



KINGS of SHREDS and PATCHES

**Nigerian traders in the global economy
of second-hand computers**

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Nigerian traders in the global economy of second-hand computers

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Neuchâtel, le 16 septembre 2022

Le doyen

Louis de Saussure

P.O.
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Abstract

This work is a journey along the global flows of used computers. Via first-hand business experiences, and long-term observation, I explore the economic activities of Nigerian traders and engineers in Computer Village—the biggest IT market in Lagos—and those of their suppliers among the African community in Guangzhou, China. I discuss the complexity of the economic practices at work here as an economic system with its own norms and values, and the complexity of objects categorisation, as a manifestation of the mix of global production networks (GPNs) and global destruction networks (GDNs). I conceptualize these activities as global reuse, repair and refurbish networks or GRRRs. The GRRRs challenge the existing narrative on e-waste and UEEE, as well as the dichotomy of 'globalisation from below' and 'globalisation from above'. By drawing a Nigerian-centred map of the circulation of used computers, I argue that the global economy should be understood in its diversity and entanglement.

Keywords: Nigeria, Igbo, second-hands goods, UEEE, e-waste, used computers, global networks, GPNs, GDNs, global reuse repair refurbish networks, GRRR, globalization from below.

Résumé

Ce travail est un voyage le long des flux mondiaux d'ordinateurs usagés. Sur la base d'expériences commerciales personnelles et d'une observation sur le long terme, je décris les activités économiques des commerçants et des ingénieurs nigériens à Computer Village (le plus grand marché informatique de Lagos) ainsi que celles de leurs fournisseurs au sein de la communauté africaine de Guangzhou, en Chine. J'argumente d'abord que les pratiques économiques à l'œuvre ici sont la manifestation d'un système économique spécifique, avec des normes et des valeurs propres, et non pas des pratiques d'adaptation et/ou de survie. De même, les biographies des objets au cœur de ce commerce montrent les limites de la dichotomie déchet-marchandise, et mélangent de fait les réseaux globaux de production (GPNs) et des réseaux globaux de destruction (GDNs). Je conceptualise ces observations en termes de réseaux globaux de réutilisation, réparation et rénovation, ou GRRRs. Les GRRRs portent un nouveau regard sur les déchets électroniques et les DEEE, ainsi que sur la dichotomie entre "mondialisation par le bas" et "mondialisation par le haut". En dressant une carte de la circulation des ordinateurs usagés centrée sur le Nigeria, je soutiens que l'économie mondiale doit être comprise dans sa diversité et son enchevêtrement.

Mots clés: Nigeria, Igbo, marchandise de deuxième-main, UEEE, déchets électroniques, ordinateurs usagés, réseaux mondiaux, GPN, GDN, GRRR, mondialisation par le bas.

Lingos | Pidgin English, IT and Trading

aboki	'Friend' in Hausa. In Lagos, it is often used to refer to, address or call a Hausa person (see also Alhaji, Mahalla)
amala	staple food prepared with yam or cassava consumed mainly by the Yoruba.
area boys	or <i>agbero</i> refers to groups of youths. Claiming to be the original inhabitants of the areas, they demand payment(s) from all business-related activities "on their land". Bus drivers, street sellers and (informal) markets are their targets. While this practice can be called extortion, area-boys can also act as informal security guards or provide other odd services.
alhaji	title used to address a Muslim man who has made the pilgrimage to Mecca. In Lagos, it is often used to refer to, to address and/or to call a Muslim man, usually with a high social standing (see also Mahalla and Oga).
bring in	to import; used goods from the 'West' is usually referred to as <i>Tokunbo</i> .
China	as an emic category, it means fake objects and copies and generally describes anything of bad quality that does not last (as was <i>Taiwan</i> before).
clones	locally assembled desktop computers, very popular at the end of the 1990s and at the beginning of the 2000s.
customer	in the context of the marketplaces, it refers to the customer as well as the seller
danfo	bus; refers to the iconic Lagos yellow buses.
demurrage	in commercial shipping terms, this refers to the charges paid for delayed operations of loading and offloading at the ports' terminal.
egusi	melon, refers to ground melon seeds used to prepare a very popular Nigerian <i>soup</i> .
fairly-used	second-hand
Ghana must go	large plastic tote bag characterised by red or blue patterns, used all around the world and known under different names. In Nigeria, it owes its name to the 1983 presidential mandate, that threatened undocumented migrants with arrest. More than 2 million people, including 1 million Ghanaians, were affected and left the country in a rush, carrying their belongings in said tote bags.
to gist (v.)	to discuss, to chat
hotcake	a very fast selling good, or in demand within the market
JJC	is short for johnny just come, is a newcomer, novice

line	refers to an area in the market, specialised in one activity, and where traders are organised in association. The first level of identification (within the market) is: <i>my line</i> .
mahalla	see Alhaji, and aboki
mugu	a fool, naïve person, but also somebody who can easily be cheated.
oga	probably one of the most common words in Nigeria. It means master or boss. In Yoruba it translates as director, boss, master, chief. Interestingly, in Igbo, the word Ogaranya (Ogalanya) means rich man or the richest person. It is widely used in Lagos to address anybody with a superior position—any hierarchy applies here—but also in a joking, mildly fond way.
okada	commercial motor bikes
oyibo/oyinbo	white person, also used to address Nigerians with fair skin.
over-there	generally used to refer to Europe or the USA but it can also refer to China.
ro-ro	stands for to roll-on/roll-off, meaning ships and vessels designed for wheeled cargo; Lo-lo, lift-on/lift-off refers to containers' ships, using cranes to load and offload the cargo
shakara	to show off, posing
suya	meat roasted on wooden skewers served with a row of onions and very spicy seasoning. It is more of a snack than a meal, generally offered by mobile sellers in the street opening in the evenings and by stationary sellers around dusk.
Tokunbo	<i>fairly-used</i> , used goods imported from Europe or the USA, second-hand, literally translated from Yoruba as 'from oversea, from across the sea', also used to name babies born abroad.
wahala	problems
yahoo-boys	also yahoo-yahoo refers to young people who practice internet scams, such as 419
419	derived from the section of Nigerian law that condemns fraud, it is used to refer to advanced free fraud, as well as general con artistry. <i>Fouroneniners</i> , or simply <i>niners</i> refers to people practicing 419 activities.
9ja	Naija, one of Nigeria's nicknames.

Dramatis Personae

In the market, people are often addressed by their business name and their actual names exchangeable. In this dissertation, I reflect the practice on the field.

Anonymity has been handled according to the wishes of people who decided how they should be addressed after reading, and sometimes correcting, what was written about them. In the same way, some biographical details are a compromise between the needs of the research and the right to privacy. The right outweighs the needs, as people should have the last word about their personal life.¹

In order of appearance:

FRANK DURU OKEKE: Dear friend; he walked with me during my first steps in Nigeria, Computer Village, and the trade of used computers. Before this he studied library science at the Federal Polytechnic of Port Harcourt. He ran a fashion boutique in Nigeria, before migrating to Spain, where he worked for an aluminium factory. He now lives in Berlin, where he is a father of two and is working towards becoming an electrician.

FESTUS NWABUKA—FESTACOM SYSTEMS AND TECHNOLOGY: After years trading spare parts cars in Onitsha, he joined Computer Village in 2003 during the cloning boom, assembling computers for another trader. A passionate and fast learner, he opened his own shop after six months in Megacity, specialising in *fairly-used* desktops.

STEVE OKOYE—GÉNIE INFOTECH Ltd.: Former chairman of Megacity. He had his first branch in Otigba Str, and the second one in Megacity, managed by Tonia, his sister. He passed on in 2021 to the surprise of all. He is dearly missed.

IFEANYI UKEKWE HESTER: After graduating with a degree in English Language and Literature Education, he migrated to South Korea where he worked as a specialised worker in a plastic factory. After three years, he came back to Lagos with enough capital to open a shop in Computer Village. In Metro Quarters, he specialised in desktops spare parts. He left the market after three years, when he

¹ The same order of idea explains my writing style. I tried my best to write a doctoral dissertation accessible to those outside our field. I strongly believe that our informants should be able to read what we write about them.

got an opportunity to work in the Safety/Firefighting department with an oil company in Port Harcourt.

ANTHONIA EGBULE OKOYE —SLEEK DEKA COMPUTERS (aka Tonia): She has been in the market since its very beginning. After graduating from the English Literature department at the University of Lagos, she joined the market, where she worked for some of the biggest companies, before joining her brother Steve, as manager of the Megacity branch of Génie Infotech Ltd. In Megacity she started selling *fairly-used*; today, she works in her own shop, Sleek Deka.

UCHE ANTHONY—RAINBOW BUSINESS BUREAU (a.k.a Oga Rainbow): He is Steve and Tonia brother-in-law. After his apprenticeship in trading car spare parts, he worked in the north of Nigeria before coming to Lagos. He later migrated to Guangzhou, where he lived for several years supplying items to his wife, who would sell the goods in Computer Village. He finally came back to his family and resumed trading in Computer Village selling office furniture.

CHUKS PHILIPS—LARGESS LTD.: After studying civil engineering, he reoriented professionally and joined Computer Village, which was at its very early days. After some years in the market, he opened Largess Ltd, specialised in laptop repairing, where he works with his wife, Sandra.

SANDRA PHILIPS—LARGESS LTD.: She followed her sister and joined Computer Village, where she met her husband, Chuks, with whom she worked for several years, before leaving the market to study economics, letting her sister Chinyere fill her position. After graduating, she came back to the market, where she works as a laptop engineer.

CHIZOBA GABRIEL OKOYE—MEGA-RICHZONE CONCEPTS LTD (aka Mega Rich or Mega): He used to trade in car spare parts, before trying to emigrate. After a first setback following an unsuccessful first migration experience, and started over in Computer Village, selling IT accessories. He finally travelled to China, where he lived for several years, before coming back to Nigeria where he runs a logistics company and imports tyres. Today, he has left the tyres trade and he is back in Computer Village.

KAMANU BENJAMIN CHUKWUEMEKA—#KABENCH COMPUTERS AND TELECOMMUNICATIONS After his high school, he worked a few years for a company in Computer Village, before going back to study at the Institute of Management and Technology (IMT) in Enugu State. He graduated in 2004 and after his National Youth Service Corps (NYSC) service with the Dangote Group (2005–2006), he returned to Computer Village. Since 2008, he runs a company specialised in *fairly-used* screens and laptops.

PAUL AJUTA—ADONAI'S GLOBAL VENTURES: After obtaining a diploma as a computer hardware technician, he decided to add practical skills to his knowledge, while also learning what he called the 'Igbo way of trading', he joined Computer Village in 2003 as an apprentice. He later opened his shop Metro Quarters, specialised in *fairly-used* desktops and laptops. He used to regularly travel to Europe and USA to supply his business.

JOHN WILSON MAJOR: Friend with whom I occasionally carried out import business in Lagos. Familiar with marketplaces since childhood, he *hustled* in Europe for years, till he finally obtained the papers that will allow him to travel freely. Today, he lives in France, where he works for a logistics company.

MOSES IGWE—ADONAI INTEGRATED NETWORK: He joined Computer Village in 2006, trading fairly-used screens. After attending computer science evening classes at the National Open University of Nigeria in Lagos, he pivoted to laptops and networking services.

CHUKWUEMEKA EMMANUEL SUNDAY—ECO INTEGRATED TECHNOLOGIES (aka Sunny): He learned trading during a seven-year apprenticeship in the textile business in Onitsha, Anambra State, where he worked for several years, before coming to Lagos. In 2003/04 he joined Computer Village and specialised in the trading of spare parts for desktop and laptops.

OGU LIVINUS— GREATERHOPE ATLANTIC COMPUTERS: He worked for several years as a medicines and drugs wholesaler in Zaria and Kaduna. He later came to Lagos where he was employed by a transport company, which he managed for almost eight years. He left the transport company to resume his studies, however financial difficulties led him to join Computer Village, where he learned computers maintenance and repairing. After one year in the market, he opened his own business, specialised in repairing and selling of desktops and laptops.

LAWAL OLA—UPPERLEVEL LAWAL: He has been in the market repairing computers since 1999. He first specialised in desktops and then laptops, moving as technology did.

OBINNA: Experienced middleman in Guangzhou. Fluent in Mandarin and Cantonese, he runs a logistics company, while he designed men clothes for the Nigerian market. He left China, and was later said to have been seen in Europe.

ALFRED CHEKWAS OCHUMA: After graduating in Biochemistry from Abia State University, he worked in a medical laboratory for a short period, before travelling to Benin Republic, where he

started trading used clothing. He later came back to Lagos and joined the used electronic trade in a market along Apapa-Oshodi Express Road. Today, he also imports foreign wines.

PATRICK: Used to live in Japan and Korea, and regularly travelled to Hong Kong for four years, before finally settling down the year before my visit. He sold clothes and phones, before moving into *cargo* (logistic) and informal *banking*.



Ikeja. Lagos, 2016

Nobody knows tomorrow

The benefits of slow science combined with the particularly fast-moving computer business imply that things have evolved since I left fieldwork at the end of 2016. Notably, China has banned all kinds of e-waste imports since 2017 and in Computer Village, the business of phones has grown exponentially, probably (soon) outgrowing the computer business.

I haven't addressed these changes in my dissertation, as I believe they do not compromise the pertinence of the economic model I describe nor the general argument I present.

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Prelude: drugs, aid and social (in-)justice

It was quite an organic path that led me to this work. Organic and difficult, unfolding at the crossroads of three, apparently unrelated, *worlds*. The first was the one of undocumented Nigerian drug dealers in Switzerland, the second was the Geneva international aid and development studies, and the third, simply everyday life of my friends and I, thirty-something year-old Swiss lefties.

Before anything began, I was working as an assistant to the director of a documentary film about life in an asylum seekers' centre. There I met many Nigerians and became friends with some of them. While they all shared the asylum experience, their backgrounds varied greatly: with a primary school education or a university-degree, newcomers or with a 10-year-long migration experience, last-born from a wealthy family or first-born in a struggling one. Some were entirely undocumented, others had more or less steady permits from European countries. The vast majority were Igbo; many sold cocaine for a living. All of them were men. The film shooting ended, so did postproduction, and the documentary started its journey to film festivals and award circuits. On our side, we kept hanging out, sharing the idle hours that make up their work shifts—much like prostitution, drug dealing is a job that involves a lot of waiting (Sala 2010). These hours were filled with conversations about Nigerian politics and European football, immigration laws and bypass strategies, colonisation and oil production, Abacha's money and Swiss banks, China and the global economy—and, of course, love, women, music and drugs. These were learning hours.

First. I became familiar with the undocumented drug dealer's experience. Business-wise: the buying, the pushing, the packaging. The slang, the police, the clients. Migration-wise: the opportunities, the dangers, the hope, the disappointment, the fears, the promises. Sometimes it was more than I could take. Prison and death. High prices and cheap lives. A few times the police searched my house and called me in for interrogations. I came to understand the police as a minor worry compared to the whole experience of being on the margins. Stigmatisation, exclusion and the constant state of fear can be worse than prison. I learnt what to tell whom; how to lie, mislead and ignore; and how this, at least in my case, can lead to forms of social and psychological paranoia.

I also became familiar with Nigeria. The languages, the ethnicities, the literature. Its history, politics, economy. And its role within the international geopolitical game. The foundations of my knowledge of the giant of Africa and its place within the "rest of the world" were built with and by undocumented migrant drug dealers. Their self-representations, their representations of my own country, and their understandings of the 'North', the 'South', the 'East' and the relationship between these areas. They introduced me to narratives that wove together a harsh critique of international power dynamics,

trading strategies and lack of victimisation. These narratives counterbalanced, even outbalanced, the marginality and paranoia mentioned above. These narratives shook up my thoughts and shaped these pages. For this I'm grateful, and it may explain some of the difficulties I had, here and there, to keep the *right* anthropological distance.

Second. While educating myself on migrations, drugs and Nigeria, professionally I had moved on to my next job: creating visual archives of 50 years (1960-2010) of development studies in *La Genève International*. Through in-depth video interviews, I met, questioned and listened to past and present personalities of the development and cooperation scene: Swiss politicians, prominent personalities of the UN, researchers, professors. Some were more of the desk-type, others hooked on the adrenalin of the field, all of them were *good and smart* people who, in the 1960s, shared great hope with and for the freshly independent African countries. Since then, with different degrees of enthusiasm, doubts and criticism, they all had been 'developing for a living'. For months I had been told the stories of development, cooperation and aid: from the success stories of the Four Asian Tigers to fierce criticism of the International Monetary Fund, the World Bank and their Structural Adjustment Programs. Although I didn't know it then, I was building a background for this work that nourished part of the understanding of today's situation in Africa, and the narratives behind it. But most importantly, while listening to these stories, I couldn't help but wonder about the possible links between these two worlds: to what extent the actions of the second led to the situation of the first.

Third. When learning about Nigeria and years of developing-aid failure, I was carrying on with my 'normal' everyday life: hanging out with my friends, worrying about organic food, fair-traded goods, and the rising popularity of the right-wing. We were also partying—at parties where, since the 2000s, cocaine had become banal and ordinary. Or, as a Nigerian drug dealer put it: "See, child for this place, all *na ori*, me never go born for this country oh²". Swiss consumers and Nigerian sellers were hanging out at the same bars and clubs, where economic transactions played out as friendship, everybody smiling and dancing to the same tune. At closing time, the song would change. If consuming cocaine had become more and more accessible and almost socially accepted³, selling it was another deal. At closing time, some would get home high and fine—as long as they did not drive—merely at risk of a bad hangover. Others, walking home sober, would be at risk of police controls, police abuse or brutality (from drug and money confiscated without paperwork, to being beaten up, or left in the forest with wet cloths), prison and/or deportation. Again, I could not help but wonder about the

² "Young people in this country are all drug addicted, I will never have a child here."

³ For an interesting and quite complete discussion on cocaine's global trade, consume and social role, see Saviano (2013)

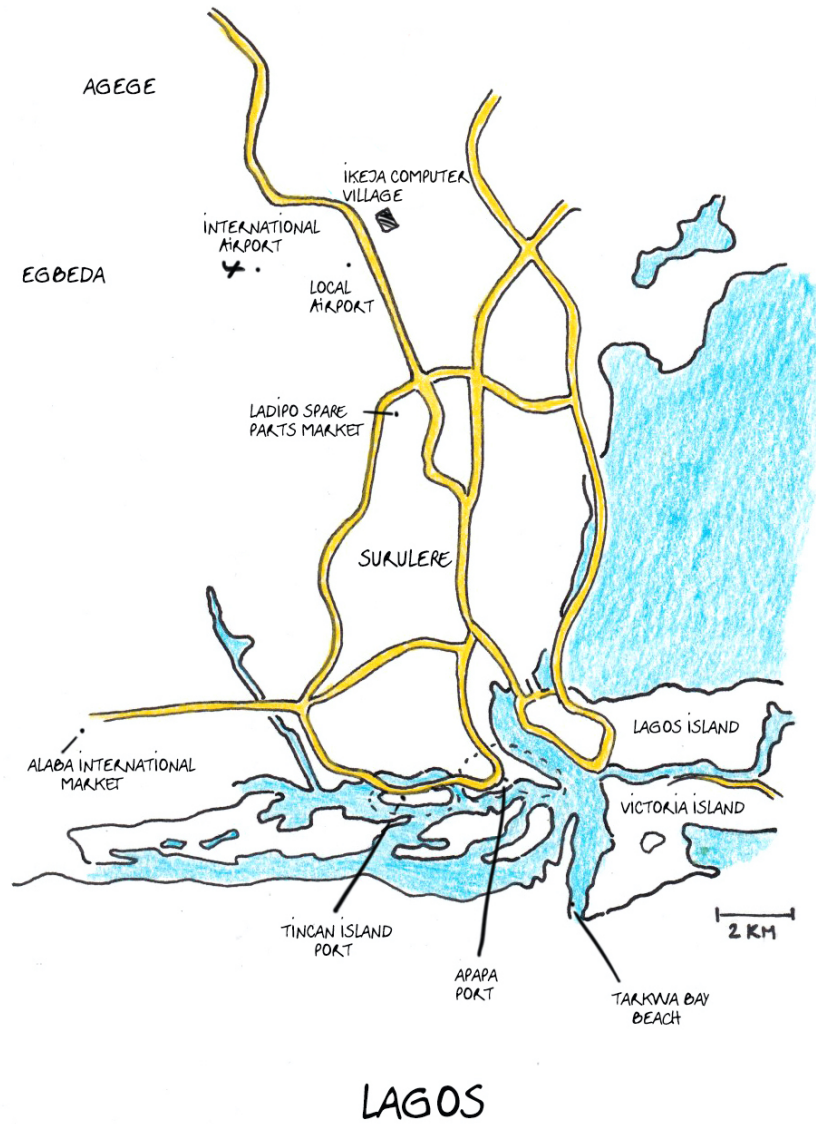
dynamics between these worlds, puzzled in front of the opposite outcomes of the same transaction: some got the fun, others the risk.

Navigating these worlds was not easy. I felt lonely. I thought the difficulties were due to how far the values, rules and narratives of these three worlds were. But I came to understand that the difficulty stemmed from the dissonating connections between these three groups: they were incredibly distant *and* yet possibly shaping each other. I couldn't help but wonder how 50 years of development aid led to a situation, where so many young people would be willing to take the risk of migration to sell coke to young lefties? And how these lefties, sensitive to anti-racism and pro-migrant politics—often sharing the values and in some cases following in the footsteps of the international aid actors—would play friends in economic transactions that are the very manifestation of highly unfair situations? These questions open a multitude of arguments, but the main point I want to make is that see these *mise en relation* of apparently distant situations exacerbated the constant confrontation with social injustice. For years, I was lost in constant questioning, trying to build an understanding of the separate yet interrelated situations, fuelling my anger. In short, this work is shaped by social justice concerns.

I started this PhD encouraged, helped and guided by the Nigerians I met in Switzerland. They influenced my work a great deal. They opened the way to the field through their teachings, holding my hand while I learnt to walk the lines with doubts and questions. They impacted the object of the study: used electronics were goods and not waste. Also, their drug dealing operations provided fundamental insights into the economic practices underneath the flows of used electronics. Finally, and most important, their self-narratives helped to put in perspective the 'globalization from below' paradigm. I carried on with this PhD despite the difficult and painful years because I couldn't throw in the towel. I was learning too much too intensely. I was hooked. So, I navigated these troubled waters, trying to be faithful to my values. I felt down more than once; I doubted myself and the work. I paid quite the toll, sometimes with my health, but I learnt to keep my anger against social injustice strong and alive without self-destructing, probably the most interesting thing in this long learning process and maybe all that matters.

This work is the result of numbers encounter across seven years spent between Nigeria and China and New York City. This work is dotted with *faux pas*, but I hope none of them comes across as disrespectful or offensive. And I hope that despite its limitations, it brings some understanding—and possibly some pleasant moments.

Intro | johnny just come



Johnny Just Come, or most of the time just JJC, is a newcomer, a stranger in a place, a beginner, a newbie.

1. Good vibes and dirty stuff

The first time I walked through Computer Village I didn't know left from right, up from down. It was a physical impression of being completely lost: the constant body contact, in a soundscape filled with generators, shouting, music and prayers, the smell of dust, fuel, gutters, food and heat. With my eyes glued to the floor to anticipate a pothole, a metal spring, and other gifts of a failed state, I was wondering: how will I be able to observe the social life and analyse cultural and economic dynamics if I need to stare at the ground to keep myself uninjured? Anthropological arrogance?

Occasionally I managed to raise my eyes from the wrecked ground to take in colours, lights, sounds and noises. People, parts, tools and generators. In the shops, on the stalls or in the street sellers' hands there were motherboards, hard drives, cables, cell phones, mp3 readers, memory sticks, batteries, etc. The yellow-MTN and the green-GLO beach-umbrellas gave shade to SIM registration stations. Overlapping voices filled the rare sound-space left free by generators. A young man was pushing a wheelbarrow with about twenty flat screens, a (pirated) software peddler passed in front of a shop where a PlayStation was being bargained over. In the next shop, somebody was changing a Samsung Galaxy screen. Frank⁴ a friend I met in Switzerland, essential Cicerone and future business partner, asked for directions.

We climbed up the external stairs, walked along a balcony, and entered a shop. It was calm. A veiled young woman was sitting alone in a small room; around her, the walls were covered with phone parts arranged by brands: Motorola, Nokia, Sony Ericsson. She looked at me, patting a stool: "Sit down, sista". Hanging to her left, bunches of chargers. With the steady pace of chain workers, she would plug a phone via USB in an old computer, click a few times, type a few things, unplug the phone, and plug the next one. She was unlocking SIM-locked cell phones.

Extending barely 500 sqm, Computer Village is one of the biggest IT markets in Africa. Laptops, desktops, printers, webcams, keyboards, mouses, phones, software, video games and more are bought, sold, and repaired here. Assembled, in components, retail or bulk, the goods are brand-new, *fairly-used*, original, fake, copyrighted or pirated. Traders and repairers range from university graduates to elementary school drops outs; from street sellers holding a few RAM sticks to USD-

⁴ As a reminder, anonymization has been done accordingly to people wishes, some names have been changed; others have not; some biographic details have also been omitted to respect privacy without compromising the analyses. Also, note that people usually have a name and a different business name. In this work both are used, reflecting the practice in the marketplace.

millionaire businesspeople. With praise and/or fear, everybody in Lagos knows Computer Village. Infamous for its congested environment, poor infrastructure, *area boys*, lack of planning and risk of cheating. Famous for its economic power, range of supply, high resourcefulness and ingenuity of its engineers and its major role in the digitalisation of Nigeria and West Africa⁵.

Computer Village is a local market in a global trade. Every single good is imported and traders are constantly in touch with the USA, China, Europe, Dubai. They text, call, Skype, Messenger, WhatsApp, QQ their suppliers, usually family and friends, members of the diaspora. What started as a local and informal settlement, has since attracted international actors: major players such as Hewlett-Packard or Tecno (a Chinese mobile phone maker), as well as businesspeople from other African countries, Chinese engineers and resellers. Today, Computer Village is a highly dynamic and hyper-connected market. Or, as a journalist with the *Taipei Times* put it "The Computer Village is Nigeria's response to Silicon Valley, a chance to get in on the digital revolution on the cheap."⁶

What I experienced as sensory saturation that I could link to a multitude of travelling stories about the authentic experience of 'traditional' African markets was actually a hub, a central player in the global economy. Computer Village is an African market *and* a global hub.

