will have many other costs to cover. Burying a loved one in Nigeria is of utmost cultural importance and is a big investment for the families. Sometimes they wait years until the money is raised, meanwhile a debt grows from the compounding daily fees to keep the body in the mortuary.

MamaG will make the best celebration to PapaG's memories that she can, without a second thought.







A boy cleans the big water tank from inside, he's the only one who could enter it.









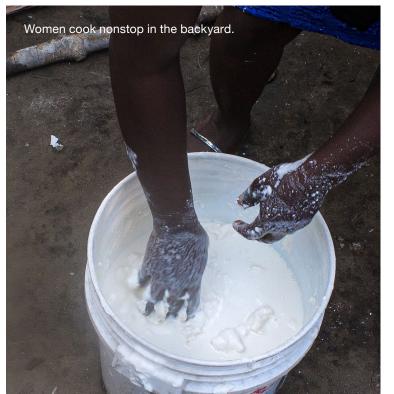














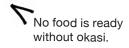


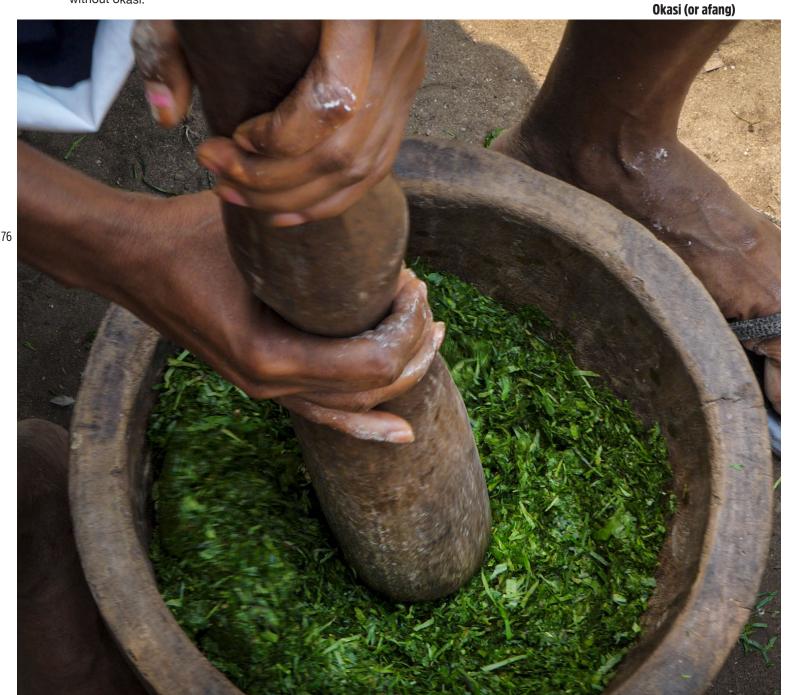


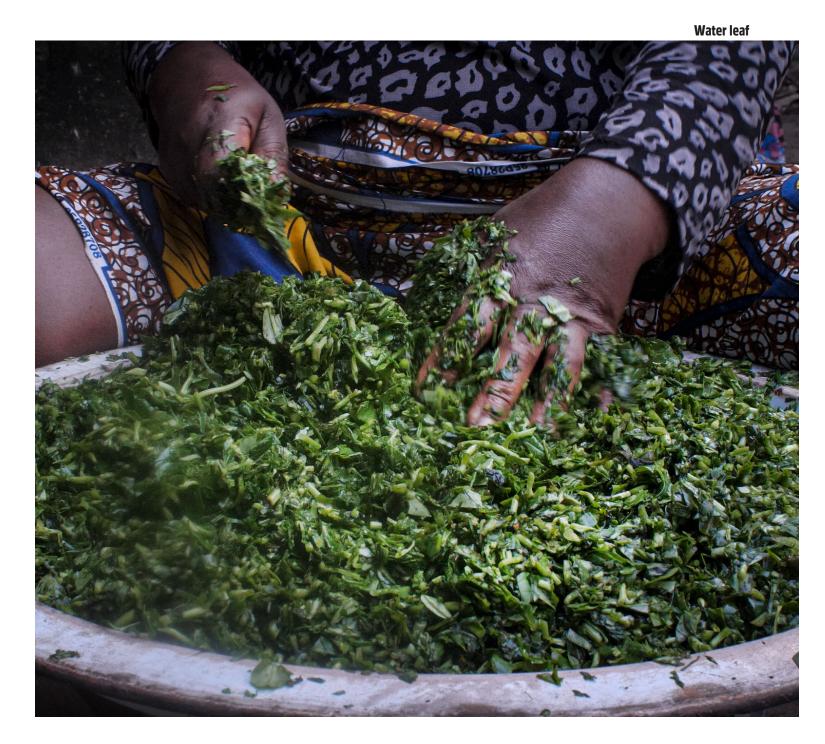
The villagers grab okasi leaves from a nearby tree, wash it and pound it. It's the main ingredient of their stews. It is strong and gives the stew consistency.

The Port Harcourt women sit around bowls picking water leaves they brought with them in the minibus. This will be the lighter base for the stews.

Soon some rivalry emerges between the groups. An elderly villager woman is visibly resentful of the interference those city women are bringing to her kitchen. Do they think city food is better than theirs? MamaG appears to calm things down. The workload is heavy and they better find a way to work together. They have some hundreds of mouths to feed in the days ahead of them.