Toilets, injustice and guilt

I arrived at Computer Village almost by mistake. The first time I travelled to Nigeria was also my very first time in Africa. Actually, except for three weeks in Beijing and Shanghai, it was my first time outside the 'Western World'. I landed in Lagos, and for the following month I could not understand what was going on, neither around me, nor inside me. I couldn't distinguish between an *area boy* and a street seller, between gatemen and students, and I could not say if the woman at the crossroads was roasting corn for her family or for business. I was a pure JJC. I lacked the most basic keys to read the social fabric. Despite this, my plan was to make a documentary film. I guess this says something about a potentially dangerous mix of good intentions, ignorance and entitlement. Following up the experience of filming in an asylum seekers' centre, I wanted my first full length documentary to be *afro-positive*. I landed in Lagos to learn about Nollywood, then I branched out.

⁵ Exportations from Nigeria are not part of this work. However, it should be said that Computer Village—as well as Alaba International Market—export to the whole West Africa region, establishing the role of Lagos as a regional hub.

⁶ AP. *Piracy thrives as Nigeria hurtles into the digital age*. Taipei Times 03.19.2006- DOI: <http://www.taipeitimes.com/News/bizfocus/archives/2006/03/19/2003298173> [last consulted on: 22.11.2021]

One afternoon, during a one-month-long scouting trip, Frank and I wanted to buy a kit (cables, software, and the know-how) to open SIM-locked phones. The idea was to bring this business to Europe, where, at the time, what was a very common practice in Africa, was not available. That was my first visit to Computer Village.

I flew back from Lagos and sank into depression. I was puzzled. I did not consider myself naïve about social, economic or political injustice. And I do not reduce my first experience in Lagos to a slumming tour that brought some kind of awakening. Yet, something was really disturbing, something I didn't know how to make sense of. It grabbed me the first time, on my way back from Lagos, during the layover at the Madrid airport: its brightness, cleanness and smoothness was suddenly upsetting. A feeling that became even more intense when I went to the toilet. At first, I could not help but appreciate the design of the woman pictogram on the door. Sitting on the toilet, I admired how the cubicle's walls in mat glass gave a sense of protection from unwanted sights and sounds, while conveying a feeling of transparency and hygiene. Then I started to follow the money: how much was paid to the designer who came up with such stylish woman-man pictograms on the doors? How much for the architects, the engineers, the construction workers? How much for the material? How much money, time and energy had been exchanged to make sure I could feel protected while peeing? It's a game I am used to; I play it quite often in different situations. But this time I was overwhelmed by a heavy feeling of absurdity. The money is one aspect, but suddenly I couldn't wrap my head around the fact that some details get so much attention. That somehow there is an agreement that it is worth the stress, the money, the work, the pollution to get the comfort of a fancy toilet: not clean, healthy and functioning, but fancy. I guess the intensity of the feeling was due to the stark contrast. Sure, there are different types of toilets in the same country, in the same city and maybe even in the same street. But at that moment, a six-hour flight had rubbed in my face, an out-of-proportion difference between two airport toilets.

A simple question popped up: "What the hell?" I flew to Lagos looking for an Afro-positive story, and I came back with anger, sadness, discomfort and a bit of guilt. For years, this feeling grabbed me every single time I travelled back. Years later in a Frankfurt airport toilet, I was at ease, washing my hand, planning to buy water as soon as possible. Then my brain realised that I was in Europe. I could simply drink from the tap. I smiled. I was finally able to manage radical changes of infrastructure standards without spiralling into confusion and depression. Congratulations. And then I bugged: I just peed in drinkable water. Anger, sadness, discomfort and a bit of guilt.

Maybe it was nothing else than a cultural shock. But somehow it wasn't new. I knew the feeling already. I had known it since I was nine years old. The bright walls and drinkable water of the

European toilets belong to my personal list of moments that marked my consciousness and nourished my (not-)understanding of the world—along with images of Tiananmen tanks and Rodney King’s beating. I know this may sound dramatic, but those moments triggered by very different events, in very different registers, are linked to forms of deep injustice, nauseating injustice, that turn into an overwhelming feeling of rage, sadness, and sometimes guilt. Overwhelmed, dizzy and nauseated by unbelievable human behaviour, triggered by encounters with out-of-proportion inequalities. Be reassured, I still don’t know how to make sense of it, I just manage not to get destroyed by it.

It took years and a painful dose of self-questioning to finally understand that Computer Village and the global trading network it is embedded in would be the story I wanted to tell—a story that allows me to denounce, without spiralling. A story of business, exclusion, success, resistance and resilience.

Working in Computer Village

In Computer Village one can find any kind of IT equipment. From an old, repaired Pentium 2 to a brand-new Core i7⁷, from a flip-open Motorola to the last Samsung Galaxy, but I focused on the trade of *used* computers. This choice is not the result of an Afro-negative stereotypes perpetuating the exclusion of the African continent from economic wealth. Nor is it the manifestation of a *System D*⁸ fascination, that confuses (new-)degrowth paradigms with a romanticised out-of-need-creativity of those on the margins. If I focus on the re-used old stuff, it is not to deny the access to new one. My choice is rooted in the will to question social injustice issues linked to the overconsumption of electronics, that touches the whole planet but concentrates its social and environmental costs in specific places. Moreover, the global flow of used electrical and electronic equipment (UEEE)⁹ owes much to the hegemonic ideas of economic growth and technological progress. These actively promote consumption, associate personal well-being with material affluence and, on top of it, have

⁷ Pentium 2 and Core i7 are both intel processors. The Pentium Original dates from 1992, while the Core i7 was introduced in 2007 as a high-end processor and later became common. Its successor, intel Core i9 was introduced in 2017. For an exhaustive list of Intel microprocessors’ evolution and release dates since 1971, see Wikipedia page “List of Intel processors” (https://en.wikipedia.org/wiki/List_of_Intel_processors). It also gives an idea of the acceleration of new models’ release dictated by planned obsolescence needs.

⁸ From French *Système D* – *Système Débrouille* (*n.*), comes from *se débrouiller* (*v.*) can be literally translated as to manage, to do without, to cope, to handle. It is also used to refer to a state of mind, a way to be and to do things. A way of being based on creativity, fast thinking, and a bit of smart a** attitude, to get the job done. Particularly present among those without means.

⁹ Used Electrical and Electronics Equipment, generally shorted in UEEE is a wider category than used computers. It includes fridge and TVs as well as phones and computers. In this work, I use UEEE when I am not referring to specificities of the used computers business.

a massive environmental impact. In short, UEEE is a great illustration of the inherent problems of the global neo-liberal system, to the point of becoming a symbol of injustice (see next chapter *The e-waste Misunderstanding*).

At the same time, Computer Village is a dynamic marketplace, where people make a living in the most normal way, by buying and selling. They do not consider themselves as victims¹⁰, but rather businessmen—or dynamic go-getters—evolving in an economic system that works. This aspect is part of what made it possible for me to work on this topic. The traders and success stories of Computer Village helped me to keep a healthy mental and emotional state, while looking at the complex globally unfair mess that is the economy of UEEE. Maybe this was getting a good vibe while handling dirty stuff¹¹.

This led to the fact that, in the field, I mainly worked with people who, on different levels, were in a dominant position. I worked in a predominately male environment, with traders often older and richer than me. The fact that I was female, younger, poorer and still studying existed alongside other narratives, related to the general unfairness of 'Global North' and 'Global South' relations and to the Nigerian situation: corruption and lack of infrastructure. In short, narratives fitting into the Afro-pessimist narratives say "nearly everything that African states are not" (Mbembe 2008). In a certain

¹⁰ I said this thinking of previous works, for example asylum seekers and prostitutes. Even though, of course, social hierarchies are not absolute, and in any situation I worked in previously, there were as many narratives of victims than empowerment. I hope this present work also shows how narratives about agency, victimhood and empowerment constantly interweave in complementary, and sometimes contradictory ways.

¹¹ This tension resonates with the mixed feelings I had toward Lagos and living in the city. These are probably nothing else than a personal manifestation of wider and known discussion about Urban Africa. The understandings of Lagos, and more generally urban Africa, often oppose two competing ways to see the African metropole (Agbibo 2017, 940). The first one is articulated around the dysfunctional chaotic urban life, where Lagos is the "nec plus ultra of urban 'apocalypse' " (Probst 2012). The second one, probably best represented by the famous Harvard City Project of the architect Koolhaas, sees Lagos as "a city of work and agency" (Koolhaas 2000). Tejuoso et al. (2005) called this an "aesthetic of chaos", pointing out that it has partially been re-appropriated by Nigerians, particularly photographers and editors. If the first, has been criticised for its ethnocentric and condescending gaze that normalizing urban functionality on the Western models (Abouhani and Simone 2005), the second one may forget that Lagos is often hated by the dwellers themselves. In fact, praising the city at work may rightfully challenge the urban hell, but it may also underestimate that living in Lagos is hard (particularly for 'middle-class' and utterly hard for the 'poor'). Also, parsing the agency risks underestimating the history (and responsibilities) that led to such situation. "To treat the city as a living art installation or compare it to the neutral space of a research laboratory is both to de-historicize and to depoliticize its experience. The informal economy of poverty celebrated by the Harvard team is the result of a specific set of policies pursued by Nigeria's military dictatorships over the last decades under IMF and World Bank guidance, which decimated the metropolitan economy." (Gandy 2005, 42). To avoid the ethnocentric, judgmental and condescending gaze, that in fact proceeds to an active invisibilisation of what works in the African cities (Mbembé 2004), without falling into romanticised art-like approaches, Simone suggests discussing the difficulties many African cities and their dwellers are facing every day but insists on emphasising, "the determination of urban Africans to find their own way." (Abouhani and Simone 2005, 1).

sense I found myself studying up—as in addressing the situations of people enjoying more power than me, and being part of the middle and upper end of the social power structure (Nader 1974).

I believe that looking at the UEEE, usually part of Afro-pessimist approaches, in a “studying up” position allows for new narratives to emerge behind the focus on the victims and dominated categories. Working with businessmen led me to appreciate different hierarchies that act simultaneously, and to analyse an economic system that works on a global level, challenging the dichotomy of ‘globalization from below’ and ‘from above’. At the same time, I couldn’t avoid the fact that I was discussing trade in used computers, meaning discarded somewhere else, and thus embedded in unfair power dynamics. Somehow, I was “studying up” and “down” simultaneously, which allowed me to think about success stories and discuss the presence of different economic systems on the global scale, without falling into the “well-meaning anthropological urge to treat modernity as a cultural formation whose different version may be understood as both coeval and of equal value ends up looking like an evasion of the demands of those who instead see modernity as a privileged and desired socioeconomics condition that is actively contradicting with their own radical unequal way of life.” (Ferguson 2006, 33).

On a less personal level, the good vibe allowed me to build a reflection that addresses the topic from an afro-positivist angle, without denying injustices and difficulties. What I thought of as a personal and intimate emotional roller coaster can be understood as the manifestation of a wider discussion articulated around the tension between afro-pessimist and afro-optimist approaches. If the first has largely been criticised, the second is not without problems: “Although we very much agree with the critique of afro-pessimist accounts of Africa, we view a similar danger in over stressing the opportunities for cultural innovation and creativity open to Africans in a historical era shaped by particular forms of globalization and neo-liberalization.” (Röschenthaler and Schulz 2016, 1).

As I will show in this work, the trade of UEEE is a trade that works, carried on by entrepreneurs with several success stories. However, the very roots of such entrepreneurial activities are indeed the unequal distribution of wealth and waste, costs and responsibilities. The study of the trade of used electronics, no matter how positively, is watermarked with a critical perspective of the system that generates over consumption for some and more or less forced recycling for others. The latter cannot be studied without questioning the former; they are two faces of the same coin. Understanding this conjunction provides an opportunity for overcoming the tension between afro-optimist and afro-pessimist positions as both are a part of this complex reality.



Main entrance, Computer Village. Lagos, 2011

2. A long story short

I opened this work by describing my first steps in Lagos and in Computer Village. *Chapter 1. Good vibes and dirty stuff* tells my sensorial impressions and personal struggles; these not only set the emotional framework for my research, they also served as the humus from which the analytical tensions that mark this research grew. The first of these is the tension between the traditional African market—that famous anthropological love object—and the global economy: one of the original contributions of this work is to bring together a physical marketplace and a global trade network within the same analysis. The second is the tension between the success stories of the traders in this market and the deeply unfair structures that underlie them.

Both of these tensions are examples of the more general tension between afro-positive and afro-negative storylines. As such, my inner emotional maelstrom was a manifestation of my *malaise* with and later rejection of dominant narratives in favour of less dichotomous and Manichean terms of analysis.

Throughout this dissertation, drawing on my first-hand trading experiences, I explain how the economic system that allows Nigerians to be part of the global circulation of used computers works. This description provides insight into two interrelated fields of study: e-waste and UEEE studies on the one hand, and the anthropological investigation of 'globalization from below' on the other. Indeed, the UEEE phenomena is a particularly telling example of the necessity to think beyond dichotomies, and of the need to conceptualize globalization in all of its plurality and diversity, in a word, as entangled globalizations.

Despite this work is not exactly on e-waste, I open with a synthetic presentation of the mainstream UEEE narrative. *Chapter 3. The e-waste misunderstanding* helps make explicit for the unfamiliar reader the elements of social injustice mentioned above and that partially explained my interest in Computer Village, while laying out the analytical framework that I came to question. This is important not only because the mainstream narrative is deeply rooted in an afro-negative gaze, but also because it has an impact on regulation, which may miss its target and criminalize the wrong actors.

Through this general discussion of the complexification of the e-waste narrative, I establish the intersections between my work and that of other e-waste scholars. This is most clearly illustrated by the phenomenon of reuse. Reuse is a crucial step in the biographies of most electronic objects, and it is central to the circulation of used computers, yet it is largely understudied. Key empirical questions

that remain open are: how do these things flow? who are the actors pushing this flow? What are their economic practices? And what are the system for categorizing these objects? My work helps answer these questions by describing what happens after objects enter the complex circuits of use, reuse, refurbishing and discard. I do this from the point of view of Nigerian traders and engineers, with a particular focus on the emic categorization of objects. The specificities of this trade—such as its hyper-fragmentation, the importance of repairing, access to spare parts, the commodity vs waste tension and the links between global production networks (GPN) and what Pickren (2015) calls 'global destruction networks' (GDN)—will be developed thought out this work. Each of these elements demonstrates, in different ways, limits of dichotomic thinking about complex, entangled realities.

Chapter 4. Getting over above and below closes this introductory part. I discuss the concept of 'globalization from below' mainly because it is massively mobilized, with little or no critical distance, by scholars addressing economic activities and actors like the ones who figure in this work. I too mobilized this concept at first, before realizing it was more of hindrance than a help when it came to analysing my data. The 'globalization from below' paradigm is based on a series of stereotypes that it both maintains and reproduces. To make senses of these conceptual pitfalls, I have been inspired by the older and richer arguments about the concept of informality, which critic the clear separation between the formal and the informal by showing how the attributes assigned to one or the other are actually present in both contexts.

Throughout this work, the argument against the 'globalization from below' paradigm is articulated around two main points. First, I suggest that the economic practices I observed are better conceived of as an economic system—with its own norms, conventions, standardized practices and technics—and not as a mere reaction to an all-powerful globalized framework. Put somewhat differently, though I am aware of the risks of essentializing or romanticizing my field, I suggest that the economic practices mobilized to handle this highly fragment form of global commerce should be taken seriously on their own terms, and not as mere coping strategies. Thus, I argue that the careful study of the different contexts, moments and situations in which these different global economies are intertwined demonstrates how the 'above / below' dichotomy hides more than it reveals. Thus, throughout this work, I cast light on scholarly bias and the dangers of reproducing stereotypes when conceptualizing the complex and differentiated networks of international trade we call globalization.

On the question of method, discussed in *Chapter 5: No Food for Lazy Man*, focuses on the advantages and difficulties of undergoing participatory observation by doing businesses, and stress the opportunities offered by a long-term multisided ethnography, moreover in the position of studying up and down simultaneously. I should emphasize that I came to my understandings because I chose

to participate actively in trading activities, putting “skin in the game” by investing, making and losing(!) money. This approach forced me to see my research informants first and foremost as economic men and women, seeking to making a living via the trade in UEEE. By observing myself participating, I became aware of the many anthropological biases that can be introduced through mere observation. I consider this to be one of the main contributions of this research, and I mobilize the data I obtained through this hands-on participation throughout the dissertation.

Part 1 | How market?

How market? is a zoom in on Computer Village and its internal dynamics, and it is entirely set in Lagos. Heavily based on my personal experience, it is inspired by classical African markets studies and by economic cluster analysis. It is articulated around the different internal circuits of goods, skills, money and information that characterize Computer Village. I discuss these circulations in terms of cooperation, which I conceive of as simultaneously an economic manifestation of Igbo value systems (presented via a brief detour through Igbo economic history) and a good answer to one of the used computer trade’s specificities: its fragmentation.

The opening chapter *Portraits of Computer Village* sets the context. The short history of Computer Village provides an initial portrait while also serving as an illustration of the points to be developed in this work: the complexification of the e-waste narrative and the need to overcome the ‘globalization from below’ paradigm. By stressing how the trade of used computers finds some of its roots in older, long-distance trading networks, I seek to put the flows of UEEE into perspective as the continuity of existing trading patterns, and not radically new behaviour spawned by new industries in waste. By showing how the birth and growth of Computer Village are related to and shaped by these particular social and cultural contexts (e.g., interethnic economic practices common to pre-colonial, colonial, post-colonial times), I establish the basis for my discussion of how different economic models have evolved on a global scale, creating the conditions for globalization’s diversity. The section *Family picture* introduces the main characters I met in Lagos and gives my readers a sense of the market at the time of my fieldwork. This presentation aims to convey a feeling for the extent of the interconnectivity that characterizes Computer Village and that led me to understand how deep cooperation draws on, but also dominates, market dynamics in this context.

Chapter 8. *I go enta market* is titled after one of the most common phrases in the market. It explores Computer Village as a dense and endless circulation of goods, tools, skills and money among same level traders, as opposed to lined up traders—wholesalers, middle sellers-retailers. I discuss these internal circulations as the materialization of the deep cooperation that structures relations between

micro and small enterprises (MSEs) and as a key aspect of the success of the market and, by extension, of the trade of used computers globally.

I first address the circulation of goods by establishing its link with *running the market*, a practice that consists in buying from a fellow trader in order to satisfy a client. This practice has characterized pre-colonial, colonial and post-colonial dynamics in Igbo markets but is also described for West African and Caribbean contexts. I suggest that the massive presence of manufactured products in African markets, and particularly of *used* manufactured goods, has radically increased recourse to *running the market*, making it the norm rather than the exception. As such it operates a shift in the purpose of the practice, from satisfying the client, to be part of an internal circuit of trade, key of the market success. Different examples demonstrate how business in Computer Village cannot be conducted without taking part in this internal circulation of goods, as well as of tools, skills and money. Inspired by cluster studies, I follow up on these empirical insights by suggesting to conceptualize these market-internal circulations as cooperation, and I introduce the notions of *shared inventory*, *co-working spaces* and *common capital* to reflect their density and efficacy. Thus, this chapter casts light on the fact that cooperation is key for success in the trade in UEEE, due to the market's high fragmentation. The necessity of inventory and resource sharing in this market shows most clearly when it comes to repairing activities, which I addressed mainly via the questions of access to spare parts. These, in fact, are essential as they are underdiscussed in the e-waste and UEEE literature.

Information is the last circulation I discuss in Computer Village. *Chapter 9. Information, cheating and belonging* opens describing a particularity of Computer Village that I called *fluid specialization*. This refers to the fact that while traders specialize in a specific line of business, they can also deal in pretty much any other line of trade in the market. Besides showing that this particular organization also participates in making this highly fragmented market work, I also point out that *fluid specialization* is knowledge-related: the more one knows about the market, the more one is likely to deal with a specialist; the less one knows, the more likely one is to deal with whoever one happens upon. This leads me to the fact that, as in the *bazaar*, information in Computer Village is not displayed and accessible to the passerby. Building on my long-term field work and personal trading experience, I discuss access to information through the lens of belonging. Belonging is a process that takes time, as one must go through a series of steps before becoming part of an inner group of traders among whom information circulates freely. Outsiders are exposed to more or less total exclusion, this exclusion manifest via the cheating. The articulation between information, cheating and belonging is thus directly related to the cooperation discussed above: there is an inner group where cooperation happens, it takes time to access it, and being cheated is part of this process.

This analysis further shows how, irrespective of emic narratives, ethnicity is not the only basis for solidarity among traders. By introducing cheating as a practice through which traders actually build trust, I offer an alternative view on the cheating narrative widely reported by scholars working on Africans in China—at the heart of the second part of this work. I thereby counter a stereotype common to much work in this area: the metaphor of the market as a jungle-like fight for survival.

In sum, in zooming in on Computer Village, I cast light on the internal dynamics of this hyper-fragmented market, stressing the essential role of cooperation in its functioning. Moreover, I view these internal dynamics not as strategic economic behaviour developed to answer particular challenges, but rather as the manifestation of an economic system, with norms and values, which adapted to a contemporary situation. These elements will be fundamental in the coming part, where I look at the bigger picture: the global networks in which Computer Village is emmeshed. By transporting my observations of Computer Village to a global level, I claim that different economic systems evolve on a global scale, and as such globalization is diversified.

Part 2 | Naija no dey carry last

After zooming in, the second part of the manuscript zooms out, locating Computer Village within the global networks it belongs to, with a particular focus on China. From Lagos, travelling to China was the obvious next step. In Computer Village, China was simply everywhere: as a major supplier, as an object category, and in the discourses of Nigerian traders and engineers. Conversely, observing Nigerian traders in China showed how the economic practices observed in Computer Village fit within a global system. This opened the way to rethinking globalization as a phenomenon adopted and adapted by a variety of economic actors, a variety not accounted for by the simplistic vertical metaphors of 'above' and 'below'

Part 2 is structured in four chapters. The first two focus on Nigerian traders in the Pearl River Delta (PRD) and the trading activities that create the connections between the PRD and Lagos. They are articulated as a counterargument to analyses that reduce the activities of these traders to survival strategies, rather than recognizing their economic logics. My methodological decision to participate in these economic practices by attempting myself to trade from China to Africa gave me first-hand insights into this economic system, based on cooperation between micro enterprises working on a global scale. This in turn allowed me to "de-exoticize" these economic actors, to appreciate their economic calculations, with their resulting successes and failures, without denying the structural constraints they face.

The third and fourth chapters of Part 2 address the objects they trade and their categorization, focusing first on Chinese goods and then on Chinese goods sold in Africa. Travelling to China was an opportunity to apply the follow-the-thing approach (Cook 2004); indeed, if going to Lagos was like following the thing *downstream* (Gregson et al. 2010), going to China took me *upstream*, much like Cook who followed his papaya from British super markets to Jamaican fields. This experience made it clear to me how inaccurate and outdated linear metaphors are when it comes to tracing and mapping complex production / reuse / destruction networks such as those in which UEEE circulate. This discussion also highlights the specificity of UEEE trade, bringing new perspectives to the e-waste literature, and blurring the categories used to classify the objects that flow within them.

Chapter 10. This na China o! is a general presentation of African traders in China, based both on my personal experience in China and on a *family picture* articulated around the biographies of Oga Rainbow and Mega Rich. These biographies highlight the complexity of the life-paths and decision-making processes that these traders experience by describing the challenges they face as well as the successes they celebrate, the pressures as well as the mutual support. As such, they complexify analyses of the situation encountered by Africans in China, which tend to over-emphasize the difficulties of surviving in this environment and speak of traders' behaviour in terms of 'coping'. The brief review of the literature highlights two aspects of this *misérabiliste* bias: the focus on migration as the defining characteristic of the African trading diaspora in China, and the fascination with the problem of Chinese racism. While both of these phenomena are important, they tend to lead analysts to forget the fact that African traders are first and foremost businesspeople, and that like most of the world's businesspeople, their primary objective is to make money. Thus, while permits, police raids and racism are part of everyday experiences of living as an African in China, the centre of attention of the Nigerian traders I studied was clearly their success and/or failure *as traders*.

Zooming out somewhat further, I then present a general social economic mapping of African traders in the PRD. This contextualization is articulated around my argument against the 'above / below' dichotomy. I do this by stressing the central role of Guangzhou and the PRD in the global economy, and by showing that different African areas in Guangzhou can be understood not in ethnic terms but as the reflection of differentiated economic organizations. In this general description, I introduce the elements that I will develop further below: Nigerian traders' 'wiggly room', the diversity of the jobs that makes the machine run, and the categories of objects traded. These descriptions also provide passing glimpses into the high degree of cosmopolitanism of the "African" neighbourhoods in Guangzhou. From *egusi* soup served by Chinese waiters in a Brazilian-owned restaurant, to the polyglot talents of Nigerians fluent in Mandarin and Cantonese Chinese in addition to pidgin English

and a couple of African languages, from mixed-race couples that form over the course of long-term stays, to the Chinese pharmacist who took on an Igbo name, cosmopolitan is very much part of the daily life of Nigerians in China. Finally, I close this general presentation of Africans in China with a discussion of the central role of the exchange rate in the evolution of trading activities among Nigerian businessmen. My aim here is simple: to put the economy back into trading activities, often dismissed in the analyses of these migrant-traders' practices.

Chapter 11. China-Lagos express focuses on Nigerian traders' activities and the ways in which they connect the Lagos and Guangzhou markets. It addresses three main aspects of these dynamics: logistics, the role of middlemen and the transnational circulation of information. Once again, the insights I gained from my work in and on Computer Village in Lagos inform my description of the activities of Igbo traders in Guangzhou. I recognized here some of the same features of the economic system I had identified in Nigeria: an emphasis on cooperation between a multitude of small actors, the central role of *enta market*, and the processes by which one gains access to information.

I open by discussing the need for a proper introduction to get access to support when one seeks to run a business in Guangzhou. While scholars have discussed networks of support in terms of ethnicity, I suggest that being Igbo is neither a necessary nor a sufficient condition. Rather, just as in Computer Village, other, more market-specific logics determine whether or not one belongs to the group. I argue that the numerous stories of cheatings and distrust reported by scholars may best be understood in this light: as part of the social dynamics of creating belonging to a market-specific network of like-minded traders.