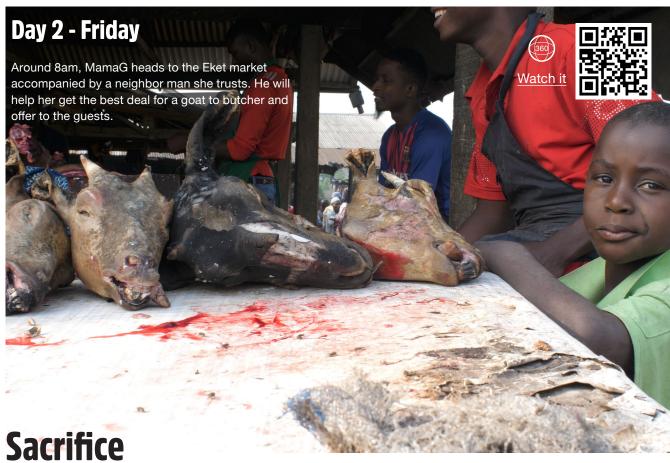




The only woman who won't cook is MamaG. According to tradition, the widow rests until the last day of rites. The reality is that in the days to follow, MamaG will do everything but rest. She will once again find herself managing transactions, requests and conflicts of all sorts. On her shoulders rest big expectations from the village family.

The night is falling and MamaG invites me in to see her bedroom. As the widow, she gets to have a bedroom to herself. With her phone she illuminates a big bed, covered in floral sheets. She is proud of the space she has in the house. She is proud of the beautiful celebration she is putting together with a lot of effort to honor the story she shares with PapaG.

























The dead goat is hung on a stick from its head. The men cover it with dried leaves and set the whole thing on fire. Moments later the leaves disappear into ashes and the goat silhouette reappears behind the heavy white smoke. The scene is impactful and sacred.





Beats are heard in distance.
They are getting louder. A group of colorfully dressed ladies are approaching the house in formation, singing and playing agogo.



While we watched the goat in the fire, Michael's phone rings. He is the head of the local team. As he answers it, he learns that one of his young trainees had passed away. We visited V.I. Khelly at the hospital in Port Harcourt the day before traveling to Eket, he was breathing with a lot of difficulty and the illness was unknown. Like him, many young Nigerians lose their lives due to all sorts of diseases that could be treatable, if they had minimal access to a decent health care system.

V.I. Khelly was a talented rapper and a cook. He would have been the subject of this research but as he got sick, he couldn't take part in it anymore. The Chicoco film team had the chance to say goodbye and tell him that they will miss him on this trip. We can only imagine how this adventure would have been with him.









Tonight is the vigil and nobody will sleep. A diesel generator powers the huge sound system and the front of the house becomes a stage with a band and DJ playing until the next day. Vendors sell hard liquor and hard boiled eggs on towels set on the floor. People from all over the village are coming by, and they need fuel for the night.

In a room ladies pray around a decorated catafalque matching the blue and white motifs. It's empty and waiting to receive PapaG in the morning.

The fire pits in the backyard are constantly fed with more wood to make jollof rice.

Vigil





That night, Harry arrives at the village in a bus he rented with friends from Port Harcourt. He hands me the outfit that he and the family tailor have made. A few days earlier, when we met to record his work at the shoe workshop, I mentioned I inadvertently had only brought jeans and sneakers to the trip. These wouldn't be suited to his father's burial, so they took my measurements. They made a beautiful pair of sandals and a black and blue dress, the same colors Harry and MamaG would wear for the burial. I felt immensely honored.

























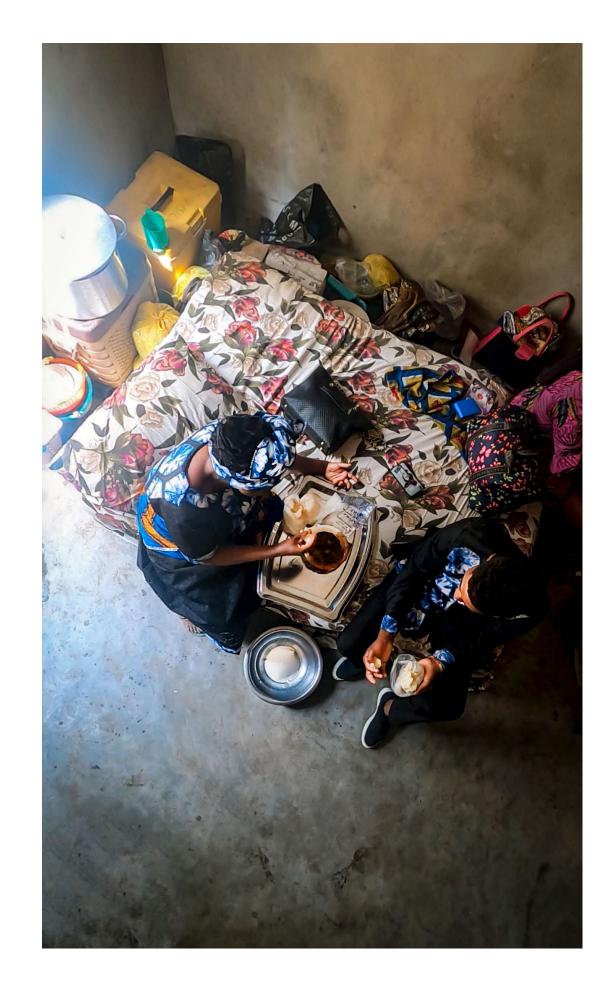




Special meal

300 lunchboxes with jollof rice and water sachets are distributed among the guests. For the closest acquaintances, soup and fufu is waiting in the backyard kitchen.