I then explore the massive logistical machine connecting China and Lagos, casting light on two aspects. First, I describe its different channels and transport routes, taking into account the characteristic of different goods, different regional specializations and the possible need to avoid regulation. Importantly, I insist that these are created to offer the most complete and convenient links to Lagos. Second, I discuss the logistical particularity known as *groupage*. Presented by scholars as a coping strategy to overcome limited access to capital, I argue that that *groupage* is actually also a logistic materialization of the 'let-us-be-many' economic model common to Igbo markets. In sum, Nigerian traders opened the economic routes they needed and then shaped them to be compatible with an economic model that could match their system of values, articulated around horizontal, same-level micro-enterprises, instead of hierarchy. The fact that in Guangzhou, traders from different African countries—notably the highly hierarchized Malian traders—handle transport in different ways, supports the idea that there is far more diversity amongst small-scale global traders than the 'globalization from below' paradigm can account for.

I then turn my focus to the role of the middleman. Unlike traders who regularly travel between China and African, middlemen are traders who stay in China. I point out that the way they create bridges between the two countries resembles the process of *enta market* described for Computer Village. (Indeed, Nigerian traders used the exact same expression). Thus, market practices that already proved particularly adapted to the hyper-fragmented used-computer trade in Computer Village turned out also to be useful for IT trade in China.

In sum, this chapter discusses activities largely described by other scholars, but with added perspectives based on my own trading experience and insights from Computer Village's dynamics. I stress how these practices are first and foremost economic and reflect the norms and values that make up this particular economic system, which understanding should see beyond mere "coping" or "surviving". Without denying the specific difficulties Nigerian (and African) traders experience, I stress that there is no need to reduce their entrepreneurial attitude to the obstacles they face. This point feeds directly into my general argument about the limits and dangers of the 'globalization from below' paradigm.

After discussing the traders and their activities in Guangzhou, I shift my focus to objects. *Chapter 10. Standard, substandard and refurbished*, focus on Chinese objects and is articulated around two examples: the pimped HP 6220 and the 15'6-inch screen for laptops. To describe the HP 6220, I introduce the emic category of *China refurbished*: computers discarded by what could be called *Grade A* countries, refurbished and/or upgraded in China with *substandard* spare parts, and then shipped to the Nigerian market. I then introduce the idea of *refurbished in China, designed in Africa*, that I suggest should be understood as the manifestation in the IT world, of the phenomenon that has come to be known as *Made in China; designed in Africa*, referring to goods such as wax, clothing, furniture, etc. This latter refers to the agency of Africans (sometimes physically located in China) who dictate to Chinese producers what products should be made for African markets. *Refurbishing* and upgrading in China, opens up the possibility of exploring the agency of African entrepreneurs within the context of the global circulation of UEEE.

The second example focuses on access to spare parts in China, which I qualify as *upstream*, building on the classic follow-the-thing perspective proposed by Cook (2005). This completes spare parts sourcing through *scrapping*, already discussed in Computer Village using the notion of *downstream*, inspired by Gregson et al. (2010). *Downstream* spare parts access challenged UEEE transborder regulations—articulated around the distinction between what is thought to be repairable and what is not; it blurs the line between waste and commodities, since *scrapping* turns waste into spare parts. When shifting the discussion to *upstream* sourcing of spare parts in China, I show how they mainly

come from overproduction, broadly defined as unsold and/or defective goods discarded by the factories that supplying the major IT brands. This overproduction, resulting directly from the highly fragmented global production networks (GPN)—shaped by forty years of subcontracting race—finds its way to Lagos, via Chinese middlepersons, along the commercial routes opened and maintained by Nigerian traders. In Computer Village these spare parts end up in the same secondhand computer, side by side with scrapped spare parts recycled from ‘waste’, thereby blurring the line between used and new, and *standard* and *substandard*.

In sum, examining access to spare parts in rich empirical detail allows me to show that, in the context of UEEE, global networks of production and global network of destruction (Pickren 2015) are indeed entangled. Overproduction links GPNs, generally qualified as to ‘globalization from above’, and GDNs, generally associated with (so-called) ‘globalization from below’. In my opinion, this entanglement is a materialization of the limits of dichotomous thinking; ignoring these entanglements leads us to underestimate the richness not only of their economic functions but also of their social, migratory, cultural and ecological logics.

For the concluding chapter of Part 2, Chapter 13. *China Stuff, Western Trash and African Agency*, I come back to Computer Village, this time with a focus on objects. I do this by looking at Chinese goods in Africa. Much like African traders in China, these goods have attracted a fair amount of academic interest from scholars who generally agree on the massive arrival of cheap Chinese goods in Africa. While many are critical of this flood of African markets by cheap Chinese goods, there is a growing body of literature that is agency-oriented, understanding cheapness in terms of affordability and acknowledging the role of Africans, in particular African traders in this phenomenon. I clearly align myself with these analyses. However, when dealing with the market in IT, we need to pay more attention to its specificities. While studies of other consumer goods tend to understand Chinese goods in terms of competition with or as alternatives to goods from the ‘West’, in Computer Village, ‘Western’ and ‘Eastern’ goods are *complementary*. Thus, in a sense, this closing chapter of Part 2 mirrors the opening of Part 1: the history of Computer Village already introduced the complementarity of goods from the ‘West’ and from the ‘East’ as central element for the birth and growth of this economic space.

However, I conclude by insisting that despite their complementarity, goods from China and goods from the ‘West’ circulate within hierarchies of value, a fact that brings geopolitics back into my analysis. These hierarchies operate in two different ways, one based on accessibility and the other, on quality. The first hierarchy sets Chinese goods on the top, while the second places them at the bottom. These inversed hierarchies are the reflection of the different forms of exchange that the

China and West engage in with Africa. If the West supplies better quality, it is nonetheless getting rid of its top-quality garbage, while the Chinese not only produce (and/or refurbish) for Africans, but also consider their African partners as *business* partners, investing in building economic relationships with African traders.

Finally, I build on this complementarity and inverted hierarchies to discuss how the relations between Africa, China and the 'West', in the context of UEEE, are structured by triangular dynamics. If African traders resent China for its low quality, they also value its economic involvement. In the same way, they value the quality of *fairly-used* goods coming the West, while resenting it for its dismissive and condescending attitudes.

I argue that the UEEE trade cannot be understood in bilateral relationships—Africa-'West' or Africa-China. Instead, it can be described by what I label "refurbished in China, designed in Africa and involuntarily supported by the 'West'". I argue that it is within this triangulation that African traders build their agency. It takes three to tango.

Conclusion | Water don pass garri

To close this work, I circle back to the e-waste question, by drawing a Nigerian-centred map of the reused step presented above. This map shows the extent and the central role of the activities of reuse, repairing and refurbishing in the circulation of used computers, as well as the entanglement of the GPNs and GDNs. For this I suggest conceptualizing these activities as global reuse, repair and refurbish networks or "GRRR". The GRRR challenge the very idea of 'working' and 'non-working' stuff, showing the limits of UEEE regulations, while casting light on the agency of the actors operating within them. However, they are the proof of the structural limits within which said agency takes place. In fact, by operating mainly in within the GRRR Nigerian traders, and other actors in similar positions, are 'choosing' refurbishing, repairing and *substandard* because new, top-quality goods are mainly not available. It is a decision by default, moreover, taken while facing specific challenge, from international migration laws to the domestic political and economic difficulties. Finally, I open a discussion about the possibility that the GRRR and their actors are indeed part of, but maybe also involuntarily helping, the system that excludes them.

3. The e-waste misunderstanding

When in Computer Village I chose to focus on used electronics not on e-waste. After all, I was in a market not a dump. But I was in a market with a strong smell of 'waste'. In fact, the line between UEEE and e-waste was blurred. Without much awareness, I was building an understanding of the first relying on a general narrative and iconography surrounding the latter. Here, after explaining the main aspects of the mainstream narrative about e-waste—which fed my first impressions—I will focus on the tension between waste and commodity (UEEE vs e-waste). This explains why this project is relevant in a discussion of e-waste, even as it isn't explicitly about trash.

E-waste has drawn considerable attention in the last twenty years. In a very schematic way, there are three main features around which the familiar narrative on e-waste is articulated. One, it grows at a very fast rate and is considered the fastest growing flow of "waste" (Schulz 2018; Lundgren 2012). This is the consequence of what has been called *digitalisation* of the world (more and more objects have a digital component) combined with an economic system based on growth. The latter directly relates to objects' shorter and shorter life span—via different planned obsolescence strategies—in order to keep up growth, hence the waste. Second, those fast-growing mountains of waste are dangerous. Studies focused on the impact of lead, mercury and other toxic components present in electronics on the environment and on health, paying particular attention to water and soil pollution due to dumping and scavenger practices (Little 2014). Third, this fast-growing hazardous mass of waste has been handled very unfairly through what has been known as dump-it-on/in-somebody-else's-backyard. It refers to *rich* countries dumping their dangerous waste in huge landfills in *developing* countries (Puckett et al. 2002).

The combination of these economic, environmental and social aspects constitutes a narrative heavily articulated around the denunciation of injustices. Several documentary makers (Klein 2009, White 2017), journalists, environmental non-governmental organizations (ENGOS), international organization, and artists and some scholars have denounced hell-like situations. These denunciations come with a well-known iconography, mainly featuring smoke towers, burning cables and working

children¹². The semblance to charity aid and development campaigns doesn't need an expert eye to be spotted.

Injustices call for action. Under the UN Environment Program, the Basel Convention, an agreement signed in 1989 and entered into force in 1992, counts 199 signatory states¹³ and bans the movement of hazardous waste from *developed* to *less-developed* countries¹⁴. E-waste falls into the category and over the past few years it has been at the centre of the Basel Convention work. The Convention has been constantly evolving, adjusting with several annexes (from the lists of the countries and their categorisation to the list of dangerous materials).

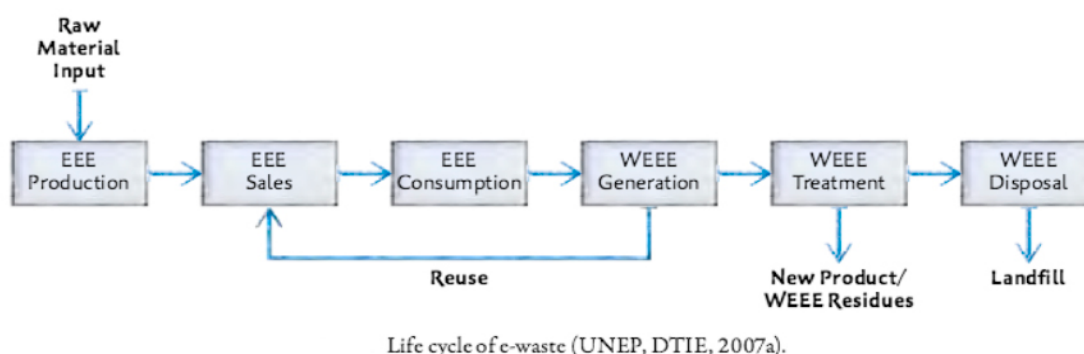
The existence of cable-burning kids and the more generally shockingly high numbers of victims of these stomach-churning injustices are undeniable (and to be honest, the economic, environmental and social injustice are part of reasons behind my interest for this to this market). However, this narrative and its iconography deserve nuances. ENGOs have played an important – probably pioneering – role in e-waste studies. Their approach is based on tracing shipments back to first user (for example by tag collection) along with toxicological analyses of water and soil. They could “trace back e-waste to the USA, Canada, and various countries in Europe [...] and they] documented the toxicological effects of e-waste [...] in the recipient countries” (Lepawsky and McNabb 2010, 181). It is possible that the central role of the environmental aspect has somehow marginalised the social issues, which have been reduced to a Manichean understanding of injustice opposing two figures. The bad guys dumping their garbage and responsibilities, and the powerless victims of this global flow, who must deal with waste they didn't generate – and pay with their health as well as with the pollution of their environment. The first is usually located in the 'Global North', the second in the 'Global South'.

This narrative is nuanced and complexified, however it still has an important impact on the understanding of e-waste. In particular, there are blind spots in the understanding of said flows. One central unknown is the step between the first user and the final dismantler. Scholars and regulators have acknowledged the existence of a re-used step, which is generally understood in it linear terms.

¹² The work of the South African photographer [Pieter Hugo "Permanent Error"](#) provides a vivid illustration of this common iconography, but the list includes documentaries, photography works, articles portraying the electronics trade using similar images of crisis and decay is long and growing.

¹³ Major players such as Haiti and the USA have signed but not ratified it.

¹⁴ The countries are addressed as OCED+EU+Liechtenstein and non-OCED countries; different annexes update the countries categorization.



My work focuses on the reuse steps, which are largely understudied, filling an important gap in e-waste studies. “We are just starting to understand how important reuse, repair, and refurbishment are to global flows of discarded electronics” (Lepawsky 2018, 84). These gaps are important to fill, because these narratives impact the actions of the Basel Convention with questionable consequences such as the criminalization of importers and transporters. But also, because, on a more general level, these partial narratives maintain and reinforce the victim-like agency-deprived position of the receiving countries; clearly leaning toward the afro-negative side of the spectrum.

The waste-commodity tension and the re-used loophole

The difficulty in defining what is waste and what is used-goods goes well beyond my work. The line between UEEE and e-waste is a tiny one and a moving one, with actual overlapping. Lepawsky, building on Wynne (1989) points out how hazard and waste are not physically bound to the material properties but how “the meaning of ‘hazard’ and ‘waste’ are not just imprecise or statically fuzzy – they are *fundamentally* ambiguous.” (Lepawsky 2018, 23). This is true for different waste, and not really news for anthropologists, who are more used to asking, ‘who defines what and how?’ However, when it comes to e-waste, the line between UEEE and e-waste, is also the line between hazardous and non-hazardous, and, thus, is the line between exportable or non-exportable. This discussion of defining one from the other has been going on for years – years of debates and disagreements: representation of ENGO’s, national government agencies, trade associations, individual business (such as Philips) have all participated in the debates trying to draw the line between waste and non-waste, what is dangerous and what is not, what is exportable and what isn’t (Lepawsky 2018; Pickren 2015). This aspect is interwoven with the re-used step of discarded electronics. Set after the first user and the final landfill, a reuse step in electronics biographies is acknowledged by all the different actors taking part in e-waste discussions. It is source of tension between the benefits of refurbishing and re-using, and its potential as a loophole to avoid regulations banning the exportation of e-waste toward

developing countries. In short, this comes down to two opposed interpretations of the Basel Convention. On one side, there are those standing for the idea that only stuff in working condition should be exported, which is the position of The Basel Action Network (BAN)¹⁵. On the other side, there are those defending the idea that repairable stuff is not-waste and can be exported. This is the position defended by what is called R2—Ready for Repair—defined by governmental and non-governmental organisations in the USA (Pickren 2015). The BAN points out that exporting repairable things allows for the avoiding of the cost of proper eco-friendly dismantling, and more general I represent an economic advantage for the OCED countries and IT industries. And the R2 stresses the economic, environmental and social (IT penetration) benefits of refurbishing and reusing.

The point here is not to side with one or the other, as both have limitations that will become clear with the description of the marketplace and global trade dynamics. What I want to point out here is how the tension between waste and commodities is crystalized around technical aspects. Both sides back their positions with ethical or moral arguments, but the aim of the debate is to agree on clear *technical guidelines* and *a/ list of dangerous materials*. The reasons for narrowing such a complex question to technical aspects are understandable¹⁶, but it also shows an important blind spot: e-waste specialists and studies address the reuse step, but they do not describe it. They estimate quantities (in tons or containers) and state of functioning in order to write regulations. But the question of who and how, within which social and economic structure, actually moves these things around is only marginally addressed. This is one of the interests of my work. The objects that make the subject of this work are indeed considered part of the general e-waste issue.

Computer Village is discussed in different reports of the Basel Convention. They describe the market as a refurbishing place, they acknowledge its role as a job provider, and discuss IT penetration in Nigeria and other African countries (Manhart et al. 2011). However, while they differentiate the refurbishing from the scavenging in the biography of the objects, they all agree that hubs like Computer Village and Alaba International Market play a central role in the importation of UEEE and e-waste.

¹⁵ Named after the Basel Convention, BAN is a kind of unofficial guard dog of this latter, and a major player in the e-waste field, with its 2012 Report titled "Exporting harm" being one of the most cited documents in the e-waste field (Lepawsky 2018)

¹⁶ I guess part is due to the very central environmental questions, that is often translated into technical aspects such measurement of soils, air and water contaminations levels.

The Person in the Port Project (PiP), carried out under the BCCC Nigeria¹⁷, aimed to verify the entrance via the ports of Lagos of UEEE and e-waste in the country. They evaluated that 30 % of the UEEE entering the country was not in working condition (Odeyingbo, Nnorom, and Deubzer 2018). These numbers are partially extrapolated by anecdotal information and a short survey period/short survey period; the precise figures are difficult due to numbers of factors, such as the fact that electronics come in mixed with others used goods, such as cars, clothes, toys... However, it is important to stress that there is no proof of massive importation of ready-for-dumping e-waste in Nigeria. The good UEEE that finds its way into Nigeria enter through the paths of trade that I have delineated in this project.

The primary intent of this work is to describe, through first-hand experience, the perspective of traders in the marketplace. This will lead to a description of socio-economic realities that should help move the discussion past the technical. It will also cast light on the limits of UN categories as established by actors not actively involved in the business.

I refer particularly to the limits of the dichotomy of working vs not working condition, or repairable vs not repairable. Studying the trade of UEEE from a marketplace shows differences between the UN categorisation and *emic* categories from Computer Village. The latter translate the economic logics at work behind these flows. For example, *tested* and *untested* emic categories in Computer Village illustrate the economic non-sense for local traders to import computers in working condition only. These will be addressed in detail in the upcoming section, within the market and in the context of global trade. In fact, mainly discussing what is repairable or not repairable is context-dependent.

Complexifying the narrative

Distinguishing waste from non-waste is only one of the complexities characterising this field. Due to an increased attention over the years, debates have opened up into disciplines as different as geography, chemistry, environmental and social justice, design, public health, etc. Other features of the narrative discussed above have been challenged. And there are three aspects that are particularly relevant in relation to Computer Village, and to which, I believe Computer Village can add some knowledge.

First, the general assumption that UEEE and e-waste flow from the 'Global North' to the 'Global South' has been nuanced. The mapping of the UEEE and e-waste circulation has been complexified

¹⁷ Basel Convention Coordinating Centre for the African Region in Nigeria

and the flow 'Global North' to 'Global South' challenged (mainly by acknowledging the growing domestic production of countries considered importers and the importance of intra-regional movements (Lepawsky and McNabb 2010, 181). However, this increase in complexity does not truly call into question the fact that there is a correlation between global domestic product and the importation balance: the lower the GDP the higher the net e-waste importation.

Second, geographers have also been looking at global value chains (GVCs) from the e-waste perspective and have challenged the linearity of commodity value chains. With a following-the-thing approach in Bangladesh and in Canada, Lepawsky and Mather (2011) found goods and not waste; they suggested that the value of things should be discussed in a performative economy: it is what people do that gives value, not a predefined trajectory that establishes the end of life of an object, and, thus, its value. Lepawsky and Mather suggest the ongoingness of economic activity, in opposition to the beginning and ending of value chains as theorised by economists. Gregson et al. (2010) mobilized Appadurai and Kopytoff concepts of social life of things and biography of objects to expand the meaning of value in anthropological work which recognises different 'regimes of value' (Foster 2006). Mainly they used trash to press the idea that global production networks (GPNs) and global value chains (GVCs) theories need to be reviewed. "Theorizing thought waste has long pointed out that it is less an end point than a fulcrum point. Even items discarded in dumps may be brought back into circulation and given use and exchange value once more by scavenger (Reno 2009). Studies of waste and disposal point to 'rubbish' as the transient site of plural and indeterminate values, rather than 'an end point in a sequence of the declining value of an object'" (Gregson et al. 2010).

Pickren (2015) explored the direct link between waste and production. He did so mainly by referring to planned obsolescence (impacting the design of stuff) as one of the tools of capitalism to guarantee constant growth. Building on the idea of *ongoingness* of value, he introduced the concept of global destruction networks (GDNs) stressing how recycling economies disrupt the understanding of GVCs as value is created and captured in recycling and dismantling. In this way, he establishes a link between GPNs and GDNs.

My work follows this line of thinking. In fact, the phenomenon I describe here—the circulation of used computers—could be considered an illustration of Pickren's global destruction networks (GDNs). In fact, the GDNs concept, since I consider repairing and reuse as part of the recycling economy, along with the recycling of materials. As such, I understand (and use) the GDNs as including the whole trade I am about to describe. However, I do this for lack of better options, as destruction doesn't translate well the phenomenon of the global economy of used computers. My description of the reuse step shows how GPNs and GDNs are only both impacted by planned obsolesces but are indeed entangled.

In fact, via the repairing activates—essential to the reuse step—and more the key question of access to spare parts, GPNs and GDNs are completely entangled, in what I called the global networks of reuse, repair and refurbish (GRRRs). The GRRRs show the necessity of thinking beyond 'production' and 'destruction', and therefore beyond 'below' and 'above'.

Finally, the snowflake factor, named by economist Rivoli (2005), refers to heterogeneity of used goods. Unlike in the case of industrial production, used goods are unique; they require a different set of competences and structures in order to produce value. Rivoli (2005) explains how the flow of used stuff demands a large competence in selecting the good stuff, which is a game changer in the global neo-liberal economy. She suggests that the middleperson has a central position. With world-wide connections and personal relations, these middle players become key in business success because they have a unique position that "allows them to match snowflakes with customers. It is hard to see how big multinational companies could pull this off. Here, finally, is a global industry for the little guy" (Rivoli 2005, 178). Crang et al. (2013) built on this snowflake approach to rethink governance along the global commodity chains (that could be called networks).

The interests in studying Computer Village are multiple. This work is unique as it looks at e-waste from a marketplace and follows the trading routes, always keeping economic practices at its centre. The simple fact that stuff circulates via traders and businessmen, like the ones I have been working with, may help to overcome the still present misconception about e-waste circulation as linked to the idea of trafficking, which is burdened by an imagery of illegality and organised crime. Finally, it raises the question of the pertinence and adequacy of regulations and legislations.

Also, the marketplace as a starting point of observation acknowledges economic practices as part of the factors explaining the circulation of UEEE and e-waste from the recipients' points of view, beyond the environmental and/or ethical questions within the 'North-South' relations. Computer Village sheds light on two blind spots in current literature: the focus on markets (as opposed to traders) and the modes of reuse, which are ignored in favour of modes of breaking down and treating waste. In fact, as opposed to other consumer goods, the recycling of technical waste is mainly understood in terms of urban mining. The growth of the tech industry grows the need for precious metals used in the manufacturing of motherboards and micro-components. Obsolete devices become a source of gold, silver and other materials.

What I look at here are the larger components, also known as spare parts, not the micro-component, nor the precious material. Looking at recycling, as reuse via repairing, introduces the question of access to spare parts, skills and tools, thus emphasising reparability within a specific context. I believe

this brings interesting elements to the 'commodity vs waste' discussion. This particular aspect will be treated by discussing the different economic practices at work in Computer Village, exploring further how the economic model based on cooperation-competition between micro and medium enterprises is particularly adapted to a trade of snowflakes.

Finally, putting Computer Village within global trade networks adds empirical knowledge on the mapping of global trade in e-waste, making it less about directions and magnitude (Lepawsky and McNabb 2010), and more about categories, practices and discourses. Observing the flow of used computers from a marketplace and having the chance to proceed to real in-depth ethnographic work including actual participatory observation, forced the repairing activities to the forefront of this work. The access to spare parts, dramatically absent from the discussions around the commodity-waste tension explored on a global level, shows to what extent this marketplace is embedded in GPNs as well as in the global refurbishing network. Used computers (working or broken) circulate, but so do spare parts, and they move in different directions, and pass from one category to the other along networks of production, dismantling and refurbishing. Ethnographic details from Computer Village and the laptops trade and repair bring new elements, thus complexifying further the mapping as well as the non-linearity of the value chains and production networks.

So what?

This prelude about e-waste and UEEE aims to spell out the main points around which the e-waste narrative is built. It was necessary to make them explicit to distance myself from them but also to define the intersection between e-waste/UEEE and my study. This intersection is the reuse step. A step in the biography of electronics conceived in a quite linear way, acknowledged policies and regulation makers, yet still largely underexplored. My work comes to fill this gap.

I discuss three specific aspects inherent to UEEE and e-waste, important for my analyses and to which I will be adding new insights. The waste-commodity tension, central in the transition flow of used e-stuff; the impact of the global network of production (GPNs) and the global destruction networks (GDNs); and finally the snowflake-factor, which refers to the unicity of each object in used-stuff trades, unlike standardised factory products.

The snowflake element will be particularly relevant to understand the high-performance traders of used computers traders are pulling off—by handling the logistic challenge that comes with managing a mass of unstandardised stuff on a global level.

Finally, my work will bring new insights on the reuse step by looking into the questions of repairing. I will do this by exploring the question of access to spare parts. Interestingly enough these are as essential to repairing and refurbishing, than overlooked in the UEEE/e-waste literature. My findings on spare parts' circulation will bring new insights to the links between GPNs and GDNs. By showing how new, used, repaired and scrapped, are mixed in the same computer, I challenge the waste-commodity tension, and argue that the networks are indeed blended.

4. Getting over above & below

Computer Village is a global hub and an African market, thus it seemed obvious that it qualifies as a global hub 'from below'. To understand how Nigerian traders evolve in the global economy, I spontaneously turned towards the 'globalisation from below'. Actually, the concept came up unnoticed; it was *just obvious*, probably because it is abundantly sprinkled in the literature on transnational African traders in China and Chinese goods in Africa (Lee 2014; Lan 2017; Mohammad and Kernen 2016; Mathews, Ribeiro, and Vega 2012).

But if the concept made sense spontaneously, it soon started to feel inadequate. The questions of invisibility and marginalisation—with their list of synonyms: in the shadows, hidden, inconspicuous, underground, poor to poor, low-end, the *other* globalisation—seemed particularly problematic. The field had made it clear: *all of this* has been going on for a while; it concerns a very large number of people in a large number of countries. And *everybody* seems to be pretty much aware of it. The question became: invisible to whom? Unexpected by whom? Uncharted on which map? The fact that I didn't know about it is not enough to talk about the invisible. Yet, I was not the only one flirting with this Christopher Columbus complex.

More than 20 years after Portes (1997) first introduced 'globalisation from below', several publications still refer to it as invisible, underground, marginal, etc. I believe the researchers' self-pleasuring with the idea of digging, exploring and discovering partially explains the overrating of the unknown qualities of these activities¹⁸. The pleasure of unveiling is a legitimate drive—yet, overstating the invisibility of a social phenomenon may be more revealing of the researcher than the researched, and it may potentially harm the understanding of the phenomenon. I was disturbed by the choice of words Jedlowski and Röschenhaler (2017a, 4) stressed their consequences: "Most existing theories of globalisation that made an attempt at analysing 'South-South' interactions ended up labelling them with attributes such as 'minor,' 'from below', and 'alternative' [...]. The use of these attributes inevitably maintains the 'West' at the centre of the pictures, as the key referent for comparison. This has often caused a theoretical blindness toward the existence of other geometries of encounter, which cannot easily be labelled as 'minor' or 'hegemonic'." (2017a, p. 4).

¹⁸ Maybe in combination with the pressure for 'groundbreaking' and 'innovative' results, partially forced by the structure of the funding system, which, among other problems, leads to an inflation of these words.

With a brief literature review, I will discuss how, despite a discourse that one would like to be post-colonial, too often the use of 'globalisation from below' tends to reproduce a dichotomy in which the 'Global North' is clear, transparent, understandable, from 'above', while the rest of the world is unexpected, in the shadows, dark and from 'below'. In short, the reproduction of the dichotomy between a *normality* and a *difference*. As such, the 'globalisation from below' refers more to a world order with a well-known hierarchy, than to the complexity of the social and economic dynamics.

To discuss the limits and bias of the 'globalisation from below', I mobilise informality. Indeed, despite an air of novelty, the dichotomy 'above' and 'below' has many similarities with the older, and more discussed, formal-informal economy. I will therefore rely on some works on informality, particularly Fontaine and Weber (2010) and Ledeneva (2018), to push the questioning of the pertinence of the younger dichotomy. This will be done by discussing some similitudes between *up* and *down*, and by exposing how the differences between the two sides are sometimes due to the filter through which they are analysed.

In the last section, I will open, in two steps, the discussion about an alternative to the dichotomy. First, my work suggests that economic globalisation should be considered as one phenomenon with multiple manifestations (not two). Not only because economic globalisation takes different shapes, travels different routes, and generates multiple hubs, but because this phenomenon was adopted by different economic systems: different economic systems have adapted to the global scale, evolving into one diversified global system. Acknowledging this diversity, beside challenging the dichotomy, is also part of processes to overcome hierarchisation. Second, these different declinations are entangled and interwoven and together they constitute a co-dependent economic system.

Below as in poor, black and in the 'Global South'

Portes (1997) introduced 'globalisation from below' in an "attempt to give a theoretical form to the concept of transnational communities, as a less noticed but potentially potent counter to the more visible forms of globalisation" (1997, p.3). He suggested transnational communities as a working-class response to the globalisation of capitalist production (instead of international unions). They are described as neither here nor there, but sitting one leg on each side of the political borders. "The economic activities that sustain [them] are grounded in the differential of advantages created by state boundaries [as do] large global corporations, except that these enterprises emerge at the grassroots level and their activities are often informal." (Portes 1997, 5). He understood that globalisation was not a completely new phenomenon: what changed in the 1990s were its modalities and intensity. "By its very momentum, this process is likely to trigger various reactions giving rise to

countervailing structures" (1997, p.2). He saw the 'globalisation from below' as the globalisation by and for "common people." Despite the differences, mainly articulated around the fact that 'below' takes place in the informal sector, he stressed the continuity. He pointed out that it would be naïve to believe that such a massive phenomenon—as the one taking place with the acceleration and intensification of the global exchanges—would be a one-sided story. Everything is here: the mobility, the similarity with the 'above', the link with informality and the idea of resistance.

The idea of resistance in *below* mainly refers to the economic policies imposed by the neoliberal global transition and opposition to the Washington consensus. In fact, transnational activism and protest networks such as the Seattle battle, and anti-G8 and WEF demonstrations—also known as no-global or alter-global—and other actions sharing similar positions, *e.g.* open source software and independent media, are also referred to, in emic and etic terms, as 'globalisation from below' (Della Porta 2006) or 'information from below'.

Ribeiro (2009, 2012) in his concept of non-hegemonic globalisation builds a parallel between non-hegemonic political globalisation (from the massive street manifestations contesting global movements to the World Social Forum) and non-hegemonic economic globalisation, addressed as grassroots economic movements, exposed by case studies of informal transnational trade between Brazil, Argentina and Paraguay. I believe with this parallel that Ribeiro shows an ambiguity which floats on this concept (and that maybe reflects in the scholars' posture). On the one hand, he describes the anti-global street demonstrations and alter-globalisation Social Forum, both as a resistance against the neoliberal global capitalism. On the other hand, the actors of the informal trades he describes not only are not against capitalism "but on the contrary they want to participate in it to increase the flow of goods to poorest strata of the population" (Jedlowski and Röschenhaler 2017b, 6). I think this double posture is a kind of constant sliding between resistance and resilience (more or less romanticised) but that is in both situations built in opposition with the 'above'.

Tarrius (2002) picked up the 'globalisation from below' and developed his former works under this new label. For example, he discussed the neighbourhood Belsunce in Marseille—considered by politics as a hole of poverty—as an international economic hub counting its turnover in millions of euro. More generally, he outlined trading routes around the Mediterranean, in South-East Asia, the Middle East and on the African continent. The richness of his field of data is incontestable. He keeps Portes' notion of transnational communities—more flexible and transitory than classic immigration, and active in a large number of entrepreneurial activities—but his optics are different. He makes a generous use of words and expressions such as new nomads, errancy, ants, underground, surprising, etc. to refer to transnational businessmen and their activities with quite a heavy rhetoric of alterity.

To an extent, he singularises (*exoticises*) the 'globalisation from below'. Finally, by addressing the 'globalisation from below', as "poor to poor", he establishes a link between 'globalisation from below' and the poverty (Tarrius 2014, 2015).

The 'globalisation from below' would be a globalisation by the 'poor for the poor', where the poor are experts of their own business. This agency approach is conflicted by a heavy exploitation filter: by accessing the global economy, "the poor become a source of income, no longer only via the exploitation of their labour but [...] also by the consumption of goods made for them and more importantly marketed by them." (Tarrius 2002). He points among the origins of the 'globalisation from the below' the interests of the large South-East Asian companies eager to conquer the market of the poor (Tarrius 2014). Denouncing the exploitation feature of the consumption society and capitalist globalisation is important. However, boxing the entrepreneurial activities carried out by *the poor* for the *poor* as exploitation is problematic. One, it suggests that the poor can *only* be exploited; or at least it oversizes their exploitable side, while their entrepreneurial skills, generations-old trading networks or the creation of new economic space and routes are (ironically) made invisible. Second, it suggests that *only* the poor are exploited or, at least, it makes invisible the continuity between consumers. It is the characteristic of a society of consumption that we are all consumers. I am not implying that it all goes on the same level, but when establishing the link between consumption and exploitation, to think of the continuity between consumers of different horizons may be useful to avoid arbitrary divisions between *us* and *them*.

Geographers Choplin and Pliez (2018), whose work builds on Tarrius', discusses the GFB, stressing its spatial dimension. In their book "La mondialisation des pauvres: loin de Wall Street et Davos" (Globalisation of the poor, far from Davos and Wall Street) they claim the need to "desoccidentaliser la pensée" (de-westernize the thinking), to shift the gaze to spaces considered marginal and move past a binary vision of the world. To do so, they draw a map of the global urban hubs that focus Nord Africa (joining Tarrius' works on the Mediterranean) and West Africa, as well as South Asia, referring to the seminal role of China in 'globalisation from below', while adding other important centres, such as Bangkok, Kuala Lumpur, and Jakarta¹⁹. In doing so, they detail the map of the global economy, but also contribute to reinforcing the link between 'Global South' and 'globalisation from below'.

The chapter on African globalisation may be the best example of the difficulties in overcoming established narratives. While discussing the cement trade in West Africa with a "follow the thing"

¹⁹ Latin American, as well as Southern and East Africa—with their direct link to South-East Asia—are not in the picture.

approach, they describe the "tribulations of a bag of cement". In this context Aliko Dangote, CEO of Dangote Cement PLC, whose share' value is daily reported in the Wall Street Journal and who has made it to the Forbes' billionaire list over the last decade (net worth of 11.3 billion in USD) is introduced as "well known in the region". The authors mention the fact that Dangote's worth is counted in billions, while illustrating his commercial activities with an example of a purchase of 1000 trucks that benefitted from the exchange-rate advantage and a bonus of 10 trucks offered by the Chinese supplier. The discrepancy between 1000 trucks and 11 billion dollars calls for questions. What is Dangote doing under the umbrella of the globalisation of the poor? He is far from poor, and surely closer to Wall Street and Davos than (most) social scientists. This points at the limits of the overlapping of poor, non-Western territory and the 'globalisation from below'²⁰.

Finally, Mathews and Vega (2012) give one of the largest definitions of the 'globalisation from below': it is globalisation as experienced by most of the world's people. It can be defined as the transitional flow of people and goods involving relatively small amounts of capital and informal, often semi-legal or illegal transactions, often associated with 'the developing world' but in fact apparent across the globe." (2012, p. 1). This is a simple definition that tries to avoid the overlap between the GFB and the 'Global South', the poor, or illegality, but that nevertheless conceals a few problematic aspects. For example, the idea that GFB is experienced by most of the people may be complicated. The question would be: experienced how? As businessperson, as wagedworker of companies trading on the international level, or as a consumer? How to count how many people are involved in which globalisation?

Below as the continuity of informality

The question of informality is central in the 'globalisation from below'. Portes introduced it as the main aspect to differentiate 'above' from 'below'. For Ribeiro (2012), "globalisation from below could also be thought as 'global informal economy'. [However, this would] obscure an essential distinction that the expression 'from below' allows to make clear: the main difference between 'below' and 'above' is a power difference." (2012, 223). In the introduction to the same collection, Matthew and Vega (2012), while admitting to owing much to studies on informality, insist on the need for a more global approach, justifying the choice of GFB over informal economy because "the term 'informal

²⁰ There is no reference to the fact that he is member of a very connected Nigerian bourgeoisie. His great grandfather, who died as the richest West African, was into local products trading (kola and ground nuts), as well as European goods in West Africa while supplying British companies with raw material. The Dangote story may deserve to be studied in a wider context of long-distance trade in West Africa, and generations of trading in the transnational economic space.

economy' is often used in such a way as to implicitly assume separate national economies, each with their own formal and informal sectors."(Mathews and Vega 2012, 3).

Despite these statements of distinction, it seems to me that the dichotomy 'globalisation from above' and 'from below', has much in common with the one of informal and formal economy. As such the younger GFB could benefit from hindsight that fifty years of studies have given to informality, since Hart (1973) first pointed out that economic activities are what people do and not necessarily only what is on paper.

To answer the question of national based economy and the power dynamics, the beautiful "Global Encyclopaedia of Informality" edited by Ledeneva (2018) makes it indisputable: informal practices cross national borders in a very fluid way, while being context-sensitive; there is no need of a nation-state anchor. Beside this specific point, three aspects, in particular, seem to require urgent tackling: the geographic and population question; the aspect of quantification; and the legal aspect, including the relation to governments.

One. 'Below' is actually 'South' and 'poor'. Despite an explicit will to consider the global behind the fraction 'North-South' as well as the will to overcome a Western centred gaze, GFB remains linked the 'Global South'. For example, the fact that Dangote Industries Ltd, the cement and sugar giant listed on the stock exchange, is discussed within the 'globalisation from below' is clear evidence that 'above' and 'below' are matters of different parts of the world, rather than capital size or proximity to the main global institutions. On a more general level, all the activities of Nigerians in China seem to fall under label GFB, with little or no care for the volume of the turnover, the capital size, the status of the businesspeople, the regularity of trade. By the same logic, the rare incursions within 'Global North' of 'globalisation from below' mainly deals with migrants, suggesting that 'globalisation from below' is a matter of regions *and* race, at least for economic issues.

When at first discussed, informality described economic activities taking place outside regulations in the "Third World urban poor" (Hart 1973). It had then become central in the understanding of economics dynamics on the African continent and other "developing areas"²¹. The concept has since travelled well into the 'Global North', and today's informality crosses over areas and economic contexts. Assumptions about informality being associated with poverty, underdevelopment, 'Global South', and oppressive (economic and political) regimes have finally been questioned (Ledeneva

²¹ Also due to the fact that informality has largely been adopted by international intuitions and development studies.

2018; Fontaine and Weber 2010). Informality is now understood as “ways of getting things done” as Ledeneva gracefully put it. And it takes place everywhere.

Two. What can numbers tell? Authors often express the idea that line between ‘below’ and ‘above’ is made of numbers. The former is difficult to count, to turn into statistics, as it is hidden in the shadows and off the books. The latter, on the other hand, can be described by statistics, companies’ sales figures, national GDPs, and other economic indicators. Authors writing on GFB often open their argument by establishing how the globalisation (from above) is *known*: “The phenomenon of globalisation is omnipresent and obvious, well-documented, mapped, and quantified when it comes to economic exchanges. . .” (Choplin and Pliez 2015, 1). And how “globalisation from below, *by definition*, does not provide such data; it cannot be measured by economic statistics because there are no reliable statistics.” (Mathews, Ribeiro, and Vega 2012, 5).

This opposition is based on two assumptions, two mutually reinforcing biases. On the one hand, concerning non-quantifiable aspect of the ‘globalisation from below’, one could argue that there are numbers: estimations maybe, nevertheless numbers.

On a micro level, for instance, I could mention that economic activities exposed in this work involve bookkeeping; it may escape the state but it in fact exists. On the statistic level there are several registered companies in Computer Village, number of registered importers, and registered clearing agents. On a macro level, there are the numbers of passengers and containers moving in and out the ports and airports of the African continent. The general turnovers of these transport infrastructure also include importations made by the Nigerian traders in China and other are actors of the transnational trade and who are not involved in multinational companies. For example, Grimaldi has figures on the annual number of *roro* cars. The point is, as it has been argued for the informal economy (Fontaine and Weber 2010), that the ‘globalisation from below’ can also be translated into numbers, and these numbers are part of the whole globalisation.

To turn these (estimated) numbers into non-quantifiable—and by extension invisible—is not only a shortcut, it is a shortcut that rests on preconceived ideas. This goes hand in hand with the second bias. The narrative of visibility, countability, transparency of the ‘above’ side. Stating that the ‘globalisation from above’ is “well-known”, “well-documented”, *obvious* may be as much as a stretch as the invisibility of the ‘below’. It is *obviously* happening, but if ‘globalisation from above’ is the one of large multinationals, quantification and transparency are more a wish than a fact.

Thirty years of outsourcing have led to such complex and constantly changing production networks that the firms themselves do not have a clear picture of who produces what and where (Tsing 2009). The well-known routs and nods of the 'globalisation from above' may not be as clear as suggested. The same applies to their numbers. The extreme complexification of the production networks goes hand in hand with the complexification of the global circulation of capital, aiming to a maximisation of profit also via creative accountancy and as a tax optimisation, which make a large use of tax havens (Tsing 2009) (Tsing 2009). These practices brought more opacity than clearness to the 'globalisation from above's' figures. The quantifiable vs non-quantifiable attributes had already been challenged concerning the formal and informal economy and the pertinence of the need to attenuate the rigidity of such division seems even more urgent when it comes to the global economy. Besides stressing the numbers of the 'below', one should also stress how the neoliberal rush has made the quantifiable, and well-known of the top opaque and impenetrable.

Three. Licit-illicit, legal-illegal and the relation to governments. Along with production outsourcing, tax optimisation and creative accounting are part of the general neoliberal approach preaching and pressing for the state to shrink out from global affairs. The relation to the state and laws constitutes the third tension I want to discuss here. "Because globalisation from below is typically untaxed, it deprives governments of incomes that they seek. Thus, the governments almost as a rule seek to turn globalisation from below into globalisation from above" (Mathews, Ribeiro, and Vega 2012, 10). However, when it comes to multinational companies, avoiding taxation is a central part of the game, and one of the main activities of the "battalions of lawyers" that are part of the 'globalisation from above'. More generally, the extensive use of fiscal paradises calls into question the legality of the activities of the globalisation from above.

When informality came to the 'Global North', illegal activities (cheating, petty crime, black employment) were introduced into the concept (Ledeneva 2018), a translation of the understanding of the informal sector as anything happening without the state overview. A broad definition that led to put in the same basket activities as different as extortions, babysitting services from the neighbour or transnational trade of used RAM sticks. This diversity has somehow been tackled with the introduction of the distinction between illicit and illegal, which didn't prevent the questioning of the utility of the concept altogether (Fontaine and Weber 2010).

GFB suffers from a similar mix up. For example, Tarrius links the genesis of the global market "poor to poor" as a result of the conjunction of interests of the poor transnational migrants, and the ones of the large South-East Asian companies eager to conquer the market of the poor and the international criminal world—what he calls the Russian-Turkish-Italian criminal organisation (les

milieux)—eager to money-launder via transnational migrants carrying on entrepreneurial activities. These analyses, besides shifting the poor for the poor from agency to muppets, also tends to elude the fact that money laundering is done through a multitude of economic activities, including the most formal ones, from real estate to banal front shops. After all, the point of money laundry is to shift illegal money into the formal economic circuit. Money issued from illegal activities is recycled via official channels, too, with the central role of the banking system, a major actor of the 'globalisation from above'.

Riberio also mentioned the presence of illegal global activities in the 'globalisation from below', and he distinguished two different sets of GFB: the global illicit economies and the global illegal economies. The former is what he addresses as "the real economic globalisation from below" and refers to informal but legal activities taking place outside the state control. The second refers to money-laundering and mafia-like activities (Ribeiro 2012, 2009). In a way he clearly joins the illicit-illegal distinction already operated in the context of informality. Combining under the same umbrella legal and illegal, licit and illicit activities can be the results of seeking a large definition aiming to cover the diversity of the case studies, situations, and contexts that fall under the GFB. However how it has been said for informality, the risk is to participate in perpetuating reductionist assumptions (Ledeneva 2018) and loose theoretical utility, or at least, as for informality, in becoming a problematic concept (Fontaine and Weber 2010).

The examples brought up here have the goal to spell out some limits of the dichotomy, simply by showing how the attributes' distribution may not be as clear and schematic as pretended. It is useful to observe how visibility, transparency, quantifiability and legality are overrated when it comes to the 'above' and underrated when it comes to the 'below'; while illegality and opacity tend to be reduced to exceptions (unfortunate malfunctioning) in the 'above', they become essential characteristics of the 'below'. Some qualities attributed to one and some qualities denied to the other produces limited understanding and participates in the perpetuation of a hierarchical world system.

Finally, this divide may also be magnified by science, since the two globalisations (and the same happened for the formal-informal dichotomy), still are perceived as the realm of different disciplines: with economists being the experts of the formal one while the informal one, and in extension the 'globalisation from below', is the matter of anthropology, sociology and geographers. "Because globalisation from below is below the radar of the state, and of multinational institutions, it is also beyond the reach of their apparatuses of economic measurement. Formal economist cannot know globalisation from below from their figures, they can only guess," stressing how "the disembodied economic approach applied to the strategies of multinational or transnational firms is rarely

operational when it comes to dealing with 'other world economies'" (Mathews and Vega 2012, 7). I don't doubt the invaluable contributions of these disciplines. However, in this case they may have participated in a process of oversizing vulnerability and *undersizing* economics. Sidelining the economic aspects of the traders to the migrant status participate to reproduce the victimisation and a "normative ambivalence of double standards" (Ledeneva 2018). A distinction that clearly appears in the words used to describe social actors and their activities. When businesspeople become migrants, ants, or nomads, it is easier to shift into analyses reproducing the narrative of coping and surviving, in turn participating to keep/put these economic activities in the shadow, in the dark, in the underground, to make them *different*. I try to write (describe) these activities with business terms, an exercise that seems trivial, but it showed me how easy it is to fall into the temptation of "survivor" lingo, where the entrepreneur becomes a hustler. It is important to describe the activity in question, with an economic vocabulary rather than a narrative loaded with pathos that emphasises the distance, the difference, the other, the shadows, the underground, the surviving. The language participates in the ghettoizing of these global economic activities.

The fact that qualitative micro studies are adapted to the subject does not mean that other approaches should be forgotten. On the contrary, the GFB also deserves a disembodied economic approach, or at least a gaze that point at the economic skills and rationality over the surviving/coping strategies. Conversely, disembodied multinational companies benefit qualitative studies. To balance the narrative is a double movement: as it is important to *elevate* the 'globalisation from below' by injecting economic aspects, it is capital to *lower* the 'globalisation from above'. In order to do so—and this is not what my work is about—it is important to cast light on the shadows hunting the above. Interpersonal relations, improvisation and approximation are part of business, as well as precarity, corruption, and errors. It is important to study up and explore what is going off books and under the table of the 'above' global economy. (Nordstrom 2000, 2007)

Rebalancing the narratives, overcoming the dichotomy

As with other dichotomies, 'above' and 'below' are built in opposition. Unlike other dichotomies, the very expression 'globalisation from below' has the purpose to empathize power dynamics behind such a dichotomy (Ribeiro 2012, 2009). Unfortunately, it seems to me that the use of this concept has participated in digging the gap. The 'above' and 'below' are treated as two different globalisations, while the actual power dynamics that intertwine them are not part of the analyses.

Unveiling underlying power dynamics is at the very core of social sciences' purposes. In the case of GFB, it has often become stressing the lack of power. For example, a large number of scholars on African traders in China focus on migration issues: before anything else African traders in China are

migrants, and mainly vulnerable migrants. “African migrant’s vulnerable status in the global value chain” (Lan 2017, 80) is often a central explanatory factor of the church they attend, the marriage they get in and, of course, their commercial practices. These latter are so often described by the lack of capital, the disadvantage in facing the police and the cutthroat survival-oriented competition.

The vulnerability of social actors is not to be denied, hidden or reduced. However, when it is used as a central piece of analyses, it has different problematic consequences. First, it participates to reproduce the kind of victimising gaze largely criticised in different areas of research. Victimisation, besides being deplorable, is an obstacle to the possibility of understanding economic systems. In fact, the actions and behaviours of the actors are too often understood in terms of out-of-need reactions, while specific analyses and understanding of the economic systems at work remain vague. On a more general level, it is a missed opportunity to bring economic anthropology from the African markets, where it was born, to the global economy and try to understand diversity on the global level. In the case of UEEE, particularly touched by the victimising narrative, focusing on the economic aspect seemed important and interesting. As such, to observe the economic dynamics within Computer Village, a marketplace, helped me to see them played out on a global level. This was a rich insight, which allowed me to understand certain practices as rational economic practices, rooted in their cultural background.

The most vulnerable people as well as the most empowered evolve in one global economy, constituted by different economic systems at work. Bringing the economy back into the GFB will normalise the activities of the social actors at work here, and, at the same time, dethrone the activities of the big companies from their central place. It is a way to gain awareness of the real complexity and diversity that constitute economic exchanges on a global scale.

The need to overcome this dichotomy, finally, also revolves around the fact that it tends to make the middle strata of globalisation invisible. This revolves around some very simple observations that emerged in China.

The visit to the Guangzhou Export fair—which accounts for a third of all the annual Chinese exports (Gilles, 2015) opened my eyes to what could be called globalisation in the middle. The fair’s visitors are businesspeople, mainly from the ‘Global North’, but they are not multinational companies. They are entrepreneurs investing in bulbs, plumbing pipes, solar panels, clothes or whatever. They are the wide SMEs environment that constitutes a large part of the economy sector also in the ‘Global North’. They buy Chinese goods to carry on the family business, supply their shops or launch a start-up. The neck hammock that allowed me to finish this dissertation without destroying my cervical spine was

designed by four young French osteopaths, who had it produced in China. Are they below? In the middle? Above? What makes the differences among these? The size of the capital of investment? Or the tax paying? The region of the world? The turnovers? The dichotomy 'above' and 'below', seems to hide a large part of the economy.

In the same vein, when looking at globalisation via the consumer, things may be a little more overlapped. The consumers of the cheap goods traded within what has been addressed as 'globalisation from below' also daily consume stuff from above: if Nigerians importing substandard goods from China are central players in the national economy (as I hope to prove in this work), in the same way is Nestle, solidly implanted in Nigeria since 1961. If Chinese (cheap) goods are the main consumer item, Maggi cube²² has become a basic ingredient of many traditional Nigerian dishes (and more generally African cuisine). The point is, consumers experience globalisation in its different variation. And so do the traders, who import stuff from China, Europe and USA using China Shipping, Grimaldi RORO lines, or Mediterranean Shipping Company, clearly actors of the 'globalisation from above'. And in the same way, consumers (and traders) in the 'Global North' have been evolving in a wider range of global trades than the ones of the 'globalisation from above'—including global cocaine trade that some authors may label under 'globalisation from below'.

The diversity of situations and the multiplicity of factors intervening in the defining global economic activity points to the necessity of overcoming the 'above' and 'below' dichotomy. Not only is the dichotomy a reductionist analytical tool, but the continuum may have its limits. The diversity of attributes (capital size, good qualities, tax payment, etc) and the general complexification of trading networks make it difficult to draw the lists of attributes of the two extremes of the continuum.

Somehow, it seems that the continuity between 'above' and 'below' expressed by Portes has been lost. From the globalisation for "common people", in opposition to the big multinational corporations, 'globalisation from below' shifted toward the globalisation of the poor, the black, and those living in the 'Global South'. It is as if scholars kept discovering that, besides big multinational companies, people also take part in the globalisation. This rediscovering seems done, by stressing, again and again, the opposition to 'globalisation from above', which also has been crystallised, becoming a synonym of multinational corporations, international financial institutions such as WTO, as well as international organisations such as the World Bank.

²² Maggi company was founded in Switzerland in 1889 and acquired by Nestlé in 1947; it produces mainly seasoning and instant soups.

This essentialisation of both 'above' and 'below' globalisations, may also be explained that we are dealing with a concept from the 1990s. The late 1990s to the early 2000s were marked by globalisation and strong no-/alter global movements. This a tension materialised, among other things, in the opposition to the World Economic Forum (WEF), Davos, 'Global North' vs World Social Forum, Porto Alegre, 'Global South'. But this may not be pertinent to understand today's situation.

The alternative: diversity & entanglement

Despite discussing the limits of the dichotomy, and those of the concept of 'globalisation from below', I don't have a proper alternative to offer. However, my work participates in a move towards an understanding of global economy in its diversity. Overcoming the dichotomy allows for globalisation as experienced and appropriated by different groups, in different ways.

Along with the diversity, the question that I have explored concerns the interaction between these different global economic systems. The study of Computer Village and the global networks it is embedded into, shows the necessity of thinking of diversity in terms of continuity, complementarity and even co-dependency, trying to think of the global economy as a mixed model system, in which each part depends on and completes the other. A mixed-modelled and co-dependent globalisation.