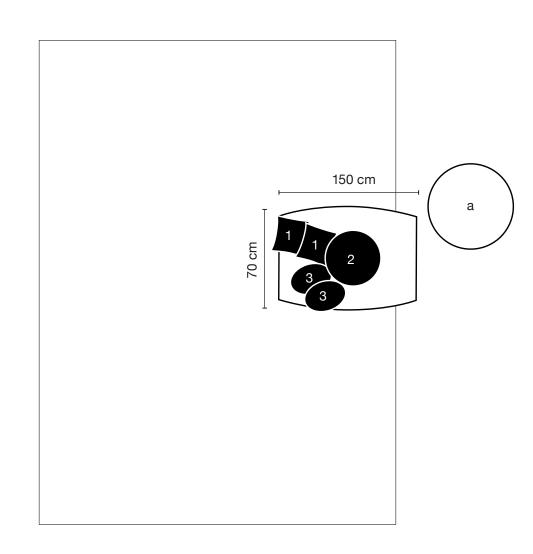
After, and only after, every guest is served, MamaG and her son eat. Far from the fuss outside, they quietly share a plate of okasi soup on top of the big floral bed, dipping fufu balls in it with their hands. From now on it will be like this, just the two of them.



MamaG's special day table

194

- 1. Water sachet
- 2. Okasi soup
 - 3. Fufu
- a. Hand washer



Day 4 - Sunday

The house is quieter now. The day started later and people are still recovering. Only a few closest relatives and friends have stayed around. MamaG is proud and at the same time relieved. She fulfilled so many expectations and now she can finally rest assured she made a beautiful and memorable ceremony. Her prestige is clear as so many people left their routines aside and came from far and wide to attend the event, reinforcing the bonds of her community of friends and family. MamaG knows what she's doing:

- I am making history in this town.

Final rites



Day 5 - Monday

MamaG is cooking for the first time after she arrived in the village. She vigorously pounds cassava in a wooden pestle in the backyard.

By the other side of the house, a group is pounding the ground where PapaG was buried in order to stabilize it and prevent erosion. When they are done, a tray of dried fish and a plate with some Naira bills are laid on top of the grave. Ladies begin to sing and play agogo around it. Everybody eats the fish afterwards.

Another goat is sacrificed and apportioned among the neighbors. This is the last duty MamaG has to cover before she can close the rites and leave the village to return to Port Harcourt.

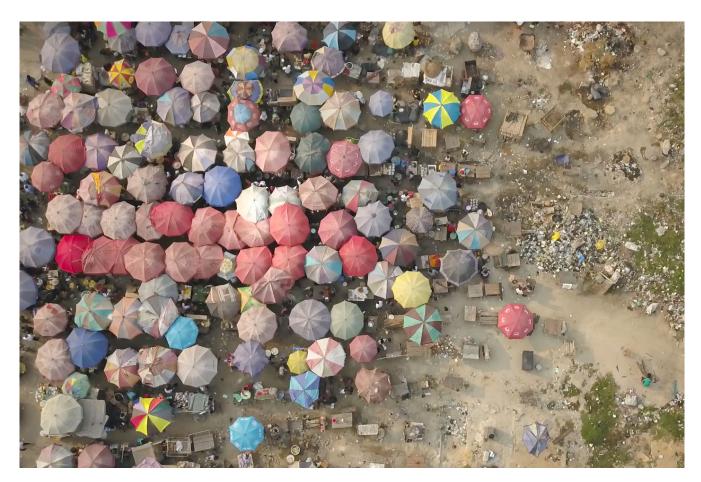
Finally, MamaG is ready to be disconnected from any remaining links with the deceased husband in the physical world. He won't be able to come after her and she will be free to move forward in her life. She sits on a bench in front of the house and a woman starts cutting her hair straight to the roots while the other females watch it. MamaG looks serious, eyes far away. As the hair is falling, she is careful to collect everything. When her hand is full, the women choose a place close to the grave and bury the hair.

That's the end of a chapter.

covid-19

The stories of MamaG, Eva and Gihan were captured from December 2019 to February of 2020. Shortly after this work was completed, the world was faced with the COVID-19 pandemic. We were grateful to have an opportunity to share these stories and gather this content before the pandemic. We had an opportunity to catch up with the women in the fall of 2020 to learn more about their experiences and the impact of this pandemic on their lives.







MamaG

MamaG's son set up a video call on his cell phone so we could talk. The internet connection was very limited, but after a few attempts we were able to see MamaG's smiling face. It was late at night and she was coming home from work. The Flyover Market had just reopened after months of shutdown. The government closed every big street market in Port Harcourt, without offering any alternatives for the people whose livelihoods depended on them. Illegal night markets started to pop up around the city. MamaG would go to one such market to buy her food, leaving at 2am, carrying a torch to light her way. If the police were to catch her, she would either have to bribe them or she would face getting arrested, but she was covert and able to sneak through successfully.

Are you afraid of contracting COVID?

MamaG: No. I'm very healthy. God is taking good care of us.

How do you see the future of yourself and your family?

MamaG: My future, my own future and Harry's, is very bright, because we have God on our side.

204

Eva

When we caught up with Eva, we learned that she continues to be a key leader in her community. COVID-19 caused chaos throughout Guadalajara as people strived to cope and understand the pandemic. In the midst of this chaos, families in Lomas lost access to their water supply, a supply that they used to illegally divert from the main pipes that run at the borders of the community. Eva organized a protest in front of the city hall, and as a result the government sent a few water trucks for the community to use during quarantine. The community still does not have running water, but this action guaranteed that the most urgent need was met.

In addition, Eva now has a router and a laptop so communication was easier than expected. She had just graduated from preparatory school and now she dreams to enter college to study fashion design.

Are you afraid of contracting COVID? **Eva:** I fear nothing. I'm very brave.