To think globalisation in its diversity, the first step is to remember that such a massive phenomenon necessarily affects everybody. The acceleration and super-densification of exchanges due to changes in communication and transportation concerns everybody (Appadurai 2015; Portes 1997) and not only in terms of control, exploitation and damages of neoliberalism (Harvey 2010).

The diversity I want to propose here demands thinking about globalisation in the same way that economic anthropology and economic sociology have been thinking about economics: showing its diversity and making clear that market economy is one option among many to handle economics. As neoliberalism is one way to handle globalisation (Duffy and Weber 2007; Weber 2000).

The strength of this work is to have started the observation of a global trade within a market. The commercial dynamics within Computer Village could be understood also through the lens of ethnic narratives. Traveling to China, aware of the cooperative competitiveness of Igbo markets (Meagher 2010), made it easier to understand the activities of Nigerian traders in China as the manifestation, on a global level, of an economic system, instead of a coping and surviving strategy.

This, I believe, is an example of how African economics studies can come to feed the argument in favour of overcoming the above/below dichotomy and move toward an economic global diversity in

a certain way, following the J. Guyer and Hansen (2001) call for understanding African markets today. They argue that international narrative lacked an understanding of African economy as other than doomed, *de facto* limiting the possibility to understand the importance of markets in the economy. They call for analyses doing justice to this kind of “markets [that] are pervasive, but not classically capitalist. Where the formal, financial and governmental institutions have very little impact [...] and where there is a correspondingly high degree of local institutions inventiveness, using models from a variety of sources, including tradition and religion” (J. Guyer and Hansen 2001, 198). I try to describe some of Computer Village’s institutions and dynamics, mobilising Igbo narratives rooted into religion and social structures. To then discuss how this “institutional inventiveness” also evolves on a global level, introducing the idea of economic globalisation diversity.

I understand this diversity as akin to Diouf’s vernacular cosmopolitanism (Diouf 2000). Thanks to his description of the Murid brotherhood diaspora handling global trade via a highly hierarchical structure built on shared religious beliefs, Diouf introduces diversity within the global economy. And he helps thinking “the possibility of the emergence of maternities that are not, properly speaking, capitalist, but are, at the most, non-Western versions of modalities of dealing with acquisition of wealth” (Diouf 2000, 680) outside the logic of domination. I join Diouf’s statement about “the Murid locality does not seek to annex the global, but rather, to take advantage of it” (Diouf 2000, 682). In the same way African traders are in China—as migrants or cultural bridges (Bodomo 2010)—simply because China is where stuff is made, as confirmed by the millions of visitors attending the Guangzhou fair.

The observation and analyses I offer in this work come as a suggestion of another non-Western version of trade. The differences between the Murids’ and the Igbos’ global trade structure reinforce the relevance of thinking economic globalisation in its cultural diversity. I understand these differences as ways to appropriate globalisation, as business is carried out with different approaches, based on different cultural structures, but moving along the same reality of a shrinking planet. Hopefully the more diversity is acknowledged, the more possible it will be to dethrone the one form holding the role of the reference.

Entanglement and co-dependency

Along with the fact that economic globalisation exists in culturally diverse forms, my work also discusses several interactions between these. As mentioned before, despite the central role of power dynamics in the above/below dichotomy, the actual articulations between above and ‘below’ are rarely discussed. I have no ambition to understand the whole complexity of such interactions.

However, the UEEE and some specificities of the IT circulation are useful cases in discussing some links in the different path of globalisation.

There is a co-dependency. When it comes to Computer Village and the trade of used electronics, the first thought seems obvious: the used electronics traders and importers depend on the generation of waste and on the overproduction of global IT producers. However, the diversity of goods present in the market also shows the extreme complexity of the global production networks, which, as my work discusses, are mixing up with the global destruction networks, in economic spaces such as Computer Village, but also in Guangzhou before heading to other economic hubs.

Moreover, Computer Villages (itself a mixed of formal, informal, above and below) in addition to creating economic activities, played a central role in the reduction of the digital gap, by making IT, digital literacy and IT-related skills available, with a series of consequences. First, as the history of Computer Village suggests, this market played a central and important role in the national economy, and this is different ways: from supplying accessible *cloned* computers to schools, local governments, and SME in Lagos state, to contributing, with taxes or executing mandates, to the public life, or simply by being a central *hub* in mobile phones distribution.

On a more general level—and not directly demonstrated by my work—one can think that Google, which opened a headquarters in Lagos, and Mark Zuckerberg, who was very excited by the energy of the startup's ecosystem in Lagos that he visited in 2016 (and in which he has been investing since²³), are benefitting of the work of Igbos traders. Computer Village opened the way, brought and gathered the IT equipment, needed to develop the skills and knowledge, that big IT companies can now use today to enter the massive Nigerian market²⁴.

In the same order of idea, informal discussions with Anouk Batard, whose research focuses on the massive Nigerian movie industry, also allowed me see parallels between Nollywood and Computer Village rises in the 1990s and early 2000s, suggesting that access to IT may also have fostered other industries, such as music and movies, which have “become world-renowned brands” (Batard 2019), and that today, are streamed by Netflix.

²³ The Punch “Mark Zuckerberg in Lagos: ‘I’m excited to learn as much as I can’” [30.08.2016]
URL: <http://punchng.com/facebook-founder-arrives-lagos/>

²⁴ The most striking example would probably be the dependence of those sitting in stimulating open space in the Silicon Valley on the work of children taking the risks of climbing down informal mines to dig up cobalt and coltan, which are necessary to materialize the ideas of Harvard's drops outs.

Other examples come to mind. Indymedia, born during the “Battle of Seattle”, has been a pillar of the neo-global and alter-global movements against the neo-liberal policies. It was the first platform that allowed anyone to upload stories, photos and videos in live feed to a website—what today seems a banality and has modified communication codes from politics to economics. It had been created to counter the media narrative on the political activism of the no/anti-global, too often described by their violence, instead of their argument groups. It was called ‘information from below’ and it is at the root of social media. The system created for activism to challenge free trade capitalism is today used by Facebook and Twitter (Sear 2019)²⁵.

So what?

I articulated this discussion on the ‘globalisation from below’ at first by showing the bias of such a concept, as well as its dangers. In fact, despite the ‘globalisation from below’ would like to be post-colonial it tends to reproduce a dichotomy in which the ‘West’ is clear, transparent, understandable, and ‘above’, while the rest is unexpected, in the shadow, dark and ‘below’. This exoticises African economies, reinforcing their coping aspect, while invisibilising their viable trading practices and economic success.

In short, ‘globalisation from below’ reproduces a dichotomy between a *normality* and a *difference*, more akin to a too well-known world order with a well-known hierarchy social order, than to the complexity of the social and economic dynamics. By relying on the debate around the informality, which questions the dichotomy by showing the relativity of the attributes, I question the relevance of the ‘above’ and ‘below’ dichotomies. Opening the way for an alternative. I suggest globalisation should first be understood in its diversity, and then we should address the links between these. Looking at the e-waste and UEEE circulations, particularly stressing on the reuse step, I will show that not only can ‘globalisation from below’ be dangerous, but most important, what is considered ‘below’ and is considered ‘above’ are indeed co-dependent, and de facto entangled.

Throughout this work, I build the argument of entangled globalisations by arguing that the economic diversity that has been discussed since the very beginning of anthropology also exists on a global scale. I do this by arguing that the economic practices in Computer Village are *also* the manifestation of a system of value with specific norms; then by showing that this system also deploys on a global

²⁵ For more information on media and no-global movements listen to the podcast “Limoni. Episode 7: La giustizia” issued for the 20th anniversary of the G8 in Genova and, among other abuses, the death of Carlo Giuliani (Camilli 2021).

scale—among Nigerians in China. And finally showing how these economic networks are entangled with the ones considered ‘from above’: all of which demonstrates the entanglement of globalisations.

5. No food for lazy man

To my mind, there was only one way to do things: observant participation. Why? First, because it is fun. I am always grateful to this discipline for being a legitimate reason to be in situations with people and having experiences otherwise out of reach. A PhD being a rare opportunity for intense fieldwork, observant participation was an obligation and entrenched in my personal moral code.

The most obvious thing to do in a market is to buy and sell. In short, shifting between observant participation to participatory observation, I had been exporting UEEE from Switzerland, importing them in Nigeria, and selling them in Lagos, mainly in Computer Village. Between 2011 and 2013, each time I travelled to Nigeria, I would ship a used car filled with used computers (and other used stuff) to Lagos, for a total of 5 cars and hundreds of computers, accessories, cables, and keyboards. In 2014, I moved to Lagos, where I lived for 2 years. I shipped my last car, a Golf GT3 for personal use, packed with my own stuff. That was my last car, partially because being based in Nigeria it was difficult to collect stuff in Switzerland to send, but also because the importation activity was going through some changes. First, with a protectionist rhetoric, the government drastically increased the tariff on imported used cars²⁶. Second, the price of a barrel of oil dropped, leading to a sharp rise of the exchange rate between the Naira and US Dollar. The importing industry suffered greatly. Third, on a personal level, I lacked the strength for continuous hustle. However, after visiting Switzerland I would always come back to Nigeria carrying a second piece of luggage: 23 kg of hard-drives and memory stick RAM. This was the perfect UEEE merchandise: quite easy to find in the 'Global North', small and easy to transport, and hotcakes in the *fairly-used* business. I did it because though the business is exhausting, it is addictive and very useful in the field, and also to respond to the constant inquiries from the traders calling and messaging me, asking about my future trips to Nigeria and future selling. I used to understand those questions as pressure: they are expecting me to bring something, so I should bring something. With time, I came to understand it was probably just a part of the circulation of information.

I had made up my mind about shipping and selling stuff to Lagos before I was sure I could carry out research in Lagos. After all, my African experience was barely more than one month long, during which I was constantly warned about how dangerous the city was. Besides fun, the first reason to do all this, was to find out if it was possible to be an unchaperoned white woman *and* feel free, safe and

²⁶ In 2014 the federal government, raised the duty, bring the whole clearance cost for a used car from 200'000 Naira, to 400'000 Naira, making the importation of used cars, and buses much less attractive.

happy in Lagos. For me, being able to move around alone was a *sine qua non*, and it wasn't obvious it would be possible.

Besides fun and feasibility checks, there was a personal reason behind this choice. I needed to actually have something to do in the field. One of the difficulties of our discipline is the uncomfortable task of establishing an essentially unfair exchange. As usual Howard Becker put it: "[social scientists] want something for nothing, something no one ordinarily asks for or has any right to expect: free access to people's surroundings and daily life, honest answers to (let's face it) questions so intrusive many wouldn't answer even if asked by close friends." (Becker 2014). Adding: "we provide nothing of value in return [...]. We should expect, sometimes, to be greeted with suspicion, even rudeness, and not be surprised or hurt when we're treated as not very well-bred intruders. It's just what we are." (Becker 2014, online magazine). Getting into business was easier, despite the (huge) difficulties, than the lack of mutual interest and the discomfort of the unbalanced exchange. A personal discomfort that probably reflects a problematic position of social sciences on a more general level. This discomfort is actually a healthy reminder that too often scientists are the ones benefiting the most from these unfair exchanges—advancement of career, peer-recognition, and, maybe on a more general level, science for the love of it, with most likely none or very little in return for people we work with²⁷.

Besides fun, feasibility and dealing with social science "entitlement", getting into business proved interesting for reasons specifically related to the situation and the topic.

One, I was dealing with businessmen. They had limited time and interest for my questions and curiosity. Traders in the market ranged from rich businessmen sitting in large, air-conditioned offices to hustlers hawking a few memory sticks in the street; illiterate peddlers and university educated engineers, strugglers and *ogas* were all out to make money. And none of them were too keen to tell me neither about business or used electronics importation. In fact, I did a few interviews before my first shipping arrived, but I was mainly fed general thoughts about the unfairness of the world, the

²⁷This aspect actually joins the wider view I have on academic work: we probably work just for our own pleasure and personal interest. It is a career, with pleasure and passionate decisions. The point is (it is personal) we do it for us and not for the people we study. I believe, that if changing the narratives was really considered as important as we claim in our project proposals, we would probably put much more energy in both lobbying and science communication. But we mainly write for our peers, and the priority is satisfying the needs of the research more than getting our results into the real world. How can we be talking about sharing the story when we address a very closed and small group of people? Our people. People who do not seem to have the power (or the will) to get out of their comfort zone to lobby politically and economically?

greatness of Nigerian traders in sped-up interviews²⁸. Obviously, there are people who really supported me, and with whom I became close even without any trading²⁹. However, things really changed after I sold my first 50 computers: I became more interesting. Traders would answer my calls, and start calling me to ask about me, my family and ... my future deals. Everybody knew my main activity was the research, but sure enough it wasn't for my research needs they were calling me back, picking up my calls, looking for information. The interest in my goods became an interest for my research, and in some cases an interest in my friendship. Business helped me to gain some of their respect. As Ifeanyi, a seller of desktops spare parts, told me some time further into the research, after I sold him some IBM-Lenovo laptops: "It's when I saw you counting the Nigerian money that I thought you were interesting". And I was glad I spent time at home training to count thick bundles of money, as I had seen people in the market doing.

Second, as mentioned before, the UEEE importation takes place in a grey area, with potentially illegal aspects related to the Basel Convention. I did not consider this a serious obstacle to access the fieldwork until I visited the BCCC Africa, hosted by the University of Ibadan, where, years into the fieldwork, I was warned not go to Computer Village talking about *e-waste* because they would lynch me. Beside the questionable hyperbole, this warning says something about the gap between researchers on UEEE and traders in UEEE. During my years in the field, I observed how e-waste issues led to projects carried out by national and international institutions. For example, the Person in Port Project, led by the BCCC, brought under the same umbrella international organizations—such as the UN and US Environmental Protection Authorities, as well as the German Federal Ministry for Economic Cooperation and Development (BMZ)—and Nigerians agencies, in particular, the Federal Ministry of Environment, the Nigerian Customs Service (NCS) and the Nigerian Ports Authority (NPA). When I discussed these projects in the market, I was struck by how far the traders were from these questions. They would answer with scepticism, for example raising doubts on goods' toxicity or dangers: "How is this computer dangerous?". But mainly the gap between the UEEE studies and the UEEE traders resonated with the general narrative of total distrust in the authorities and the government, which is pretty common in Nigeria. Questions and information about the e-waste and

²⁸ It was suggested that I conduct a survey, which I did. I prepared a questionnaire and gave it out to different traders. It probably helped me to learn to move around in the market and overcome the shyness and the feeling of being an intruder.

²⁹ Obviously, I made my first steps in the market before trading, but I did not know anybody. Then the sister of the wife of Frank's brother knew somebody in the market: Patrick. He had a shop in Computer Village managed by Regina, to whom he redirected me. There it was: my first interview. And then the snowball effect: Patrick introduced me to Steve, then chairman Megacity—the section of the market, that became my main focus. Steve introduced me to Cajetan, who had been in the market from the early days and was very active during the *clone boom*. Then to Chuks, a laptop engineer, who at first suggested the questionnaire, but who later opened up the doors of his shop and accepted my awkward presence.

UEEE issues were understood through the lens of the failed state. Most attempts to regulate their line of business were understood within the general critique towards the government not doing anything to help the citizens or even making things more difficult, via well-known looting, corruption and basic greed. By dirtying my own hands,³⁰ I avoided being associated with other scholars, researchers or programs on e-waste. This allowed me to avoid pre-conceived discourses revolving around the unfairness of global relations and scandalous government practices. And most importantly it opened up the access to the field, as in learning about the economic practices behind the flow of these UEEE. By selling stuff, I learnt how the business works.

Are you in the business?

To learn about business, I teamed up with Frank, a Nigerian friend I met in Switzerland. He had better knowledge, social skills and the right skin colour to sell used e-stuff in Nigeria. I had better knowledge, social skills and the right skin colour to collect used e-stuff in Switzerland. I was going into business to do research; he was doing research to go into business. We were both newbies and as such we did all the first-timer mistakes. We reacted differently. We learnt together.

Our first cargo was a good lesson. We bought a Chrysler; Frank was told they sold well in Nigeria. We also collected used computers/computer parts, mainly desktops and screens, one iMac and some keyboards, cables and mice. We also had used clothes and shoes from friends and friends of friends, and a fridge. We filled the car with the used stuff, and contacted Hafaz, a Lebanese exporter³¹, whose number I got from Nigerians living in Switzerland. We loaded the car in his parking lot, in the industrial outskirts of a small Swiss town, in the parking lot number 34, among other cars with their destination hand-written on the windscreen—mainly Cotonou. A few days later I travelled to Nigeria. Frank stayed behind; he would collect the Bill of Lading (BL) from Hafaz and send it over to me in Lagos. He would come later, for Christmas. I would have a few months by myself, trying to carry on with my thing. We were feeling good and excited. Everything was going well.

Then the problems started. The BL was delayed. From Lagos I kept calling Hafaz, who kept telling me not to worry. Finally, Frank barely had the time to collect it before travelling to Nigeria himself. In Lagos, we were told, we needed a clearance agent. Frank's brother introduced us to one, who started processing the papers right away. Turned out the car had been at The Tin Can Island Port – the second busiest terminal in the Lagos Port Complex, after Apapa—for the last three weeks! Three weeks! This

³⁰ Let me stress here that I always made a point, not only for economic reasons, to import only working stuff.

³¹ On the role of the Lebanese diaspora in the export of used cars from Europe to West Africa, see Rosenfeld (2012, 2018).

meant that the BL had been issued at least 6 weeks before. The BL is issued by the transport company, in this case Grimaldi, when the car is loaded on the ship, Grimaldi hands it over to the exporter, Hafaz, who would then send it to his clients, in this case us. We started to realize that Hafaz had probably held back the BL. We went to Tin Can, after paying 200,000 Naira³² for the demurrage³³! We were escorted to a fenced parking lot just outside the port's terminal. We retrieved the Chrysler. It was empty! All the screens and computers, keyboards and cables were gone. Everything, but a few clothes and the iMac. Stolen! Staring with desolation at the empty car, trying to process the information, I started to question my choices: why was I in this hot, dusty, noisy place. We decided to drive home, and I decide to question my life later, just to find out that the car was not working, the gear box was broken! We had just spent almost 4,000 dollars to bring an empty, broken car into this hot, dusty, noisy place. I wanted to cry! I didn't. I was already feeling out of place and I wasn't going to make it worse. Poker face.

We needed to tow our way home. We needed a rope. That was easy. As often in Lagos, street entrepreneurs strategically sell whatever maybe useful in the area. The ports' surroundings are busy economic areas: photocopy machines running on generators, women selling food stuff also carry batteries and jumper cables, compressed air machines for short rents, and, of course, towing rope sellers: anything needed to assure the car importing industry a smooth run. On our way home, we passed a policeman sitting at a junction. Lagos traffic regulation only allows towing by official towing vehicles: a car carrying *oyinbo* and towing a *tokumbo* was a good deal. He saw, he jumped, he chased! He overtook us on his *okada*, shouting and waving his rifle. We pulled over. During the negotiation, the officer held his rifle in one hand and our car key in the other. I was stressed, I was scared, then I was fed up. Enough was enough, I had my share of screwed up things for one day, but I somehow stayed calm, mainly because of exhaustion and fear and because I didn't have a clue what to do. Frank handled the situation. It took time, but we made it home.

Learning by failing

Besides making a good *classic* fieldwork story, the Chrysler failure encapsulates different central elements of this work: practical lessons, access to the field, a few analytical insights, and the physical and emotional aspect linked to the trade. On a practical level, this was my first *real* encounter with

³² At the time the exchange rate was between 150-160 Naira to 1 US\$. We paid 1300 US\$ adding up to the cost of the car, the cost of the shipping, and the fee of the clearance agent.

³³ In admiralty law the demurrage refers to the liquidated damage for delays of a vessel and the port's areas allocated for the loading/unloading. In transport and business, it is generally used as a fee to compensate a kind of breach of contract on the stipulated laytime. Here, it is used to name the fine given out by the port authorities when cars and containers are not retrieved in due time. The term is also commonly used in Nigeria by non-specialists.

the police, where I learnt that patience and cool are the keys. Keep calm and you will carry on. That day the policeman shook our hands to say goodbye, going from rifle to smile within the hour and with little money. Knowing how to deal with the police on the road is an important skill to be happy and comfortable in Lagos. To be able to trust that a police encounter can actually end well, and to feel at ease during the discussion, are capital skills for doing research in Lagos.

On a less personal level, there are some market-oriented aspects that sharpened my view for the following analyses. It opened my eyes to key skill required to run this long-distance trade: packing. Today, when I think of how we loaded that first car, I see an endearing mixture of naivety and ignorance. We collected anything we thought was marketable. Excited and happy, we wrapped the computers with cellophane—as we had been told—and simply put everything in the car. Closed it, handed keys and money to Hafaz, and waved it goodbye. When later I shared this story with other traders, they laughed (with respect and compassion). We sent all our cars on *roro* ships. Roll-on/roll-off are ships designed for wheeled cargo, while *lolo*, lift-on/lift-off ones are designed for transporting containers. On *roro*, cars are driven onto the ship, hence the front doors cannot be locked, the front seats should be free, and the key stays with the transporters. Now, the market price for used cars in Lagos usually cover the buying cost of the car in Europe³⁴, the shipping and the customs clearance. The benefits from the whole operation comes from the sale of the goods packed in the car. In Nigeria, unlike for instance Cotonou's ports (Rosenfeld 2018) those goods do not exist on paper, they are not listed on the BL. The customs will open the car, in presence of your agent, to make sure there are no illegal goods (drugs and arms mainly), with a grey area for contraband goods (such as used clothes), but the main point is, goods are declared as personal goods; thus, there is no tax on it.

These are the rules, packing strategies have been developed accordingly, as it happens with any trade. It took time, pieces of advice and more or less painful experiences (stuff got stolen up to the last Golf; it is just part of the business) but we mastered the art of packing-used-car-with-used-stuff.

In your car, fold down the back seats, to have one big boot. Lay a carpet down as wide as the car from half of the boot towards the front, let it lean on the front seats. Fill a fridge or a freezer with laptops and the other goods with high (Nigerian) market value. Load the fridge face down and push it against the front seats. Pile up desktops and screens, and fold back the carpet (one can also put some phones in the desktops). This way no hands from the front seats will have access to this stuff. Some people

³⁴ Or in the USA, but note that there are some differences in the importation packing practices, since USA ports do not allow *roro* ships; cars come in containers, which not only lead to different packing practices, but also to different contents: it is common to import wrecked cars, ready for repair, from the USA.

use wood-boards, but the carpet has the advantage of being a hotcake in Nigeria. Slide a few desktops onto their sides, the slowest models: nothing tiny enough to be extracted from the front, and nothing shiny enough to stimulate extra effort to extract it. Now in the back, pack what is left of your goods. The most valuable ones at the center, the *junk* in the periphery. Finally, always put a few nice things close to the boot door and the back doors. There is no duty for personal goods, but customs are happier if they can collect something nice while making sure nothing illegal or dangerous makes its way into the country. Now, unlock the front doors and lock the back doors and the boot, disconnect the central lock (to be extra sure, add some foam filling on the back doors and booths) and kiss it good-bye.

Besides the satisfaction of learning to pack like a pro, which Frank mastered to a 6th dan level. These packing practices are shaped by a number of factors as diverse as thirty years old Nigerian economic policies (used clothes importation ban); international port infrastructures and shipping practices (*roro* from Antwerp, and *lolo* from the USA) or local demand and market price (what is marketable, and what is the most precious). Packing and trade have always influenced each other (for instance the huge economic and social changes followed the container revolution, to the fruit and vegetable selections by shape fitting the transport). And in this case, to understanding the logic behind the know-how-to-pack-used-cars-with-used-stuff, helped me think about the flow of UEEE as a complex economic trade, shaped by factors impacting other global trades as well. This helped me to conceive this (local) market as part of the global economy, and therefore understand the global economics as a culturally varied phenomenon. I would particularly like to stress the impact of local taste on the flows. At the time, I saw the whole experience as a failure, the proof that I could not do this, and I wanted to give up. On the other hand, Frank did not even consider giving up as an option. For him, there was no question or wondering about what next: we will sell what was left—clothes, iMac, and the car—and invest everything back into the next shipment. And so, we did. This is how we learnt that in Computer Village men's clothes and shoes sell fast and well, while the iMac is as good as a stool. Actually, not as good as a good stool, which can be a hotcake: nobody paid one *kobo* to sit on that iMac. We had some difficulties with the car. After repairing it, it took around six months to find a buyer who underpaid us. Manual cars are not popular, and Chrysler used to be a hotcake but was not anymore. The contrast of what I thought was beautiful, shiny or good quality and what was actually selling, helped to acknowledge the role that importation countries have in the circulation of used stuff, definitely challenging the passive receptacle of UEEE.

Second, once I understood that I was dealing within a globalised market with its own specific demand, the Chrysler experience opened me up to a reflection on structural elements of this specific economic

system. Looking back at this experience, I see the central role of learning-by-doing. At first, I read Frank's approach to carry on and just try a second shipment as a form of resilience. A resilience I did not have because I needed the business for research not money. I looked at it with a disturbing mix of admiration and condescension³⁵.

Clearly, while part of this could be explained by an attitude toward coping induced by necessity, with time I came to see his approach as a fundamental learning process. Not only as in learning from your mistakes, but as a process, an untold mandatory step to learn the tricks of the trade (as a potential substitute for the apprenticeship institution common in the Igbo economic system). Thanks to the length of the fieldwork, the learning-failing process became a fundamental step in becoming one part of the group, to belong to the market, to get access to information. The Chrysler failure gave me access to the field in an ethnographic way. I was accepted because I went through the process of learning by doing, by doing it wrong.

In a certain way we sweated our way in, as Wacquant (2000) described in his embodied ethnography. The laughs traders were giving me when sharing this experience, were also a smile of sympathy, completed with the words: "Bear with us". Which turned out to be a very common sentence heard again and again during the years to come. It refers to all the difficulties common citizens face in everyday life (and trade), caused by the action of the cheater-in-chief: the government. Besides the constant discussion on politician's greed, experiencing Fela Kuti's *suffering and smiling*, led to the trust and distrust aspect of the market, and gave access to a number of stories of people eating money and failed deals. It was obviously an essential part of the business, as it is for every business. Unlike other businesses, here, long years of fieldwork, showed the trust and distrust, cheating and winning as part of the process of belonging to the group.

Finally, this experience also revealed features of the market itself. In fact, we could make it back into business after losing everything because of the small size of the shipment. This led to a reflection on the relation between size of shipment, flexibility and access to the trade, and to evaluating both limits and strength of the economic structure within global trade, which is particularly useful in the study of the Nigerian diaspora in China, but also within the market in Lagos.

On a more general level, field working via business gave me a chance to grasp the phenomena in question from the economic point of view. This approach had two main effects. On the one hand, highlighting economic practices and interests of the actors at work, and at the same time spotting

³⁵ Mobilizing the same filter sometimes used to understand *the hustling* economy. See for example Thieme 2017.

the bias and potential blind-spots, of the researchers. For example, paying attention to the evolution of the exchange rate is linked—and surely facilitated—by the fact that I have engaged in economic activities, which allowed me to cast light on the fact that, beside migration policies, the activities of Nigerian traders in China are related to economic factors, such as the evolution of the oil barrel price. And I didn't just spend long periods in the markets; I witnessed and shared the evolution of the issues faced by the traders. Participatory observation requires a personal investment (in terms of time and energy) that is often more consequent than hanging out in the same places—neighbourhoods, bars, markets—with “our” informants. But it allowed access to analytical details that can be quite important³⁶.

If at the interdisciplinary level in the China-Africa field of study there is an agreement on the need for ethnographic approaches, to overcome rumours and distortion produced (largely) on the macro-level analysis, it seems relevant to ask questions: what do we define as participant observation? What are the conditions of ethnographic production? To what extent are we—with the aim and pressure to satisfy (and evolve) in an academic production system that requires more with less (more results with less time, more publications with less stability)—harming the social actors whose discourses and situations we are supposed to report and analyse. In this specific case, oversizing their role as migrants and squeezing their role as entrepreneurs. Contributing to the distortion of their discourses and situations and re-producing a reductive and/or victimizing discourse. We may have to question the responsibility we have in the production of our results.

In conclusion, learning by doing as a methodology has been discussed in different embodied ethnographies, mainly in physical practices, such as martial art, sport, dancing, stressing the knowledge of the body (Crosby 1997; Wacquant 2000; Menet 2020). Ethnographic studies of the economy could learn something from these, as talking about the ability of evaluating and taking risks is not the same thing as experiencing hopes and fears of investing twice your salary in a deal entertaining two possibilities: the disappointment of being cheated and the satisfaction of closing a good deal. There is emotional and physical knowledge in business that has been little investigated.

Business methodology forced the field research under my skin. So, in Switzerland, I started reading the environment through the lens of an import-export trader. What could be sent? How much it could be sold for? I would walk the Swiss streets, sitting in Swiss houses and offices evaluating cars,

³⁶ Besides questioning the interests, bias and blind points of researchers, this example may also raise questions about the research conditions. Does a system that demands more results in less time jeopardizes (or diminishes) the relevance of such results? Does sped up science facilitate “path dependency”?

computers and everyday objects in Nigerian currency. In Nigeria, I could *feel* the tension between suppliers and resellers, understand the different points of view, share the dismissive hate towards the government, recalibrate my compass towards the acceptance of certain injustices, and boost my anger against others. These are all aspects that made their way under my skin. I gradually built my knowledge and understanding of the social, political, economic environments that the trades take place in. But also, the habits and the emotions, and *feelings* related to such habits and experiences.

Business & pleasure

During the years travelling back and forth between Switzerland and Lagos I kept shipping cars and UEEE, improving my game significantly. However, I was an occasional importer/supplier. After selling my goods, I would usually hang around for weeks or months. A situation that granted me the privilege of experiencing both points of view: the suppliers of the market and the resellers/repairers in the market. Those who travel and those who stay. This double perspective, amplified by first-hand business experience, was useful in pointing out the possible tension in this interface, a symptom of different logics at stake. So, besides selling and buying, this work is based on thousands of hours spent in the market. Sitting in shops, moving around with the traders, but also the street sellers, the food-sellers, *area boys*, occasional preachers, and enjoying afterwork beers and *suya* in the police barracks behind the market. I reached the point where I was up to date with the everyday activity in the market, the ongoing deals, repairing, arriving, *hot cakes*, exchanges rates, politics, football. The discussions were simply triggered by what was going on, jumping from this and that fluidly. People became used to my presence; I was less and less special. The surprise of the new customer staring at the white lady, would be dismissed by the shop owner with a simple "Ah this one? Forget 'am, na our wife oh!"³⁷. Hours of observation gave me the feeling of what the market is, how it moves, how it vibrates. I didn't take (so) many notes on the field, which may have helped the *natural* unfolding of life. What I could call sitting go-along, were hours of "go-along" as an ethnographic research tool that brings to the foreground some of the transcendent and reflexive aspects of lived experience as grounded in place" (Kusenbach 2003, 456), while sitting in the shops, and/or following the traders, money and goods. These were wonderful observation points of the everyday life in the market that, combined with discussions, helped me to understand the rhythm of business. It also helped me grasp

³⁷ "She is our wife" can refer to the fact that by dating an Igbo man, one becomes the wife of the whole group. However, with no need for extra-exoticism, it can simply be understood as "She is family".

the technical aspects, such as repairing opportunities and obstacles, as well as the cooperation praxis³⁸.

Throughout the fieldwork, I conducted semi-directive, recorded interviews, with traders in different lines of business. On occasions, I interviewed the same persons months apart to gather extra information as new situations arose in the market. But most of the time I would take notes—the generator noises made recording pretty difficult. Information was collected via uncountable discussions, exchanges and hours spent within and outside the market, with several privileged informants and a lot of occasional ones. Due to the length of the fieldwork, my relationships with the traders evolved. I was close to some at the beginning, others later on, always bringing in new perspectives. With some traders I only discussed within the market, with others I built long lasting friendships. I was invited to activities such as church, beer-drinking, Sunday afternoons on the beach, child dedications, weddings, graduations, birthday parties, traditional carnival. I came to know members of traders' families, visited them at home and in their villages, worked with some outside the market. In short, I became friends with some of them, and the fieldwork became just life. In the first years, during each stay I would live with a family, from Franks' family and friends to friends of friends. I had the opportunity to live in different area of Lagos, until I got my own apartment for the last two years, a precious experience to get a taste of the pleasures and inconveniences of a life in a lower middle-class neighbourhood in a 'Global South' megacity³⁹. All together, these experiences, despite not being directly linked to the flow of UEEE, helped me to get a general understanding of the social, political and economic context within which Computer Village, as a local yet global hub, evolves. And most importantly, stretching the observation for almost over 7 years brought interesting insights on the impact of national and international economic evolution on the UEEE's trade.

Multisiting and follow the thing

This work is Lagos-centred, and Computer Village is its heart. However, its mutisited aspect is a fact. From the beginning by collecting stuff in Switzerland and selling it in Nigeria, it linked different

³⁸ It was a good substitute for the fact that I had not been able to work as a repairer in one of the shops. I mean I had been able to pretend to do it, but the apprenticeship as I planned it had not been possible. Apprenticeship as ethnography has been described as the experience of being "students like any other" (Downey, Dalidowicz, and Mason 2014). In my case, it was pretty sure that being white, educated, and a foreigner was a dealbreaker: it wouldn't have been possible to boss me around the way a master bosses around the apprentice around. Which was confirmed later by traders I had become friend with. Nonetheless, they explained that the apprenticeship system known in Igbo markets did not exist as such in Computer Village.

³⁹ With approximately 25 million people, 7 Lagos is a megacity. Observers expect it to add 730,000 residents annually in the coming years. Understanding trade in megacities, which are home to roughly 1 in 8 people globally, is important, particularly because most are located in the 'Global South' (Grossman 2020).

places. Later, it became more clearly so, thanks to several stays in the Pearl River Delta (PRD), in the Nigerian communities of Guangzhou and Hong-Kong.

On the 'West' side of this story, I sometimes played a sneaky card with my suppliers in Switzerland. I sometimes encountered worries about the e-waste issue, the suppliers feared the possibility to be pointed as e-waste dumpers. In fact, NGO's sometimes try to track back the origins of the e-waste, for instance by identifying labels and stickers found on the items in the dumps. But I also encountered their will to *help* Africa. I usually introduced myself by saying I was going to Nigeria and would bring over used computers in the frame of my PhD research. This was absolutely honest and, at the same time, accurately vague, so everybody could picture his own story. The truth is I was worried that if I told them I was actually *selling* what they donated to *poor Africans*, I would become a horrible greedy person and I would not get anything. We encountered this issue once, with a company that usually give their old computers only to registered NGOs as a guarantee for good use of their gifts (!). Frank, a polytechnic school graduate, joked about taking a snapshot of himself as the classic big-belly, flies-in-the-eyes African portrait, to collect the computers.

On the 'East' side, China came into the picture in an organic way. On the one hand, in Lagos *China* is wildly present, as suppliers and as a category. On the other, when I landed in Guangzhou for the first time, I was already ready to go, armed with a few names and numbers, the resellers I'd been working with in Lagos told their suppliers and they were waiting for me. I was welcomed as a friend of a friend, a family friend, and potential businessperson. As such, I was given a tour of the place. They took me around, to the different markets, restaurants, and churches: an introduction into the everyday life of the Nigerian diaspora in China. I spent hours in Guangyuanxi, one of the two *African areas* in Guangzhou, observing stuff getting bought, sold, packed, and shipped. While eating *egusi* soup with pounded yam, served by a Chinese waitress, in a restaurant owned by a Brazilian transgender woman, discussing with Russian prostitutes, I was happy thinking that maybe the centre and periphery parameters were finally shifting.

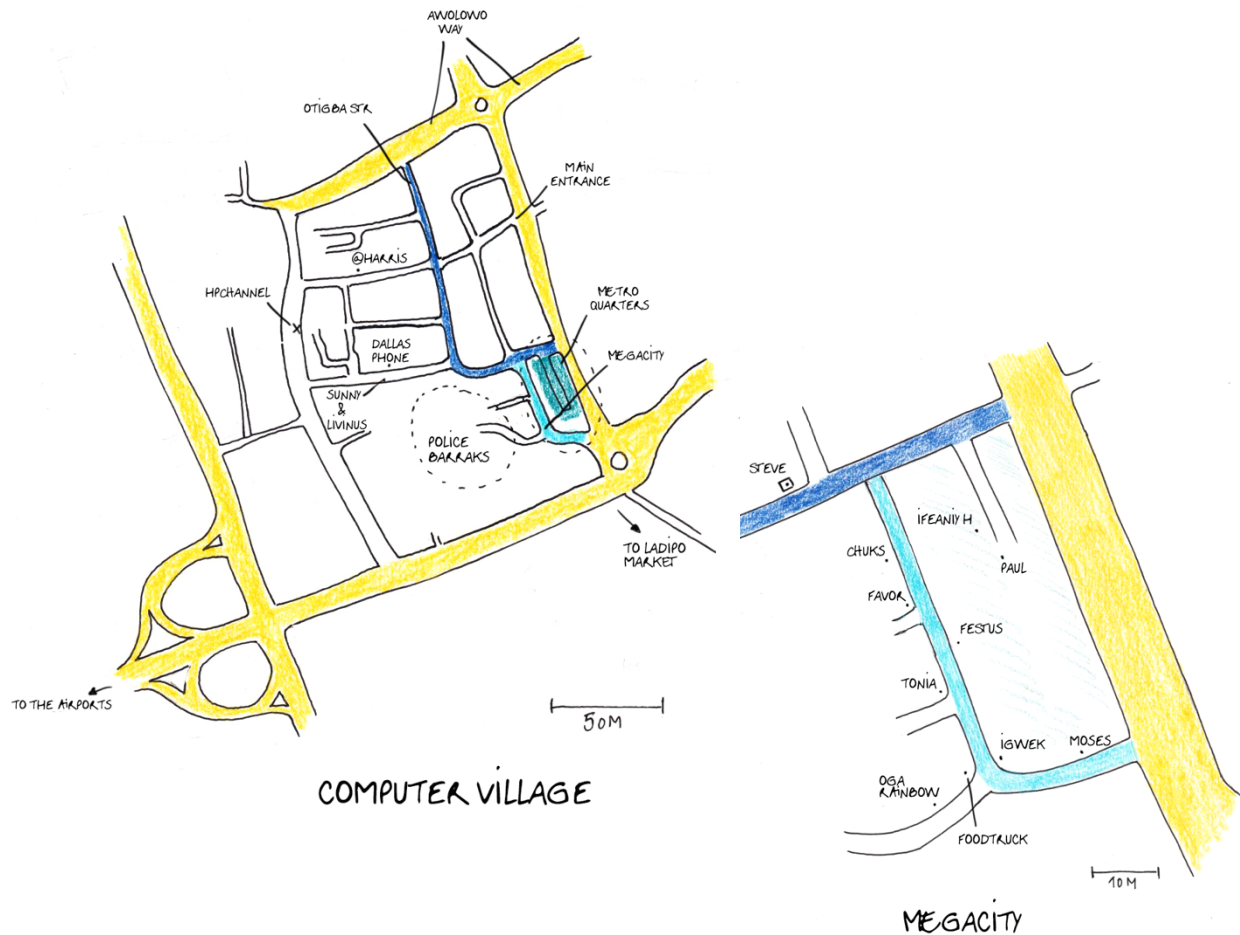
Arriving in China a few years into the fieldwork was a real stroke of luck. By then I knew people in the market, and my general knowledge about Lagos, Nigeria and Nigerian migrants (in Switzerland) was almost solid. So, after they introduced me to Guangzhou, they asked about Lagos: the market, the prices *down there*...and general info about what sells and what does not. This helped me understand a few things about the information circulation, trust issues, and other details on the suppliers and resellers interface of a long-distance trade.

Travelling to China allowed me to understand two main things. First, inspired by the follow the thing approach (Cook 2004), moving between Computer Village, Switzerland and China, helped me to get a sense of how circulation happens in networks, and to what extent linearity is outdated. At the same time, following the thing within the UEEE context showed the limits of the approach itself. Cook followed the papaya upstream, from UK supermarkets to the productions fields in Jamaica; Gregson et al. (2010) went downstream, following things of trash value, discussing end-of-life of containers ships. UEEE trade shows the limits of understanding movements of things in terms of upstream and downstream, product and waste, forcing the idea of network into the understanding of the UEEE flow. Second, observing Nigerian traders in China showed how the economic practices observed in Computer Village also takes place on a global level. This opened the way to a rethinking of economic globalisation as a phenomenon adapted and adopted by different economic systems, which led me to question the dichotomy of 'globalisation from below' and above.



Relax! God is in control. Keke's driver and his passengers. Lagos, 2011

Part 1 | how market?



How market?

is a greeting expression in *pidgin* English, mainly used by traders in marketplaces, and usually answered with "We thank God, we thank God!"

"No, no, no, [...] [in] this place you go there and you see that [that] man is selling screens, that other man is selling the same thing. Our belief is that God will give you what he wants to give you. You cannot be jealous of another person selling the same thing you're selling. (...) You have to allow that person to sell whatever he wants to sell. Providing he is not disturbing you, it is his shop. You know, we Igbos we feel like the better thing is, instead of one person trying here and sell... and it's like, he is the only person selling, let us be many. So, when people they want to come and buy, they will say "ah when you go there oh, you will see everything you want" so it will bring more customers. Because you alone, you can't sell everything. [...]"

(Oga Rainbow, 10 June 2015)

"But they all do the same thing!!" I thought to myself during my first walks around the market. Reminded of the African drug dealers that had popped up outside Swiss bars and clubs over the past 10 years. Many standing at the same place, selling the same *boulettes*⁴⁰ at the same price: "They are all doing the same thing. How come they can make it?"⁴¹

It took me a while to understand. In Computer Village, they make it *because* they all sell the same thing, in the same place, at the same time! Well, more or less the same.

It is a cluster. A single commodity market. A specialised market. Somehow, understanding Computer Village as a cluster seemed obvious. After all, journalists, traders, and scholars have nicknamed it the Nigerian Silicon Valley. And the literature addressing the market does so under the cluster label (Oyelaran-Oyeyinka and McCormick 2007; Bamiro 2003, 2006, 2012; Oyeyinka 2017). Also, when reading the most cited—and much criticised—paper on clusters, it is difficult not to notice a few *evident* links with Computer Village: "Location matters, what happens outside, in the immediate outside of the company, plays a role that has been long overlooked despite the striking evidence that *competitive success in so many fields is geographically concentrated—whether it's entertainment in Hollywood, finance on Wall Street, or consumer electronics in Japan*" (Porter 1998, 78).

⁴⁰ In Switzerland, African street drug dealers started selling cocaine wrapped in cellophane and shaped like small balls, called *boulettes*. They carry them in the mouth, so that they can easily swallow them in case of police controls.

⁴¹ Obviously, I'm not comparing these activities on the level of their legality nor moral aspect, I am simply pointing that some economic practices are used in different, formal informal, legal or legal, economic contexts.

What happens right outside Computer Village's companies' doors is not (always) nice. I cannot attempt to count the number of complaints I heard during the years in the market: the noise, the congestion, the *area boys*, the competition, the traffic, and again the noise, the congestion, the *area-boys*. Nor the number of times I have asked: "So, why are you here?" and always got the same answer: "You have to! This is Computer Village!"

In this section, I aim to understand *why* one has to be in Computer Village. The answer, as often is the case in anthropology, lies in the question not *why* but *how* does it work (Becker 1998). In short: *How market?*

How does the idea of *being many* expressed by Oga Rainbow unfold in Computer Village? The cluster's cornerstone—the articulation between cooperation and competition—is here manifested through *internal circulations*. Through the detailed, empirical presentation of the people, goods, tools, skills, money and information circulating within the market, I aim to describe a particular economic model at work in Computer Village without being specific to it. This model, I suggest, is an evolution of *traditional* economic institutions—reflecting values and norms—here adapting to the UEEE trade and its ultra-fragmented character. Internal circulations are one of the central features that make UEEE trade possible and profitable.

I open here with a chapter that offers context, presenting a history of Computer Village and an introduction to the main traders and engineers I worked with. Then, I address the question of ethnicity because the market is majority Igbo and because ethnicity was regularly invoked in *emic* explanations of market practices. Without adhering to an essentialist view of Igbo culture, I point to some of the values that, I argue, are reflected in their economic practices. In the third chapter of this part, I discuss the internal circulations of goods, tools and skills. Inspired by cluster theory and African market studies, I conceptualise these circulations as cooperation and as an economic practice in its own right, a characteristic feature of Igbo markets that evolved to adapt to the trade in used manufactured goods. I argue that this cooperation is key to the success of trade in used stuff, otherwise known as "snowflake" goods because each object is unique.

Finally, by discussing the circulation of information, I suggest that it is intimately linked to the process of becoming part of the group and gaining access to the possibility of cooperation—and I introduce the idea that cheating is part of this process. As such, I argue that, despite *emic* narratives based on ethnicity, being Igbo is not enough to be part of the market.

6. Portraits of Computer Village

This opening chapter is a general presentation of Computer Village. It is structured in two parts. First, based on the many interviews and stories I collected in the market, I outline a short history of Computer Village, setting the context but also bringing new details to the semi-official history as told in the (limited) literature that exists on this market. These data suggest that the history of the market is the first element supporting the argument for what I am calling ‘entangled globalisations’ in the context of trade in UEEE trade. In the second part of the chapter, I introduce some of the main traders and engineers I worked with during fieldwork and explain how I gained access to Computer Village.

A Brief history of Computer Village

The existing literature on Computer Village resumes, with little or no detail, its history in two phases: the informal settlement as its birth and the cloning industry as its growth. This is mostly in agreement with the testimonials I have collected in the field, however, there are other elements that may have been overlooked in the historical elements of the market. Particularly, I will address details of its birth, growth and evolution (adding a third phase⁴²) with insights—e.g., inter-ethnic trade and African trading networks deploying ‘East’ and ‘West’—which seem meaningfully linked to the larger topics at stake here.

In the early nineties, Ikeja’s residential area counted a few stationery shops along Awolowo Way. A typewriter being related to a computer, stationery shops started selling the first computers. Abiola (2008b) and Oyeyinka (2017) stated that these were brand-new. Several of my informants agree with this, adding that brand-new stuff was sometimes imported to launder money. In fact, the importation of fast-moving goods—such as brand-new computers—was (and is) a common way to repatriate money made abroad, for example, from the USA and Europe but also from new migration destinations such as China, Thailand or Malaysia—form illegal activities—such as drug sales, credit card scams or prostitution.

Other sources in the market argued that these computers were *fairly-used*. The most plausible explanation for this apparent contradiction is that both were available at the same time—incidentally this confirms that the origins of Computer Village are not mainly criminal. The essential point is that

⁴² Note that I finished my fieldwork in 2016; today in 2022, a fourth phase, the phone phase, would be a necessary pursuit.

the first computers sold in Lagos were sent and/or brought *home* by family and friends living abroad, mainly from the USA and the UK.

Around the same period, that is, the end of the 1990s, two streets away from Awolowo Way, in Otigba Street—soon to be heart of Computer Village⁴³—young men started selling spare parts and repairing computers. These ones were *fairly-used* only, and as with the brand-new machines in Awolowo Way, they were supplied by personal contacts in the Nigerian diaspora, mainly in the USA and the UK. Interviews with traders show how the repairing activity had been central from the very beginning of Computer Village's development:

"They used to repair computers all over the place, young people operating in the street, nobody had shops then [. . .] later there were like four or five shops, but when [the market] started to come up, people were selling in the street, not using money to rent shops. [. . .] When I started, those guys that were bringing in things to sell. Most were fairly-used components used to repair, to service computers. So, this came up as fairly-used and the parts to serve were fairly-used as well." (Taiwo, CAPDAN member, 01/2011)

These "young people operating in the street" were mainly Yoruba, at first supplied by family and friend who had migrated and settled in the 'West'.

Their clients belonged to a middle-class who had access to IT goods by traveling or via the diaspora but could not afford the official IT scene active in Surulere, a neighbourhood south of Ikeja, which before the rise of Computer Village, was home for all computer-related activities. These were run exclusively by officially registered companies, such as IBM, who were servicing major oil corporations and government agencies. These middle-class clients were also traders evolving in trading networks extending to Asia, regularly travelling to Japan, Taiwan and Hong Kong to import car spare parts, and other consumer goods. As the activity in Ikeja was picking up, the traders saw the opportunity and started to import what "*those guys in Ikeja needed*" (Uche, Lagos, 08.2013). Their clients were Igbo traders.

This is how, in the early 1990s, new computer spare parts were imported from Hong Kong to Lagos, where educated unemployed young men, mainly Yoruba, would use them to repair *fairly-used* computers imported mainly from the USA and the UK in the streets of a residential area of Lagos. This is the pre-history of the market: Computer Village before it was named Computer Village. Its

⁴³ Indeed, the small body of literature about Computer Village addresses it as Otigba Cluster.

birth on inter-ethnic activities, long distance trade, and importation from the 'West' and from the 'East'.

The Ikeja scene kept growing and soon engineers working in the Surulere-based companies would come to Ikeja to buy parts. At first, the only parts imported were the ones more often replaced and easy to peddle in the street (RAM, hard drives). But soon, with the growing demand and accessibility on the Hong Kong markets of every computer component, importation grew. The traders started to import everything needed to assemble a computer. The settlement became a market.

With more and bigger parts, people started to rent shops. Attracted by the business opportunities, engineers from Surulere started to move to Ikeja⁴⁴. They brought their knowledge with them. More shops opened. Shops would usually have one (or more) businesspeople, usually Igbo, and one (or more) engineer(s) usually Yoruba. With educated engineers from the big companies and traders importing every component needed to assemble computers, the business shifted. In the market, they weren't only repairing used computers sent home by the diaspora with some spare parts, they were assembling imported parts, and selling brand-new off-brand computers. The cloning industry was born! The market boomed! This is described as the heyday of the market! *Clones* made the market literally boom. Local governments, schools, middle-class families, everybody was buying locally assembled computers: perfectly functional and much more affordable than branded computers. Many sources in the market also mentioned the arrival of the mobile phone as a central moment, which accompanied the explosion of the market. Mobile phones made their massive arrival into the market during the same period *clones* were booming⁴⁵. The articulation of these movements is not very clear, but, as Steve put it: "It was fast, my sister. For you to understand that this market was purely profit oriented, you insist on [asking about] dates, but really everything happened at the same time." (Steve, Lagos, 25 Nov 2010). However, his sister Tonia pointed out that when mobile phones arrived the population was not just ready for them but waiting for them. The landlines were rare and very expensive. Mobile phones were a game changer.

This was the first wave! In the literature simply referred to as phase 2: the assembly industry. But I want to point out a few interesting aspects. Educated engineers and businessmen, mainly Yoruba with IT knowledge and with Igbo traders with no IT skills but well-established trading networks, created a

⁴⁴ Where rents were also more affordable than in Surulere, according to Bamiro (2006) and due to the former presence of the Shrine of Fela Kuti whose lifestyle does facilitate real estate business (sorry, but not sorry!).

⁴⁵ In an attempt to decongest Computer Village, the government built a GSM Village, not far from Computer Village, that never really took off.

cheaper, flexible, reactive market, that was answering a high pressing demand. A collaboration that is reminiscent of the garment market in Aba, where Igbo traders hired, on piece rates, Hausa embroiders, notoriously more skilled than the Igbo “in a symbiotic relation, since the Aba tailors and the workers lacked the skills for fine embroidery, and the Hausa embroiders lacked the capital and local business knowledge” (Meagher, 2009, p. 41). In a similar way the shops in Computer Village were usually owned by businesspeople, and the engineers were paid by the piece. However, unlike Abas’s cluster, the first settler and stationery shops were almost exclusively Yoruba run. This does not change the fact that resources, trading networks, skills, capital and labour, needed to start a market were found in an inter-ethnic collaboration.

The complementarity of the Igbo and Yoruba sets of skills as a central element of the creation of a new economic space is important in the narrative of Nigerian ethnic relationships, as well as the ethnic solidarity in economic network studies. “While communal solidarity has played a central role in Igbo economic advancement, symbiotic forms of institutionalised collaboration with other ethnic groups have been just as critical for widening markets and gaining access to new sources of labour, technology and skills.” (Meagher, 2006, p. 33).