How do you see the future of Lomas del Centinela?

Eva: I ask God for a lot of wisdom and strength because I want to see my community changed and improved. If there's no community you can't improve. We have to hold each other's hands to move forward.

How do you see the future of you and your family?

Eva: I feel proud and I feel sad because my children are grown ups, but my grandchildren... I don't know what waits for them. I want it to be something good, something better, that we are ready, but to know, I don't know. I don't want to give up. I wanna continue with the activities in the community so they have something to fight for and to live for.

Gihan / Nada Al Shazly

The Dawar Kitchen is slowly and steadily recovering from a strike. During the strike, they lost almost all of their important clients. In addition, due to the pandemic, there were no more events to cater for. This, coupled with people's bias against and fear of food cooked in poor communities, has made for a very challenging time. The kitchen was able to use their savings to allow the women to stay at home for the worst 3 months of the pandemic and later the kitchen pivoted their business to start catering for families with children who were studying from home.

The kitchen, which already had very high standards of hygiene, is now even more rigorous. The women have to keep physical distance while cooking. The big communal meal, the happiest part of the day, is unfortunately suspended until further notice.

Gihan stopped working at the kitchen. She has a new partner, someone she might want to marry, and he does not want her to work. Her children continue to do well despite the hardships of the pandemic. For this work addendum we interviewed Nada El Shazly, the head manager of the Dawar Kitchen.

Are the women in the Kitchen afraid of contracting COVID?

Nada: At first they were wondering, they were skeptical. They were talking about it as something very distant. They seemed like they didn't have any idea or scientific information of the nature of the pandemic. I saw them again in May, during Ramadan, at that point the women shared more accurate information. Women shared stories that people in Ezbet Khairallah were getting more clean or concerned with hygiene and they took care of stuff out of fear from Corona. But they would still think I'm overreacting when I keep wearing the mask all the time. You know, these days they are taking it easy, not so cautious anymore, but everyone in Egypt is like that now.

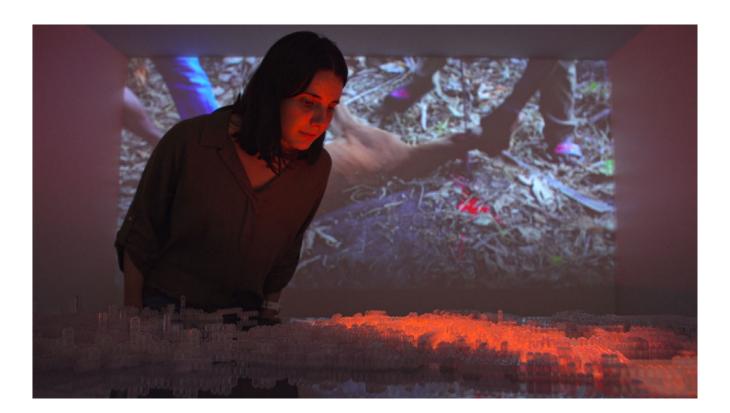
How do you see your future and the Dawar Kitchen?

Nada: These recent events of the Corona and how people reacted, this series of events, they made me realize that, you know, Cairo is very alive. It's full of this life force, strong and overwhelming. Maybe we had some resilience that made us survive on the mental health level from this wave. I'm grateful that we are surviving so far and I hope we keep surviving and get back to normal very soon.

Immersive installation



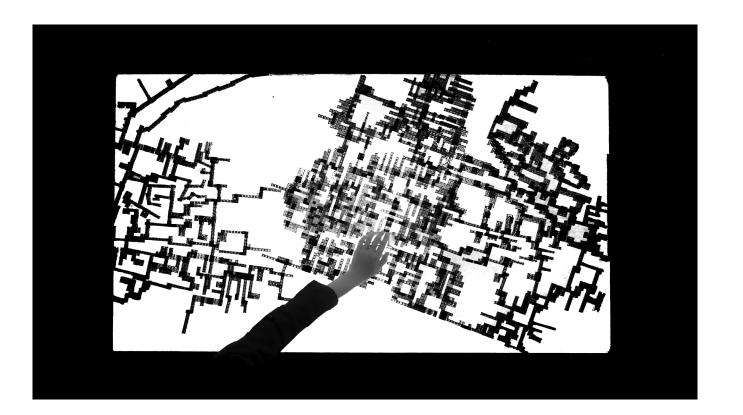




This work captured a fragment of Eva, Gihan, MamaG and their communities' stories. This tiny fragment, as little as it is, it is still vast and poses challenges for retelling the story to a diverse audience from very different backgrounds.

The possibilities of immersive media seems like a natural path to explore. With the audience's bodies surrounded by images and sound, the installation provides a glimpse to those worlds so far from our own. The aim is to create an experience based on feelings and sensations. Something as close to a journey in a new territory as one can get.

Immersive videos, a physical 3D printed model and a soundtrack work simultaneously to tell the stories, swinging from the food plate to the planet, from the absolute mundane to a surrealistic recreation of places and events.





Narrative arch

Procuring, preparing and eating food together are the three acts of a meal that are so universal and so particular at the same time. Using this as an overarching system to organize the 20 minute experience, the narrative runs through the lives of the three characters, sometimes simultaneously, sometimes individually.

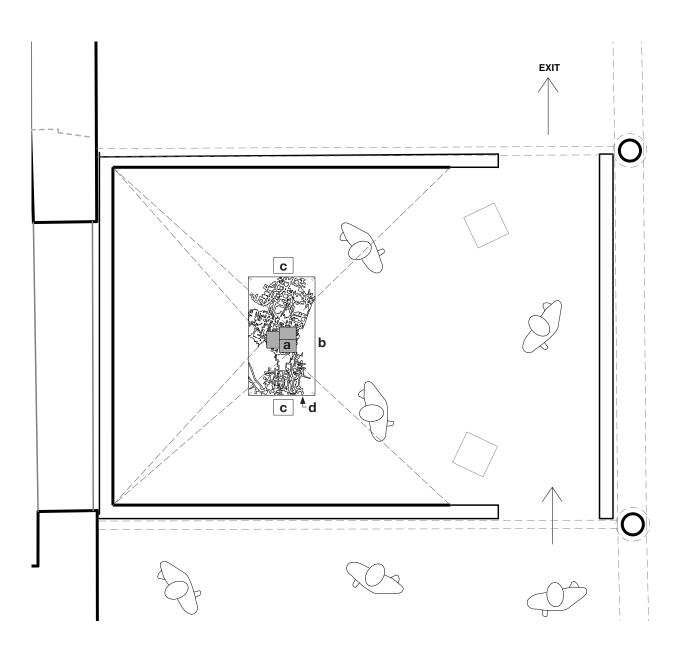
The experience is divided in 4 parts:

Intros: An introduction to each woman and their cities.

Trade: Follow the three characters in the chaotic local markets as they acquire the ingredients.

Cook: An intimate moment in each kitchen.

Eat: The meal is served. People eat and celebrate together.



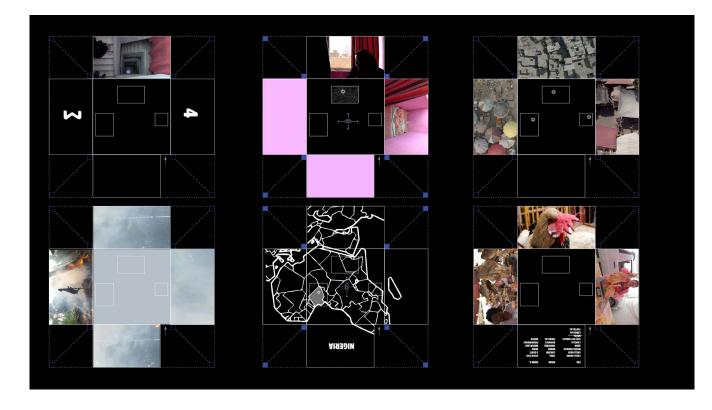
Study plan fro exhibition at Venice Biennale

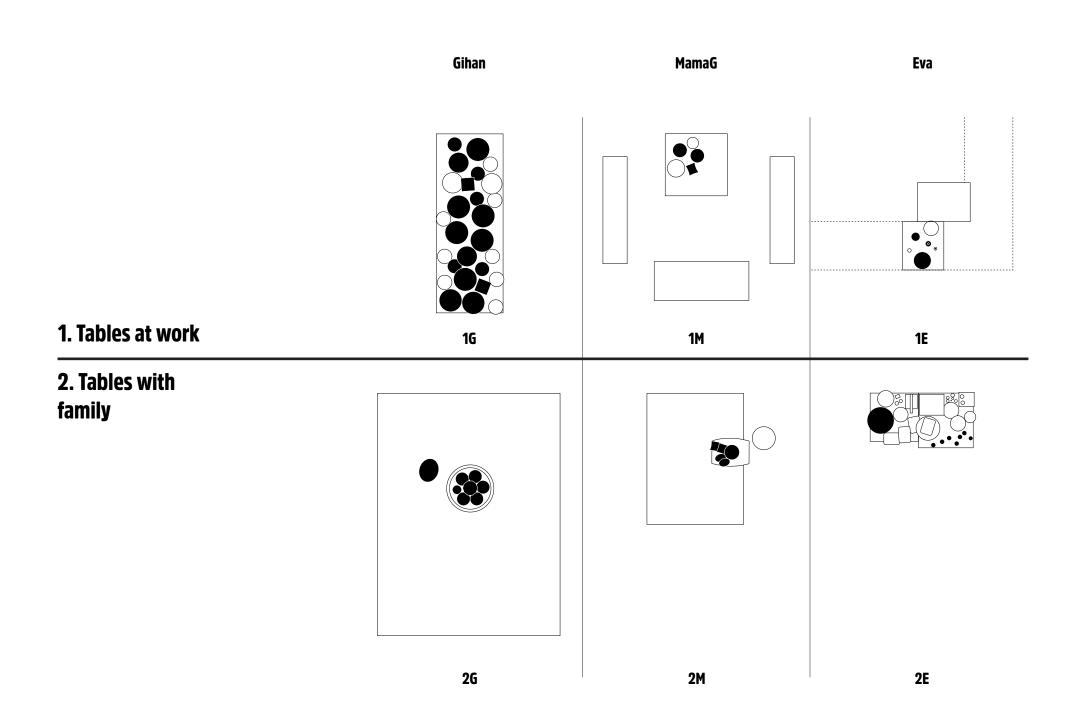
The installation is composed of:

- a. 3 Full HD projectors mapped onto the walls.b. 55" LCD monitor underneath a transparent 3D model of the 3 countries.
- c. Stereo speakers.
- d. Media server.

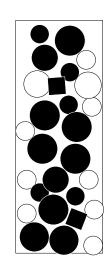
All the tests for this installation were done in the physical space of MIT Media Lab, where the team had to comply with COVID-19 safety measures. Therefore, there were no user testing conducted for this phase of the research.

An experimental style of 3D storyboarding was developed during this work to coordinate the content creation with the team.