Besides the inter-ethnic exchange, Computer Village is an interesting example of mixing stuff, such as UEEE and new parts, and of long-distance trading network extending ‘North’, ‘West’ and ‘East’. On the one hand, from the North and the West, there were *tokunbo*, that could be translated as ‘from oversea’, and is used to address importation of used stuff as a line of business, common for different consumer goods, and particularly known for cars and clothes (Beuving 2015; Abimbola 2011, 2012; Rosenfeld 2018). The UEEE flow is indeed (a) business, and started in the 1990, but should be understood as a follow up of long-distance trade of other used goods. On the other hand, from the ‘East’, there were trading networks of new stuff. IT importations from Hong Kong in the IT industry may have been rooted in already established trading networks with Asia. For example, contacts with Taiwanese businessmen provided machinery and training for the production of local car parts in Nnewi, Anambra State (Forrest 1994)⁴⁶ and for Aba’s clothes and garment clusters (Meagher 2007b). Hong Kong, and later mainland China, particularly Guangzhou and Shenzhen also played a similar role for the IT industry, becoming an essential source of spare parts. New off-brand spare parts were imported with taxes as low as 5% (compared to the then 30% for assembled computers) and assembled by a cheaper labour force.

⁴⁶ Bräutigam discussed these trading networks as a substitute for the state, in the articulation of formal and informal economy.

In terms of training, however, Computer Village differs from the industrial clusters of East Nigeria. IT technical skills were locally available, within the formal, corporate economy in Surulere. A formal economy serving quite a small demand (government and oil companies) that did not take into account the possible existence of a demand for IT goods among the rest of the population. This aspect should be understood in the general, economic exclusion of the African continent from global consumption. The cloning industry was the Nigerian response to the distribution system that did not include Africa in their plans. And they did this, by siphoning skills from the same formal economy that may have excluded them.

Computer Village ended up absorbing and killing Surulere's companies:

"Like what I said, Surulere market was corporate more of... You know... This is a marketplace, just like Ipodo Market, to buy tomatoes. The Surulere market was more corporate... they do things the way they should be done: paper, agreements, and contracts. So, what happened is [that] some of the guys in Surulere leave their boss... the Surulere's office is much more expensive, and they get a place in Computer Village and they start. Definitely, he will sell cheaper than his boss who is in Surulere, who's already a big man, who will not sell with a very little margin. The guy here he can sell with 200-naira profit, then if his boss wants to sell, he will be looking for 1,000⁴⁷ or 2,000. [...] And then along the line, the advertisement came in, people advertise in the newspaper and they [published] the prices... you understand? And it was coming from the Computer Village, and it came to kill the market in Surulere. Because Surulere will not do that because their own was for big companies; they get more big contracts, and the profit is bigger. But here, they depend on the daily sell, make little margin and move on. So, they can advertise for a mini laptop for 55K, and this same mini laptop with the same configuration the man in Surulere will quote for 150K. The man [who] pick up the newspaper and see "so HP mini, 320Gig, 1G, 55k," what does he do? He sends his processing man from the office to go to Computer Village and buy or pick up the phone call the man who advertises. "Do you say you have this? Can you give us 20 pieces?" — "Yes," — "OK bring it to the office and collect your money." And before you say "Jacob." he's in V.I.⁴⁸ with the goods. You pay him, he is off. So that's what affected the Surulere Market. That was it! Like

⁴⁷ All monetary figures, except for when specified, are in naira/NGN.

⁴⁸ V.I. Victoria Island, CBD and (middle) upper-class area of Lagos.

the Samsung guy moved to the Computer Village, too. Initially he got a big place at Awolowo, toward Allen junction, but still he was not doing as the Computer Village people. He now got another place and again started bringing in Samsung. I think the man is not even in the business anymore. He has left.” (Tonia, August 2012)

Surulere was dead and Computer Village was booming. Then came the second wave during which the market shifted, becoming majoritarian Igbo. In fact, attracted by its success, traders from Ladipo—the main *tokunbo* car and spare market in Lagos—and from Alaba International Market, the massive market of electrical equipment such as fridges, TVs, fans, flocked into Computer Village. Ladipo and Alaba markets were organised as purely Igbo markets. So, when their traders moved to Computer Village, they brought their economic system, practices and norms with them. As Steve put it:

“You had the large stock of concentration of different parts here [in Ikeja]. You have a company with motherboards, another company bringing in hard drives, another person keyboards. All will be in the Village here, so if you want to complete a system it’s easy for you to come and get what you want. In Surulere, there is maybe just one person who has what you want, which is an economic nonsense. (Steve, 25 Nov 2010)

Sense or nonsense can be discussed as economists have argued the qualities and limits of different economic models. But what is interesting here is that the fragmentation of micro and small enterprises (MSE) articulated around competition and cooperation is presented as a rational economic choice, and not as economic behaviour adopted out of need. This aspect will be further discussed in the next section, which focuses on the internal dynamics of the market, which will be extended to the global level through the analysis of the Nigerian trading diaspora in Guangzhou.

However, I want to stress here how Computer Village became an Igbo market, mobilising some (well) known economic practices, and yet adapting to the situation. This is the base for further discussion that challenges globalisation from below. With time, the cloning industry faded out, and the *fairly-used* industry grew, along with the brand-new, among other things available in the market. When focusing on the internal dynamics of the market, I mainly concentrate on Igbo traders dealing with *fairly-used* stuff, on selling and repairing. The discussion will be articulated around the fact that such dynamics of MSEs cooperating and competing are indeed very well suited to the success of a fragmented trade such as that of UEEE as characterised by the snowflake feature.

The history of Computer Village shows how different factors came together to turn an informal settlement of a few traders into an internationally renowned cluster. This *success story* is the result of the alliance of Igbos and Yoruba, businessmen and engineers, the Nigerian diaspora and their *home*. But also, an exchange between formal and informal sector in an economic context heavily affected by international policies. A success story that opened the way to digitalisation for a population that was excluded by formal players who didn't see its potential. Driven by the possibility to make money, traders in Computer Village made IT accessible:

Me: The point was also to make it cheap, affordable to anybody?

Steve: Well, if somebody wants to write a book, he may give that coloration, but I believe that the people who started this they didn't do it because they wanted to do anything cheaper for anybody, they are first of all businessmen who want to make money! (Steve, 25 November 2010)

There was money in it because there was a demand. A demand that the official chain of production and distribution wasn't ready for and wasn't interested in supplying. The cloning industry was the Nigerian answer to a distribution system that didn't count the African continent in their plans. As it happened, in the rest of the world, the digitalisation took off because it was an economic opportunity. This is worth being said as, too often, digitalisation and economic dynamic on the African continent are discussed in terms of cooperation and development aid. It was not about charity, nor some development program. It was business. And it started in the 1990s.

Today, the market covers a surface of 500 sqm, and counts between 3000 and 6000 MSEs, and its employees are estimated at 10 000 people. It is structured in lines, plazas, or compounds where the traders mostly, but not always, work in the same line of business (used laptops, phones, clones). Each line, plaza or compounds is organised as an association, which in turn are united under the umbrella of CAPDAN—Computers and Associated Product Dealers Association of Nigeria.

At the beginning of my fieldwork, there were five main official importer-resellers: Td Technological Distribution, Channel HP, Reddington (whose office is outside the market on Apapa Express Road), Channel IR (Dell products) and Hyper Disk (HP products). It is interesting to note that these joined the market when it was already booming. As Tonia put it:

"What happened with HP is: you are going to UK, you are coming in and you bringing in HP; you are going to US you are coming you, are bringing HP. Anywhere you go you are bringing in HP, you go to Dubai, you are bringing in HP. When I started, there

was nobody who was representing HP... do you understand? So, much later, we started to hear of HP representatives. These HP people they said, 'This Africa, Lagos is a big market for us.' They now came because the thing is going on. Now the manufacturing man becomes interested [because] the market is already there for them." (Tonia, 20 August 2012)

Most important, today, Computer Village is considered the biggest IT market in Africa. While exact numbers are always a bit of a challenge, the volume of the transaction is a source of pride. In 2018, the president of CAPDAN gave the figure of N1.5 bn (between 3 and 4 million USD depending on the exchange rate) of global daily revenue of the market⁴⁹. Once addressed as the African Silicon Valley—a title today stolen by Yaba—the market is still well known on the continent and beyond⁵⁰. And the number of companies settling in Computer Village is growing. Hewlett-Packard was one of the first company to open a branch in Computer Village. As its then director, Quasy Salah, mentioned in one of the very first interviews I carried out: "This mess you see behind you is the biggest computer market in Africa". Other companies followed from India. And in the last 10 years China has become more and more visible in the market, with blue painted Tecno buildings becoming near-symbols of Computer Village. There are rumours/information about deals sealed with companies in California.

The growing presence of formality is an interesting aspect. On the one hand, it confirms the role of Computer Village as a major hub. On the other hand, it also confirms informality as a central element of economic innovation, which I would further discuss as entangled globalisations.

Computer Village is a very busy place where businessmen are, and other businessmen come. Street sellers offer food, sodas, fresh pressed juices, but also clothes, belts, sunglasses, etc. The KAI—Kick Against Indiscipline—an environmental law enforcement unit established in 2003 by Lagos State Government regularly swipes street sellers, demolishing their stands, seizing their goods; just to see them returning back within a few hours or the next day. The Computer Village is also known, inside and outside the market, for its wide and tasty food offerings. Some *mama put* joints have been there for over twenty years, and many will tell you that the best *amala* in Lagos is at Computer Village. The extent of activities goes from banks to pharmacies, exchange rates shops, smoothie shops, shoe shiners, and brand-new betting houses.

⁴⁹ Interview given by the president of the CAPDAN to the Punch, 13.02.2018.[<https://punchng.com/ikeja-computer-village-generates-n1-5bn-daily-capdan/>]

⁵⁰ Note that Computer Village has always been about the hardware, while today's reference to Silicon Valley concerns the development of software.

Family picture: Megacity and its people

As said, the market is organized in lines, compounds and plazas. One of these is Megacity, where I spent most of my time. Partly by chance—the first encounter I had led me here—and partly because Megacity was a line mainly dedicated to the sale and repairing of *fairly-used* computers, desktops and laptops. During my first fieldwork trip, before the arrival of the Chrysler, I had been in Lagos for a few months and knew absolutely nobody in the market. As I was looking for some contacts, one of Frank's sisters-in-law introduced me to someone she knew in the market. Patrick had a shop in Megacity and meeting him led to a snowballing of my contacts. Patrick introduced me to Steve, then the chairman of Megacity, who introduced me to his sister Tonia, and then Chuks, and so on, for years, in a dynamic combination of business and personal relationships.

Chuks was the first laptop engineer I met. It took me a while before I could ask Steve to introduce me to somebody working on used laptops—which was my main interest⁵¹. When I did, Steve simply said: "Go and meet Largess, tell him you are coming from me". I was surprised, shy and a bit scared—my gratitude, once again, goes to Frank who patiently took me around. As it turned out, there was absolutely no problem. And while Chuks, aka Largess, questioned me about the purpose of my work with healthy scepticism, he also welcomed me into his shop, where I spent a fair amount of time over the next few years.

Chuks arrived in Lagos in 1996, after a childhood in Kaduna and college years in the east of Nigeria, at the Institute of Management and Technology in Enugu. A civil engineer by training, a dust allergy and the lack of job opportunities led him to change career paths. He started working at Computer Village in 1997 on a training basis in an IT company. He learnt computer engineering working on *fairly-used* systems.

I remember we had computer 386/386s [Intel]⁵². . . the earliest ones we had. Then up to 586, we started having dx400 and so and so till today. So, most of these systems were not assembled here; a majority came from Europe and America. I think we had more from the US. Subsequently, we had some from Europe. The earliest

⁵¹ It took me a while before I could explicitly talk about what I was interested in. I spent an uncountable number of hours discussing topics put on the table by the traders, marginally or unrelated to my centres of interest, worried as I was about disrupting the "natural" flow of the conversation. This may explain why it took me so long to bring this work together, but it did have the advantage of allowing me to get a glimpse of the bigger picture and to place the traders' discourses and practices in wider contexts.

⁵² "The Intel 80386, also known i386 or just three-oh-eight, is a 32bit microprocessor introduced in 1985 [https://en.wikipedia.org/wiki/Intel_80386]; page consulted the 05.30.2017]

ones came in from US. [. . .] we had the privilege of having most of our brothers in US. [. . .]. The cluster started after the study of those systems that came from the US and Europe. You know, most of them were serviceable [needed to be repaired] so we had to open them up and check them. The importation started when some of these replaceable parts were short of things like memory. Back then we had the floppy drivers; they were replaceable parts in these computers, so we started replacing these parts and gradually getting into assembling full systems. We could clone them, and they could work very well. [Chuks Philips, Ikeja, Lagos, 07.02.2015]

Chuks witnessed the *clone* boom, the *fairly-used* comeback, the laptops rising and the phones and tablets takeover. Laptop repairing and selling were his major activities, but since 2011 he has been exploring and developing the surveillance cameras business. With success.

Sandra has been in the market since 1999. She came following her senior sister Ugochi, whose then husband was among the first traders in Otigba street. Sandra and Chuks met in the market and married. When Chuks opened Largess Ltd., Sandra joined him, and they have been working together since. They have three children. When Sandra's university admission came, she left the market to study economics, and her junior sister Chinyere started working in the shop. Trained in business and administration, during her year at Largess, Ltd, Chinyere developed her IT repairing and trading skills. After six years, she left Largess and worked for a few other companies in Computer Village. In 2014, she jointed @Harris, a cell phone reseller. She spent a few years in Abuja as head of a newly opened branch in Wuse II market. In Abuja, she found a job in the same market for her senior sister Ugochi, who is still in Abuja today. In 2015, Chinyere came back to Lagos to work for @Harris' main office in Computer Village. Today she is working as a real estate agent at @Harris, which has expanded into a new area of business.

Eze is Chinyere's elder and Sandra's younger brother. He has been in the market since early 2000s and specialised in *fairly-used* CPUs parts. I met him for the first time at Chinyere's birthday party, at the beginning of my research.

Closing this family portrait is Eze's wife, Ezinne, who joined the market by hawking *moimoi* that she carried on her head. Since, she has developed her food business employing almost 10 people. Every day, in a compound a few streets from the market, she prepared fried rice, *jollof* rice, *moi moi*, fried and boiled fish, meat, fried plantain, beans and other Nigerian dishes. Every day she was selling in four different locations in Computer Village, with a wheelbarrow carrying *coolers*, food packs and plastic cutlery. She is part of the great food offer that characterises Computer Village.

Steve also introduced me to Tonia, his sister. She joined the market during the early years, and she can remember when the first computers were sold in shops along Awolowo way. She is the one who suggested to Steve to join the computer business. At the time of my fieldwork, she was managing the second branch of Genie shop, selling mainly new accessories, but also used laptops, that her other brother, Mega Rich, was shipping from China.

Along the Megacity line, there were a number of other traders, with whom I had more or less close relations. Some of them will come up during this dissertation, and all of them were linked by on-going deals, family ties, shared apprenticeship masters, or the same churches. I titled this presentation of some of the traders that shaped this work "Family Picture", hoping it conveys a sense of how deeply interrelated trade and personal life in Megacity and in the market are.

So what?

The historical contextualisation describes the different stages of development of the market, each pointing to different aspects necessary for an understanding of this work. Its birth as an informal settling issued by interethnic exchanges and the mix of new and used goods provides a good example of the entanglement of global (formal and informal) networks extending from 'East' to 'West'. Furthermore, its initial successes in the cloning industry are a telling testimony to the agency that brought access to computers to Lagos, Nigeria and West Africa through the appropriation of knowledge and know-how from the industry that it was excluded from. Finally, the chapter provides an introduction the second wave, when the market became dominated by Igbo traders who introduced the organisation I observed during my fieldwork.

In my view, the history of Computer Village is fascinating and provides an empirical grounding encapsulating the arguments I will discuss throughout this dissertation. More specifically, the birth and growth of Computer Village are an illustration of the extended trading networks—often discussed through the concept of 'globalisation from below'—at work for decades (almost thirty years for computers, longer for other consumption goods) and of the complementarity of objects from the 'East' and from the 'West'. This is a perfect example of what I called entangled globalisations. In fact, the formation of the market can be understood as 'globalisation from below' opening the way for 'globalisation from above, linking up below and above.

7. *Ndi Igbo* : trading stereotypes

“Are you Yoruba? But ‘Bello’ could be Hausa’

‘It’s not Hausa.’

Mrs. Nwachukwu shrugs, ‘As I said, it’s just out of curiosity. If you hear my surname, you will be right in eh, assuming I am Igbo, but Elizabeth here is not. She is from Plateau State. Okeke is her marital name, you see? So, I thought, ‘Okay Bello must be her husband’s name, then.

‘I’m not married’ Deola says, keeping her smile intact. ‘I consider myself Nigerian and I hope we can be united in the face of this epidemic that threatens us.’

She is always thrown by ethnic distrust, though she has read newspaper editorials about the next elections to understand how much ethnicity still matters politically. Pressure groups are vying for equal representation in the government. She suspects she sounds just as bombastic as the editorials. What did any of that mean? I consider myself Nigerian. United in the face of this epidemic.”

Sefi Atta, *A Bit of Difference*, (2010, p. 124)

Ethnicity in Nigeria is an everyday matter, mobilised to discuss any kind of topic: from massive killings to the use of kola nut⁵³. Its omnipresence almost led me to consider it irrelevant in the UEEE trade. However, ethnicity forced itself into the picture, on a general level—as is probably very often the case in the Nigerian context—then within the market, and finally it became relevant in understanding the global flow of e-stuff.

In this short chapter, I discuss how ethnicity is key to understanding the trade of UEEE in Nigeria. My approach is situated and anti-substantivist: when I use the term “ethnicity”, I am referring to the fact that despite its inter-ethnic origins, the market I worked in was massively populated by people who

⁵³ Nigeria, composed of hundreds of the ethnic groups, is dominated by three of them: Igbos, Yoruba and Hausa. Each has its own relationship with kola: “The Yoruba produce it, the Hausa consume it, the Igbos celebrate it.

identify as Igbo. I discuss ethnicity from an emic point of view, mainly by exploring the two principal stereotypes about Igbos—their money/business orientation and their individualism. Without essentialising, I discuss how these stereotypes manifest themselves in the economic system that characterises Computer Village—which appears to be particularly adapted to the fragmented UEEE trade—and takes place on a global level.

On a general level, ethnic categories have been present from the first steps into this work. As mentioned, I first learnt about Nigeria by talking to Igbos. This proximity led to a certain complicity, empathy and a more or less conscious affection for their emic narratives. I was particularly fond of the idea of a horizontal social structure, that fitted nicely into my personal social justice and equity principles. I later had to find the *right* distance to take from these discourses. Meanwhile it had become clear that ethnic categories are strongly rooted elements, regularly mobilised to explain social situations in general, and markets and trade in particular. Strong enough to bleed onto foreigners: I was regularly called Igbo woman by non-Igbo friends, sometimes because of my accent—I learnt English in Nigeria, and I had an Igbo accent—and mainly when discussing money or markets⁵⁴, referring to the coming stereotypes discussed in the coming section.

Unlike other researchers studying Igbos markets, as run exclusively by Igbos traders and known as such by insiders and outsiders (Abimbola 2011; Meagher 2010; Forrest 1994; Beuving 2006), I did not begin with the Igbos as a unit of analysis. But had to take it into account. Most of the traders in the market are Igbos, in proportions of 80% to 20% of Igbos and Yoruba⁵⁵. This is obviously an estimation, circulating within and outside Computer Village, whose accuracy is only partially interesting. What may be interesting, however, is the fact that traders in the market mention these numbers when discussing the Computers and Allied Products Dealer Association of Nigeria (CAPDAN): the umbrella association defending the interests of the market to the local and state governments. Igbo traders often pointed at the unfairness of the fact that despite being the majority, the umbrella association of the market was predominately Yoruba, a complaint that resonates with the more general discussion of power distribution and the Igbo people's access to central power after the Biafra war⁵⁶. Besides Yoruba's and Igbos, ethnicity in the market also manifests via other activities, often ethicised.

⁵⁴ The fact that the market was largely Igbo explains the limited breadth of my research, but is also possible that the personal closeness I had with Igbos is one of the reasons behind this work's lack of other points of view.

⁵⁵ Obviously, there are other ethnic groups present in the market, though not in significant numbers.

⁵⁶ Most of the time, the complaints revolved around the inefficiency of CAPDAN, the link between ethnic appetite and inefficiencies was never mentioned, but often implied that if a *brother* was in charge, things would have been different.

For instance, scrap collectors are almost exclusively Hausa, as are the fruit sellers⁵⁷. Ethnic repartition of activities within the market, and the dynamic between ethnicity and governance would deserve further investigations. My work, for reasons listed above, focuses on Igbos, despite the fact that other perspectives are pertinent for a wider understanding.

I will discuss the main stereotypes about Igbos, showing the essentialist emic point of view as a general background, but also because this emic use of ethnicity supplies some central insights that lead to the understanding of the economic system at work in the market and in the long-distance trade of used electronics⁵⁸.

I focus here on the economic related features of the ethnic identity construction because economic aspects are at the centre of this work, but also because economic related stereotypes are probably the main aspect in essentialised Igbo narratives—by the Igbo and non-Igbos. By discussing the two main stereotypes on Igbos, and how they articulate with a few economic and political elements in the history of the country, I mobilise ethnicity as a source of information to understand and describe an economic system.

Egalitarian money grubbing

“If you go anywhere in the world and you don’t see two Igbo men selling something, leave! There is nothing there!”

I cannot count the number of times I was told and explained this joke. It encapsulates some of the main stereotypes (self-) attributed to the Igbos: their entrepreneurial attitude, matched with the tendency to migrate. This sentence in the mouth of Igbo traders is about pride: Igbos do business, they do it well; if *they* cannot make it, then not body can! And they will go to places where it is thought impossible to go with an adventurous entrepreneurial spirit. This entrepreneurial attitude can come across as a dark side, as a money-grubbing mentality—as mentioned by Binyvanga Wainaina (2005)

⁵⁷ This ethnic-based division of the economic activities is not specific to Computer Village and can easily be observed everywhere in Lagos: scrap business (electronics, metal, ...) is generally carried out by Hausa, as are fruit and water street peddling. The Hausas also control a large portion of the parallel currency exchange market. These activities are so ethnic-based that, in Lagos, *Aboki*—friend in Hausa—is almost a synonym for scrap, fruit or water street-peddlers. While *Alhaji* or *Mahalla* are often used to refer to currency traders. All these terms are largely used in Lagos, to generally refer to Hausa people.

⁵⁸ Also, thanks to the comparative approach with the cocaine business carried out by Nigerian dealers in the street of Switzerland.

in his—almost 20-year old but unfortunately still pertinent—ironic essay, *How to write about Africa*. And well-expressed among non-Igbos in Nigeria⁵⁹, across West Africa, and beyond.

Caricatures aside, Igbos have been described as entrepreneurial and industrious by journalists, writers, and scholars (Maier 2000; Achebe 1983 ; Forrest 1994; Meagher 2006, 2007b, 2009, 2010). It has been argued that the central role played by commercial activities reveals different aspects of Igbo culture. For example, weekdays are named after their market days, and it is common to name babies after the market-days they were born on (Onukawa 1998). For Agozino and Anyanike (2007), this is a manifestation of the central place of trade and market in the Igbos understanding of the world. When the Igbo say that the world is a marketplace (*uwabuahia*) the mercantile metaphor exposes the possibility of “negotiation, haggling and bargaining” any problem encountered in life, a mercantile worldview that would also explain the value of the apprenticeship institution. Isidienu (2018), in his work on the central place of the kolanut in Igbo culture, stresses how four cotyledons of the kolanut represents the four Igbo market days. Meagher (2010) suggests three explanations enabling the central role of commercial activities in Igbo culture and structure. Land shortage since pre-colonial times would have fostered commercial activities over agriculture or livestock. Trading would be fostered by the apprenticeship institution which guarantees not only the skills but also the start-up capital, as well as the socialisation into hardship and discipline as crucial elements of business success. Finally, the traditional meetings concentrated in one period of the year would guarantee young Igbos the freedom to travel in order to trade while keeping solid ties with the community (Meagher 2010; Forrest 1994).

In more recent times, this economic identity has been understood as intertwined with the political history of Nigeria. At the end of the Biafra war (1967-1970), the Igbos were given 25,000 naira per person and all assets confiscated; they would have been forced to get back on their feet through business (Maier 2000). This entrepreneurs-out-of-need explanation is still present in contemporary Nigeria and is directly related to the narrative of marginalisation of the Igbos following the Biafra war. This narrative claims that the “No victors, no vanquished” declaration by General Yakubu Gowon had turned into a glass ceiling, keeping the highest political and military positions out of the reach of Igbos; and that, generally speaking, they received little support from the government. This somehow nurtures a feeling of being second class citizens among the Igbos. Some even consider it a

⁵⁹ Sometimes the saying comes with Nigerians instead of Igbos: “If you don’t see two Nigerians...” showing the elasticity of the groups, and the changing connotations of their stereotypes.

persecution, and surely none of them can count on help or support from the government (Harneit-Sievers 2006)

The impact of the Biafra war and its consequences on the economic identity of the Igbos tends to be mentioned often by Igbos, but less among other ethnic groups. The latter tend to agree to define Igbos as industrious and hardworking (Maier 2000; Achebe 1983), however they may be less keen to agree on the long term impacts of the war. Obviously, my point is not to discuss the wrong or right of those statements, but to acknowledge the weight of economic entrepreneurial features in the identity construction among the Igbos, and the feeling of marginalisation in the articulation of that identity.

The second stereotype I want to address here is the egalitarian, horizontal social structure of the Igbo. Once again symbolized by the kola nut: composed of different parts and yet a whole⁶⁰. And that can be emphasized with another proverb I was told again and again is: "If a child washes his hands, he could eat with kings" (Achebe (1994 (1959), 8). The proverb is also used by in the first chapter of *Things Fall Apart* to establish that the protagonist, Okonkwo, will be able to make his path despite the unsuccessful life of his father⁶¹. This generally means that inheritance and age matter less than actions. Anybody should be able to prove himself⁶². "Fortunately, among these people a man was judged according to his worth and not according to the worth of this father" (idem). A narrative often paired by emphasised ideas of independence, autonomy, and freedom⁶³. This aspect is often presented on an emic level, as opposed to other groups like the Yoruba and Hausa, which are structured by more rigid hierarchies.

On the other hand, this same aspect is also mobilized, by Igbos as well as non-Igbos, to explain the supposed marginalisation of Igbos on the national level, politically and economically. Each individual's value of freedom can become an obstacle to uniting behind one representative, limiting

⁶⁰ The Kola nut has a central place in Igbo culture, serving social, political, religious and economical functions, mainly revolving around a unifying role. "Igbos kola nut expressed, communicated und unified the people's ideals of fraternity, acceptance, achievement, productivity and wealth, joy, sorrow, of everyday family, village and clan: unity and diversity of the Igbos world" (Ukaegbu 2005, 155).