1. Tables at work

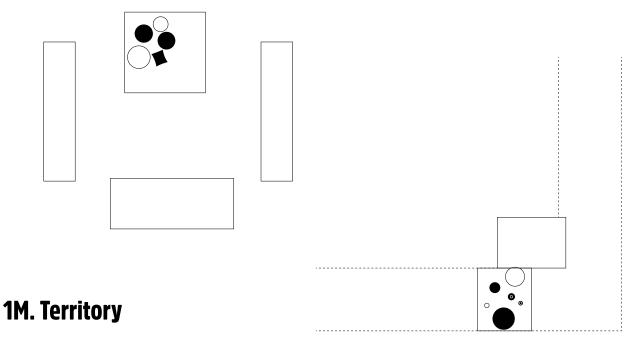


1G. Horror vacui

Gihan's table for a work day meal is so densely populated by plates and dishes that we can barely see the tablecloth. It's a lot like Ezbet Khairallah. The informal areas of Cairo are incredibly dense. There's little in-between space, and the streets are so narrow that the sky is hardly seen.

Density in Islamic culture is not something to be defeated, but an aesthetic quality. In Islamic art, for example, every single space is filled with geometries and calligraphic inscriptions, nothing is left empty. One possible reason for these preferences may derive from the natural features of Egypt in which the urbanized areas along the Nile represented the good life and pleasantness of civilization, in the very opposite spectrum of the empty, hostile and fearful desert.

Here, the density represents abundance, security and community, exactly what those women find in the Kitchen.



MamaG's table on a work day meal is surrounded by wooden benches, like in a little fortress. The market is where she spends the greatest part of her day and where she has her place of prestige. With the furniture she delineates her territory, marking a piece of land and taking ownership of it. In addition to that, the arrangement impedes the flow of people behind her working desk, providing her a level of protection as she deals with large sums of money all day long.

The possibility of having some area for herself in the market is crucial to give MamaG some space to breathe, as she lives in a tiny rental room in a crowded tenement. The density in Port Harcourt doesn't come from aesthetic preferences, but from the pure necessity of maximizing the use of any available infrastructure.

Even though MamaG has many close acquaintances in the market, she eats alone. Her meal time is tightly compacted in her working shift, and the situation doesn't leave much room for slower shared meals. Also, by separating herself from others during the eating time, MamaG reinforces her role as a respected figure that her duty as a banker demands.

1E. The sprawl

Eva's table in a work day meal is a big aluminium countertop at a public market stall. She shares the table, not the meal, with other people that just like her, are coming from the periphery to work at the center. The long table, where strangers sit a few feet away from each other, reflects Guadalajara's sprawl, a type of urbanization with adjacent yet disconnected neighborhoods.

For a resident of the sparsely populated Lomas del Centinela, which has few groceries stores and limited access to water and electricity, it's much more convenient to eat at a stall close to work after the long commuting journeys. The spacious public markets are government subsidized, which guarantee the access to infrastructure to prepare affordable and delicious fresh food that would be hard to prepare at home.

2. Tables with family

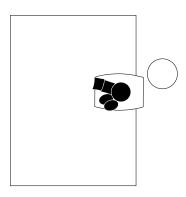
2G. Dense core

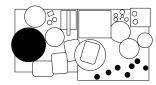
Gihan's table on a weekend with her family is as densely organized as the table she shares with her colleagues. In this case, the taste for lavish crowdedness also extends to the house which it's covered in beautiful carpets and curtains.

Here, however, the table is not a table in the strict sense, it's a tray laid on a pillow over the carpet. It's set just before the meal and removed once everybody is done. The room in the small flat shifts between two functions, living and dining, allowing the maximum area to be applied for each use at different times.

The room would accept a larger eating surface, but the small tray adequately accommodates both mother and children as they intimately eat on the floor sharing the dishes. The nuclear family and domestic life are the center of the Islamic society and, in Gihan's case, it's even more evident as she faces ostracism from other relatives and social circles due to her divorce.

Her family is her core, and this meal illustrates it. The meat is at the center of the circular tray, with the side dishes radially placed around it, all of them on top of a round pillow that is surrounded by the four family members, who sit equidistantly. Beneath them, a big carpet with symmetric patterns implies the perfect spot for the tray to be placed. It's just slightly off center though, to line up with the TV.





2M. Migrating queen bed

MamaG's table at her husband's funeral was a big bed. It was in the bedroom assigned for her in his family village house, while all the other guests would sleep on the floor in shared rooms. At this event, MamaG was the central character, the city widow returning to the ancestral village. Once again her prestige is revealed by the location of her meal.

The migration from rural villages to urban centers is a common pattern in Nigeria. Traditions such as funeral ceremonies are crucial to reinforce and maintain the link between both parts of the family—the ones who moved and the ones who remained. The body should be buried in the village, symbolizing its role as the ancestral ground. For the city people, who moved to pursue economic advancement, it's expected that they share the benefits of the social and financial capital they have acquired.

MamaG quietly shared this meal only with Harry, despite the presence of their dear ones in the event. It reminds us that this event is not purely a celebration, but implies duties to the hosts. The widow and the son can only dine after all the guests are served and, after they eat, they quickly get back to event management.

2E. Varillas de la esperanza

Eva's table arrangement for Christmas dinner was decided on the spot. The acquiring of ingredients and the cooking required a lot of planning in advance from her, but the table set up itself was figured out just before the meal. Eva made some space in a corner of her sewing area and the family stood around it, since the two story house didn't have a dedicated dining area.

This improvisation doesn't bother Eva, she sees it as a temporary condition. Even though the house has been under construction for the past 20 years, it eventually will have the dining room completed and they all will be able to sit around a big table together.

Eva and her children, all adults and with partners, share the same roof but not the same routines. They each work in different parts of town, with different schedules and they often eat in their bedrooms, equipped with individual TVs and electric stoves. Once again the sprawl leaks on this table, or the absence of it.

This multi bedroom house is the materialization of Eva's investment in her family future and her expectations to keep their ties tight. The rebars purposely left protruding from her roof are a symbol of hope and a crown on the matriarchal house.

Concluding remarks

222

Fractal system

A bed, a tray on the floor, a stall counter, a corner by a sewing machine, a folding table set right before the meal, a plastic table set every morning. All of the six different tables documented in this work were temporary. Yet all of them carry only the most traditional dishes from their respective contexts. This juxtaposition of makeshift and permanent, or informal and formal, is at the core of this work, and was tested through the use of tables as a synecdoche for understanding complex urban systems, specifically as applied to rapidly urbanizing areas of the world.

The physical structures of those communities, which are under constant threat of demolition, collapsing and risks of all sorts, express the ways people manage to work around their lack of access to permanent infrastructure, relying on flexibility to attend their needs in the best way they can. In a sense, life in informal settlements is analogous to the temporary tables. On the other hand, the social ties, family structures, religion and values that fill those spaces are incredibly formal, meaningful and driven by strong traditions, just like the tamales, the afang soup, the kolkas, the fufu, the flat bread and the tortillas that those same tables exhibited as a living museum.

There are many aspects one can observe of the city leaking onto the tables and vice-versa.

Field research framework

Documenting two meals with a subject, one on a working day and one on a weekend day provides a methodology revealing multi-level relationships between private lives in individual households, and the communities that support them. It enables the comparison of two different situations within the same context and therefore broadens the view of life within that community. More importantly, documenting and sharing a meal creates a real chance to bond with the communities as the researcher is seen as a guest.

Future work

The analogy of a table and a city offers a potential tool for storytelling as it approximates the complexities of the urban studies to a scenario that is close to everyone. This will be evaluated in future developments of the immersive installation created in this work as the COVID-19 pandemic didn't allow visitors to experience the piece at MIT. The immersive installation will be displayed at the Architecture Venice Biennale 2021, under the theme "How will we live together?" Originally scheduled for May 2020, the event was postponed one year and had its guidelines dramatically changed due to the pandemic. Any physical interactions with objects and room occupancies of more than two people at a time are forbidden.

We expect that after the deployment at Venice Biennale, a venue with attendance of hundreds of thousands of guests coming from international backgrounds, we will receive important feedback on the effectiveness of this media and storytelling tool. We will use the insights learned from the exhibition to improve the quality of this work and take it to be exhibited in the communities where this research took place in order to facilitate cultural exchange and the generation of new ideas.

At MIT, our work is far from complete. We see the need to bring more of our research to focus on the new challenges of rapidly urbanizing areas of the world. In addition, we are further rocked by the pandemic, looming climate change and political and social unrest. As With(in) informs us, we need to continue to learn, listen and document. Our perspective and our understanding will continue to evolve, and with it, new projects will emerge.

The local teams

SEGON CONTRACTOR OF THE PARTY O

Chicoco Cinema, Port Harcourt









Nigeria blew my mind. Every second in Port Harcourt was an adventure and an intense learning process. Everything was so extreme and different from what I knew so far that it was hard to make sense of things in my head, I just had to go with the flow.

There I stayed at the temporary Chicoco headquarter — they are building a new facility to be open very soon. It's a house, an office, a studio, a farm, a swimming pool for the kids and everything else it might need to be. It's non-stop coming and going of the many Chicoco trainees, the house keepers, the keeper's kids, the foreign researchers, the cats, the admins, the repair guys, the chickens... Michael and Ana handle all of this. They head Chicoco and they take care of everything and everyone with immense love and life commitment. They are fueled by some sort of nuclear power generator.

Chicoco comprises the cinema, the radio, the city mapping and the journalism branches. It facilitates young talents from Port Harcourt to develop their own artistic language, critical thinking and professional skills. Chicoco provides their trainees with the platform and the tools to produce brilliant things. Everything they make is original, powerful and technically precise.

During the visit to Port Harcourt I was paired with Chicoco Cinema people. Fingers, Gloria, Grace, Imanny, Prince, Promise and Tekena did the filming, audio recording, and local production of the piece. Starting early, our crew would meet at the headquarters, check the equipment and then head to our unpredictable mission around the busy markets, crowded homes, animal sacrifices and missing trains of Nigeria. I'm very grateful for the chance to learn from them and to have their talent be a part of this thesis.



Meet Chicoco



Circulo de amigos Treffpunkt and UdeG, Guadalajara





Mexico made me feel at home. The energy reminded me a lot of Brazil, so similar, yet so different in many other ways. Eventually I noticed that I knew Lomas del Centinela's paths by heart, so much I would be walking around the community covered in white dust. One path I learned very quickly: from the community center to the Circulo de Amigos headquarters.

Edith created the Circulo de Amigos Treffpunkt to support community development in Lomas del Centinela, with its people collectively shaping and setting the future of the place they live in. Lomas is in the beginning of its process to create a local identity and bonds of trust among neighbors. The Circulo foments this process by promoting many cultural, artistic and educational activities to engage the people to make things together. Edith and Eva lead all these activities with a lot of passion and dedication. They are constantly creating new enterprises, such as the Huerto. It's a farming area by the church backyard with medicinal and edible herbs planted and maintained by the neighbors.

The Circulo de Amigos also facilitates research on mobility at Lomas conducted by the University of Guadalajara - UdeG. Mayra is the head of this research and was key to connect the MIT City Science team with Lomas. Besides this thesis, our research group is involved with a long lasting collaboration with UdeG to understand Lomas and imagine new paths with the community.

Ashley and Charles were behind the lenses there. They are two very talented and dedicated filmmakers who spent entire days moving around Guadalajara. We started early in the morning to film Eva in Lomas, then moved all the way to Guadalajara center to fly a drone over the market, then back to Lomas again to record the local baker making a night batch. The day ended with a shot of tequila while we were copying video off SD cards at midnight. It was tough but a lot of fun; it wouldn't be Mexico otherwise.



Meet the Circulo

Dawar Kitchen, Cairo



Egypt is a difficult place to access but once you are in, you are in. There you are immersed in overwhelming beauty and surrounded by warm people. In Cairo I was lucky to be adopted by incredible women that took care of me and made this research possible.

Nada is the manager director of the Dawar Kitchen, and she warmly welcomed us into the place she is so proud of. The Dawar Kitchen's yellow roof can be seen from far away among the brick buildings of Ezbet Khairallah. Under this roof, Egyptian migrant and refugee women have a dignifying job and find a community they can rely on. The kitchen provides them with training to make their own recipes into scalable and well documented recipes to be produced commercially. The menu and the management responsibilities are shared among the team in a participatory way to empower them and provide lasting skills they may apply in future careers.

To film the Kitchen I spoke with different film crews, and after many attempts, I found Sarah. She bravely agreed to join this endeavor despite all the complications Egyptian authorities impose over filming in public spaces, especially in the *al-ashwaiat* areas, which they relentlessly try to invisibilize. Sarah became a true "partner in crime", and didn't spare efforts to make things happen during the tight time we had, from filming the meals to navigating sheep dealer scams. Sarah brought Menna to the team to film with us and the project benefited from their artistic sensibilities to capture the beauty that Cairo displays in every little detail. During the shootings, Sarah, Menna, Gihan, Nada, the kitchen women and I would share banquets around the big table. The atmosphere was festive, cheerful and it was really a delight to be there with them.



Kitchen

Credits

Protagonists

Eva Gihan MamaG

Author

Gabriela Bila Bandeira Advincula

Thesis supervisor

Kent Larson - Principal Research Scientist

Thesis committee

Glorianna Davenport - Visiting Scientist, MIT Media Lab Hiroshi Ishii - Professor of Media Arts and Sciences

Heads of nonprofit organizations and local institutions

Cairo Nada Al Shazly - Dawar Kitchen

Guadalajara

Edith Sauer, Angel Ramirez - Circulo de Amigos Treffpunkt Mayra Gamboa - University of Guadalajara

Port Harcourt Ana Bonaldo, Michael Uwemedimo - Chicoco Cinema

Film crews

Cairo Menna El-Azzamy, Sarah Riad

Guadalajara Ashley Fell, Charles de Graaf

Port Harcourt

Gloria Dandison, Grace Timi, Imanny Cleverstone, Prince Peter, Promise Sunday, Tammy Dasetima, Tekena Fubara

Video editing and motion design

Lucas Seixas, Pedro Ribeiro - Ribs + Seixas

Music

Holger Prang

City Science immersive installation team

Guadalupe Babio Fernandez, Luis Alonso Pastor, Maitane Iruretagoyena, Margaret Church, Thomas Lengeling

Thesis review

Jason Nawyn

Bibliography

Sayed, S. A. T. (2018). The Gunpowder Factory (Gabhānah) of Mohammed Ali Athar al-Nabi – Istabl 'Antar.

Kenawy, A. (2016). Al-ashwaiat areas in Greater Cairo Region (GCR) a Challenge for the state.

El Kadi, G., &Bonnamy, A. (2007). Architecture for the Dead: Cairo's Medieval Necropolis.

UN-HABITAT (2011). Cairo: a city in transition.

Sims, D. (2010). Understanding Cairo: The logic of a city out of control.

El-Sohby, M. A., Mazen, O., & Aboushook, M. (2004). Al-Fustat: The Seed of Cairo.

Tadamun (Published on December 23, 2013) `IZBIT KHAYRALLAH. http://www.tadamun.co/?post_type=city&p=2741&lang=en&lang=en#.X9btFBNKgUF (Accessed on Dec 2020)

Raymond, M. (2017). Lomas del Centinela desde la Perspectiva de los Niños. Un proceso participativo en Zapopan, Jalisco, México.

Soma, Sociedad y medio ambiente (2017). Diagnóstico Social de la Colonia Lomas del Centinela.

Huerta, E. R. J., & Solís, H. C. (2015). Colonias populares consolidadas del área metropolitana de Guadalajara: Retos y oportunidades.

Ochoa, A. O. (2015). Expansión urbana. Área Metropolitana de Guadalajara. Análisis y prospectiva: 1970-2045.

Zepeda, H. E. (2014). Piel de Calle. Una deriva en el tianguis Baratillo.

Hossein, C. S. (2016) Money Pools in the Americas: The African Diaspora's Legacy in the Social Economy.

Brown, I., Chikagbum, W., & Jerimiah, U. I. (2015). The Social And Economic Impacts Of The Mile 1 Rumuwoji Market In Port Harcourt On Its Immediate Environments

Obinna, V., Owei, O., & Mark, E. (2010). *Informal Settlements of Port Harcourt and Potentials for Planned City Expansion.*

Obinna, V., Owei, O., & Okwakpa, I. (2010). *Impacts of Urbanization on the Indigenous Enclaves of Port Harcourt and Concomitant Policy Measures.*

Nte, N. D. (2010). The Urban Informal Sector and Workplace Insecurity for Women in Nigeria: Evidence from Port Harcourt City.