⁶¹ I wonder to what extent Achebe's use of this proverb participated in the making of a common piece of self-narrative in the Igbo identity construction.

⁶² The gender question would deserve to be addressed, for example in the context of market woman in Igboland, and their role in long distance trade.

⁶³ I also discussed with some traders the possible link between this autonomous structure and the religious system. Despite Chukwu being the main general god, each person has his/her own Chi, a personal god to whom each one answers in the first place.

the possibilities of standing up as one in front of other ethnic groups on the national level. This is often presented as a counter-argument to the Biafra War's glass ceiling.

These are essentialist caricatures, and as such they are not analytically useless, but they are dangerous. However, these caricatures helped me see certain features of the economic system. The entrepreneurial activity and the horizontal structure meet in an economic system that is structured on a base of micro-enterprises evolving in cooperation-competition dynamics among those enterprises. My argument is that these micro-enterprises work simultaneously as independent structures and as part of a whole. I first observed these dynamics in the Computer Village, and then extended this understanding to the global trade, distancing myself from the survival-based analysis, often central to studies of globalisation from below. From inside the market and on a global level, I argue that this specific economic system is particularly adapted to the highly fragmented UEEE trade that played a capital role in opening new trading routes.

Finally, the reason to expose such stereotypes is that they are part of self-representations; it is the identity reference traders use to explain how they operate economically, in the Lagos marketplace, in Guangzhou and on international trading networks. The question is not to consider if these are Igbo practices or not, even less whether they are exclusively Igbo (because they are definitely not) but to acknowledge that they are referred to as Igbo's. The performative aspect of categories, in creating shared norms, forces us to acknowledge the diversity of economic systems evolving on a global level. Anthropology has extensively discussed economic diversity, stressing how the commercial exchanges cannot be understood without considering the cultural and social context it takes place in. In my opinion studying Computer Village *and* the trading networks it is embedded in push us, anthropologists, to think globalisation in its diversity, and avoid reducing any global economy that is not 'Western' as 'globalisation from below'.

Ethnicity, economy and long-distance trades

Economic anthropology and ethnicity have a shared history, often articulated around trust and solidarity, as well as inter-ethnic economic exchanges. Besides the basic inputs such as proving the diversity of economic systems (and by the same token challenging the 'normality' of market economy), anthropologists have explored and described long distance trades. In West Africa, economic studies have shown how, since the pre-colonial era, networks among the Hausa, Mande, Juula, and other West African groups have used relations of kinship, ethnicity, religion, patron-client and secret societies in the development of efficient, market-oriented institutions (Curtin, 1975, Austen, 1987, Hopkins, 1973). Classical examples, such as the Hausa cattle traders in Ibadan (Cohen

1965) or that of kola in Kano (Lovejoy 1980), showed the existence of different economic systems—ethnic monopoly vs. ethnic heterogeneity of the diaspora—used to guarantee the development of cross-cultural trade and efficient market institutions in West Africa since pre-colonial times, pointing at the role of commercial diasporas as bridges across West Africa (Lovejoy 1980).

Igbos have also attracted a fair share of scholars' attention. Political economists and anthropologists, often involved in development studies, manifested their interest in their economic success stories: the development of the industrial city Nnewi (Abiola 2008a), a massive market in Onitsha (Brautigam 1997; Forrest 1994), or Aba-made shoes and garments (Meagher 2010). All of these were discussed within the long-distance trade in which such they were embedded, with particular attention for the stateless features of the Igbo social organisation. Some describe it as the blueprint that helped Igbo entrepreneurial activity to thrive in contexts marked by state withdrawal, such as the aftermath of the Biafra war and following the drastic austerity policies imposed by Structural Adjustment Programs (Meagher 2007a). Others stressed these same features as one of the reasons behind the alleged tendency of Igbos to be involved in illegal activities as well as vigilantism (Bayart 1999; Smith 2004, 2007).

Both approaches are inaccurate: explanations by cultural institutions are tricky and simply not the point here. And, in my opinion, the declinations within legal and illegal, formal and informal frames are just what happens to any economic system exposed to different contexts. However, what is interesting is that this economic system exists and that it has been evolving on local and transnational levels. Meagher insists on the changing feature of economic systems: "Far from constituting a culturally defined infrastructure, the indigenous economic institutions of Igbo society have undergone important shifts in response to the pressures and opportunities of colonialism and the post-colonial era" (Meagher 2010, 27). My work builds on this statement. In the coming chapters I will argue that some of the Igbos' economic institutions, that I discussed via the stereotypes, materialised in Computer Village, in a cooperation-competition dynamic among a multitude of micro-and small enterprises, where sometimes only one person counts as an enterprise.

I discuss Computer Village's contemporary organisation as emerging from Igbo institutions that have evolved and adapted to new manufactured and used goods. As Computer Village is a global *hub* embedded in global trading networks (see Part2), I add the era of globalisation to the different adaptations the Igbo economic system has been able to undergo. On the role of Igbos on the global level, I address this through my discussion of the interethnic trade in which Igbos have been involved.

Meagher (2009) reviews these institutions from pre-colonial⁶⁴ times to the era of Structural Adjustments Programs (SAP), with a particular emphasis on the post-Biafra War period. She argues that Igbos' ability to build bridges with other ethnic groups played a vital role in the rapid development of local industrialisation of Igbo states in the after Civil War. As she demonstrates, after the war, local industries in South-eastern Nigeria did not withdraw into parochial forms of economic organisation but participated in the development of complex trading and production linkages with other Nigerian ethnic groups, as well as trade from other parts of Africa and from as far away as East Asia, without any assistance from the state (Brautigam 1998; Forrest 1994; Meagher 2007a). This brought Meagher (2009) to suggest that interethnic economic activities represent an element of national cohesion 'from below'. "While ongoing, conflicts over an equitable share of the national cake continue to threaten national cohesion from above, Igbos engagement in the informal economy has been knitting the country together from below" (Meagher 2009, 32). I suggest that what she describes as the Igbo ability to build inter-ethnic bridges played a central role in the establishment of commercial exchanges between Nigeria and China.

So what?

In this short chapter, I addressed the question of ethnicity, first because it seemed impossible to ignore ethnicity in Nigeria and second because ethnicity was the principal emic explanatory logic for the organisation of Computer Village which, after its inter-ethnic origins, became massively Igbo.

I approached ethnicity by discussing two main stereotypes about Igbos: their penchant for business and their egalitarian internal organization. These stereotypes take the form of essentialist visions I do not, of course, adhere to as an anthropologist. However, as emic discourses they are performative, and become crucial to how economic actors conceive of their roles, and thus to my understanding of at least some of the economic features of the UEEE market in Nigeria. I suggest that the Igbo penchant for doing business and their egalitarian attitude contribute centrally to creating a market organised as a multitude of micro and small enterprises, evolving in intense cooperation, yet independent from each other, competing as equals.

⁶⁴ She also discusses the construction of a *Pan-Igbos* group, somehow fitting into the general understanding that « [In] precolonial Africa [...] the dominant characteristics of [...] 'societies' (used here as conventional shorthand, without implying functional integration) were mobility, overlapping networks, multiple group memberships and the flexible, context-depend drawing of boundaries.» (Lentz 1995, 319). This serves as a general reminder of the flexibility of ethnic belonging.

Throughout the following chapters on Computer Village, I will discuss how these Igbo institutions have evolved to adapt to the trade of used computers, but also how these were particularly fit to the specific challenges of UEEE and, in particular, its fragmentation. Thus, I suggest, that they may have played a role in the booming success of Computer Village. Finally, building on Meagher's arguments about the Igbo ability to engage in inter-ethnic trade, I discuss that this same ability played a similar role in the construction of China-Nigeria relations, with Chinese traders representing simply another social group with which to engage in commerce.

In sum, I laid out a few elements that I believe are useful for understanding the link between ethnicity and the global trade of use computers. These will be developed throughout this work to highlight the agency of African traders in UEEE circulation. Finally, by considering Computer Village as a global hub, embedded in global networks and observing how its own economic model is also exemplified by the organisation of Igbo trading practices in China, I hope that I have laid the base to argue for diversity of globalisation, which I have addressed as 'entangled globalisations'.

8. I go enta market

Chuks' business, Largess Ltd, was in Megacity, one of the lines in Computer Village specialised in *fairly-used*. The shop size was a standard three by two meters. On the left, there were two big wooden desks, Sandra's and Chuks'. On the desks, there were bunches of screws of different sizes, colours and ages, a few tools, piles of papers, the Holy Bible and a book for accounting. Hanging from the ceiling, the *semper fi* duo: bulb and fan. On the left wall, carcasses and screens shelved in two wooden cabinets—a spare parts inventory built up through years of scrapping. On the floor, surrounding the two working stations, plastic bags held computers at different stages of assembly. Each bag was a work in progress. Each bag was a customer, whose name, written on paper tape, was sometimes tagged on the bag.

In the left corner, a small TV tuned to Galaxy TV—a Lagos-based private station—was broadcasting local news or Latin American soap operas. It was common for women *and* men to follow money and love affairs of South American families. In the middle of the shop stood a solid showcase, 120 cm high, 150 cm long, 50 cm deep. It was built and sold at the edge of the market. The glass model, more expensive than the wooden one, gave the shop a certain standard. The showcase generally displayed four or five laptops of different brands, configurations and prices. Other spare parts in the showcase were cables, chargers, keyboards, batteries, cartons of connectors, screen modules, as well as broken down systems at different scrapping stages. Behind the showcase were more black plastic bags, works in progress. At a corner in the back, there was a metal case with two drawers locked with heavy padlocks, money and motherboards within. The shop security was guaranteed by *burglar-proof* (bars at the window), as well as a metal-doors padlocked in the middle closing over glass sliding door and a floor-to-ceiling gate fencing the little outdoor area in front of the shop. This was standard market procedure.

In sum, the place was small, dark, crammed full, clean and functional.

I spent a fair amount of time on a two-seater metal bench in the shop. Chuks generally worked in silence. Sometimes the hours felt very long, but I always had a front seat to observe his shop activities, for which I'm grateful. Yet, it was not an easy position, particularly at the beginning. Over-aware of the awkwardness of my presence, out of respect, shyness and the fear of disturbing, I would not ask all the questions in my head. I spent hours observing, trying to look comfortable, while actually feeling as the famous fish on the bicycle, and wondering how much of the gist I was missing.

During the hours in Chuks' office,⁶⁵ I often shared the bench with people. Sometimes they sat in silence, or were on their phones, some other times, they discussed computers, politics, football, or other things. Sometimes they were working, replacing a hard drive or a screen, or just standing there, holding a spare part. Among the questions I did not dare to ask: Who are these people? What are they doing here? I knew why I was sitting there looking idle, participating in random discussions. I'm an anthropologist. That's what we do, right? Pretending to belong, while taking (mental) notes that will help understand and explain something or *everything*. But them: What was their excuse? Customers, friends, family members, colleagues? They were supposed to be customers, right? Sellers and buyers, that's what a market is all about, right?

In addition to people hanging about in the office, days were marked by a relentless movement of people coming and going. They would slide open the door, letting in the heat and the noise of generators, asking, "You get carcass HP i5?" or "Motherboard Dell?" or simply "Screen?", generally holding such a piece in their hand. Sandra or Chuks might ask a few more details about size and model. Sometimes they would compare parts with their stock, but usually they would simply give a fast, no-frills answer: a silent head-shaking or a simple *no*. No good-byes nor thank yous. Or they would give a *yes* and hand the requested spare part to the person, who would take it and go; again, no thank yous, no good-byes. Sometimes, the price would be mentioned, but almost never bargained. And no money would never be exchanged. The door closed, the sounds of the market fading. The interaction was over. The whole exchange might last a few seconds, rarely few minutes, with the number of words kept to a minimum. Efficient? Rude?

Every time I witnessed these exchanges, a few things amazed me. First, how could Chuks and Sandra give such fast and confident answers? Seeing the quantity of parts and stuff in the shop, it felt like super-memory-magic power (or a lie?). Second and maybe more importantly: Who are these people? Why don't they greet each other? Why don't they bargain? And why don't they pay? Why am I in a market and seeing so little money?

It took me a while to understand that they all work in the market, and usually but not necessarily, in the same line of work and the same area of the market. In this case, they were involved in the selling and repairing of laptops in Megacity. As it would happen in an office among colleagues, they would

⁶⁵ In the market, the shops are also referred to as offices; shop vs office may depend on the main activity or the owner, selling or repairing, but not necessarily. Here I simply use the term more often used by the owner.

greet each other in the morning and the rest of the day would be understood as one long interaction. Without being colleagues, they were working as colleagues.

It took me while to understand that this kind of exchange is not only extremely common in Computer Village but is what the market is about: constant movement, short exchanges, numerous ongoing deals. The market is a constant flow of people, goods and money.

I discuss these economic dynamics as cooperation-competition: cooperation between businesspeople working together, while competing as micro and small enterprises doing the same work. However, my main interest is in cooperation because cooperation is the *sine qua non* for the used computer business. In this chapter, I discuss how cooperation materializes in the marketplace through the internal circulations of goods, tools, skills and money. I will show how these internal circulations are the development of older Igbo marketplace practices (though they are not unique to Igbo); and that this evolution is particularly suited to a fragmented, non-standardised business, such as the trade in UEEE.

Running the market

I later realized that these interactions had been explained to me the very first time I set foot in Computer Village as a researcher. Obviously, I wasn't ready to understand the extent of the information.

When I contacted Patrick—the contact I was given by Frank's in-law at the very beginning of my field work—he redirected me to Regina. There it was: my first interview. We were sitting in her shop in Megacity: Regina, Emeka, a friend of a friend who came with me that day, and I. When I asked what her business was, she listed a much wider list of goods than what could be seen in the shop:

Me: So, you have another place where you store goods?

Regina: It's not a must that you have the goods, [. . .] If the customer comes in now and he asks for something and I don't have it, I can just get into this compound and pick up something and sell."

Me: The customer will not tell you, "I will go myself?"

Regina: Some they will, some will wait for you.

Emeka: "I can come here [as a customer], and I have confidence in her, I don't mind her eating that 100 naira, provided all the things I asked are there."

Regina: "Yes! I have to get something, so that my customer will be satisfied with whatever I will give to him or to her".

Emeka: "Yes. If I come and I said: 'Do you have laptop Dell?' She doesn't have it oh, but she says she has it. She will go and ask, she sees it, she says how much, 10,000, she comes and says 15,000, I may price 12,000."

Basically, a customer can mention anything; the seller will sell. If the product is not in the shop, the trader will *enter market*, buy it from a fellow seller and sell it to *his/her* customer. It may take a few minutes, a few hours or a few weeks, depending on the commodity's availability; but if the thing is in the market, the customer will get it.

At first, I made sense of this practice from the customer's point of view. I focused on trust, which is a central question in any economic situation, however, it seemed Lagos. In fact, as a newbie, I was impressed by the "Not For Sale, beware of 419" painted on many houses and how often I was warned about cheating and scams during small talk. This was even more present in Computer Village. The market is the set for countless stories of scams: fake products, overpricing, stealing, basic 419, and notorious *fufu*-filled smartphones. As Sunny, a trader specialised in laptop memory ram and processors, put it—with an honestly benevolent smile—when heading out of his shop to help his sister-in-law to buy something in the market: "Ehen, you know how people from outside are scared of this place."

I was trust- and cheating-sensitive myself; I had been warned so many times about Lagos and Computer Village dangers, that I understood this practice as a simple and efficient way to avoid cheating: the extra-money customers are willing to pay is the price of a guarantee of quality, that goes through trust in the seller. Trust is part of the picture, but by far not the main colour of the picture.

But on, the other side of the deal, Regina explained the same practice stressing the need to nurture the relationship with her clients. It's not about trust, but about loyalty: a solid business needs a solid customer base. This practice to build customer loyalty is known in other African markets. Trager (1981) described it as a common practice in South-West Nigeria, known as *onibara*, which means customer in Yoruba. She detailed the different manifestations of *onibara* relations, from casual gossiping to friendship, depending on the type of commodity (perishable or not), the distance and the trade-level (retailer, middleman and suppliers), stressing that the goal is always to keep the customer happy, thus building customer loyalty. Despite ethnic difference, Regina is talking about *onibara*, or *onibara mi*. In Igbo it translates as *onye ahia m* (my market person): my customer. My

customer is among the most common call one can hear walking around the market by traders trying to attract attention.

Enta market is one of the practices used to build these privileged *my customer* relations. *Enter market* is *pidgin* for the Igbo expression *oso ahia*. Literally it translates into *running the market*, it describes exactly this practice of buying from a fellow trader operating in the same market a commodity that is not available in one's shop to satisfy a client's specific demand and to take a commission, called *nzem*⁶⁶.

According to formal and informal discussions with traders, this is a common and longstanding practice in every Igbo market. Market women selling yam and tomatoes have been willing to go through the troubles to buy from one another, to avoid the risk of losing the client by addressing him or her to a fellow trader. In this horizontal exchange, everybody is somebody's customer—a practice that may reflect in the fact that in pidgin English the term 'customer' refers to the buyer as well as the seller, as does the Igbo expression *onye ahia*, or the Yoruba one *onibara*; in this horizontal intra-market business, everybody is somebody's customer. And *I go enta market* is a sentence even more common in the market than *my customer* calls.

Besides Nigerian markets (Trager 1981), these practices have been described in Ghana among market women in Kusumi (Clark 1994, 1991), but are known in different cultural environments. Clark (1994) draws parallels between the reciprocity of the market woman in Kusumi central market, and the Javanese *bakul* described by Geertz or the *suki* in the Philippines. She also points out how the similarity with the Haitian and Jamaican practice of reciprocity (Mintz 1961) might suggest a West African heritage. Despite some differences, all these horizontal relationships between vendors at the same trading level have been understood as personalised commercial relationships, set up in order to take care of the vertical relationships with the customers. Horizontal personal relations among fellow traders have been understood as ways to gain access and control on keys resources, such as credit, information, and transportation, without risking additional capital (Clark 1994). Of course, this is also the case in Computer Village. But unlike what described elsewhere, in Computer Village these horizontal exchanges are not only a strategy, along with gossiping and *dash*, to take care of the clients, but a fundamental a central piece, without which the trade of used computers would not be

⁶⁶ According to some of the traders, *enter market* can also be done as a favour, while *oso ahia* always implies a commission. *Oso ahia* is short for *onye agbo oso ahia*, the person who runs the market.

possible. But before discussing *enta market* and UEEE, I want to describe two important aspects of the *enta market* practice.

First, according to multiple interviews and discussions with traders, in Computer Village and other markets⁶⁷, *enta market* is a known practice and important feature of any Igbo market. However, with the arrival of imported manufactured goods, particularly electronics, *enta market* had become a central piece of the market dynamics. The lack of expertise and the nature of the goods made it difficult to evaluate the quality of the merchandise. And the customer's need to trust the seller became as important—if not more—than the seller's needs to retain his/her customers. One of the consequences was the professionalisation of this practice. *Enta market* became a job in itself. In Computer Village, *onye agbo oso ahia*, the people who run the market—also known as *nzem*—are also middle-men, which in pidgin could be translated as *hustler*. They are massively present in the electronics markets, usually standing around entrances, calling out to people walking into the market. They offer to help the potential client to find exactly what he/she is looking for, in exchange of a commission. They know the market and have contacts with different traders. Their business runs based on the general idea that without a personal relation, one is an outsider, and as an outsider, one cannot obtain the best deal. That is, such a person will be cheated. Professional *nzem* are numerous in Computer Village. And according to different point of view, they may facilitate sales between client and retailers, or add up to the street sellers and *agberos* crowding the marketplace. Even though this professionalisation is articulated around the question of trust and addresses vertical exchanges—seller, middleperson, customer—it shows the ability of so called “traditional” economic practices to evolve and adapt to new kind of goods and markets.

Back to Regina's perspective. The main point is that she can satisfy her customer *because* she belongs to the market; she is part of a network of traders. Her situation is particularly interesting because she works for one of the registered companies in Computer Village, therefore, she can supply from the official resellers, within a classic vertical supplying chain: importer, bulk seller, retail seller. However, when she said “I can go to this compound”, she was not referring to any registered supplier, but rather she was talking about going to buying from a fellow trader, a peer, in Megacity. She is the customer of a fellow trader situated at the same trading level she is. Exactly like one of the people popping in and out of Chuks' office.

⁶⁷ Due to my long stay in Lagos, I came to build friendships with traders working in other markets beside Computer Village, with whom, among other things, I often discussed my research. This particular point seems to be a collectively accepted narrative.

In sum, *enta market* is one of the most common sentences I heard in the market. A sentence that translates to the fact that Computer Village is articulated around an intense and constant selling and buying activity among traders situated at the same trading level. This practice is the consequence of the evolution of a well-known 'traditional' Igbo market feature, to the context of imported electronics. In the next pages, I discuss this *horizontal intra-market* trading in Computer Village and how this applies to the UEEE trade.

Business 2 business: same level trading

During the years in the market, I observed, discussed, and experienced a wide range of relationships among traders: friends, enemies, beer-buddies, church members, spouses, acquaintances etc. As in any place where people spend Monday to Saturday, 9 am to 6 pm, together, personal bonds emerge and develop along the whole human relationship spectrum, and business practices are embedded therein.

I want to expose three points that seem important to understand these personalised commercial relations taking place in Computer Village. First, as economic anthropologists have pointed out in different contexts, in Computer Village too personal relationships are embedded in and essential to business relationships. And this is acknowledged also in emic narratives, which explain how friendship is part of the marketplace: "We are not only doing business here, we are also friends" as Festus put it.

Second, I believe that one manifestation of personal bond within the market may be the fact that nobody, and I mean nobody, gets into the market without a personal introduction. I systematically asked people how they go into this business. Everybody, and I mean everybody, I spoke with in five years on the field, joined Computer Village through a personal relationship: a friend or a family member who already was in the business. And the same also apply for a one-time deal, as I realized when in Neuchatel my phone rang displaying an unknown Nigerian number. It was Cassidy, a Nigerian I met in Neuchatel, who had been into *tokunbo* import-export (cars, clothes, toys, skis . . . anything) and who explained to me some of the basics of importation activities. He was in Lagos to sell his stuff. Among other things, he had some screens to sell in Computer Village and he asked me for information. Filled with "I-made-it-in" anthropological pride, I told him "I have a guy" and gave him a few numbers.

Third, personal relationships are not a total guarantee of trust. Despite the emic narrative and the etic analysis, it seems hard to understand personal relationships as a guarantee, considering the

endless list of stories I was told about being cheated by a family member, a friend, a church member or a pastor.

Probably because cooperation among competitive contexts are often understood through the prism of personalised relationships, and because these latter were constantly valorised in emic discourses, I had leaned toward the understanding of such cooperation as personal links. However, with time I realised *enta market* is a central piece of business of an economic model. It was a way to do business, and not just an occasional act. Tonia's decision to update her inventory is a good illustration of this.

Tonia has been in the market since the early days, when the first computers showed up in stationery shops along Awolowo Way. She could remember the times one could make an NGN18 000 margin (compared to a few thousands today) on one computer. Since then, she had worked for different companies within the market. She is the one who brought her brother Steve to Computer Village, and at the time of the fieldwork, she was managing Genie's second branch in Megacity. She was selling accessories, modems, UPSes⁶⁸, USB sticks, etc. A few years after I met her, I walked into her shop and a few *fairly-used* laptops were displayed on the top of the counter. "Oh, now you also sell *fairly-used*?" I asked, surprised. She explained that her brother, Mega Rich, sent them from Guangzhou, and added:

"Everybody here is doing used, used, used. . . And me, I'm here with my new things. Sometimes I don't see customers for how long? So, I have to do what they are doing. At least like this I have a few things. [Otherwise] they will come and ask: 'Do you have this?' or 'Do you have that?' . . . and me I am here 'No, no'. So, at least like this I have a few things." (Tonia, 3 Sept 2012)

There are different interesting aspects to unpack in this short exchange. First, things change. People and traders adapt and evolve, as the market adapts and evolves. Second, Tonia reoriented (or enlarged) her offer to be able to participate in this horizontal selling. Her aim was not to run out to find what will satisfy her customer, she was aiming to sell to peers, to be part of a network of exchange. Within Computer Village, the link between peers goes well beyond optimising transport costs or helping out with a few goods. The aspects that led to the momentary stagnation of her business are probably multiple, but the solution was single: being part of this internal circulation of

⁶⁸ Uninterruptible power supply (UPS) are power stabilizers, very common in Nigeria due to the precarity of the power supply.

objects. To succeed one needs to play with the others. The market structure doesn't allow you to fly solo.

This cooperation is surely based on personalised relationships, and Tonia's case makes a strong argument in that direction, as she was working with two of her siblings. However, I suggest that this is a specific economic model. Tonia's sales strategy change was not just influenced but imposed by what was happening outside her door—to use Porter's image. The fact that she was evolving in a section of the market oriented in *fairly-used*, and that she was into new stuff compromised her success. She needed to be part of this internal same level trade to work. And she reshaped her business and her strategy in that direction.

This example allowed me to understand that what I was witnessing was not only occasional help, but rather an economic model based on the internal circulation of goods between same-level traders. It was, in sum, a mandatory economic cooperation. To succeed everybody needs to play ball because flying solo means not being able to sell anything.

One common inventory (1)

When it comes to Computer Village, *enta market* has become an economic practice that is not just a *sine qua non* for the success of the traders, but also a central piece of the success of the market. This becomes very clear with the second example, which articulates around the bulk retail continuum. I want to stress to what extent the market is movement, and movement is cooperation: I suggest traders in Computer Village share one common inventory.

The second example concerns former Chairman Steve and Festus. They both worked in Megacity, Festus's shop faces Genie's second branch and they belonged to the same association but operated within different business lines. Steve, an official distributor of different major Nigerian internet providers, was into networking. His airconditioned office was situated on the first floor of a building in Otigba Str, where he employed a total of five people. Festus, on the other hand, was into *fairly-used* desktops and towers. His office was in a POWA⁶⁹ shop like Chuks', but he shared the rent with another trader. He bought untested stuff from Ladipo market⁷⁰ that he would test, clean, repair and

⁶⁹ The Police Officer Women's Association (POWA) is the association of police officers' wives that manage the shops built near the police barracks. The barracks in Ikeja happened to be close to Computer Village, and the women of POWA quite clearly engaged in the far more lucrative practice of renting out their shops rather than selling tomato from them.

⁷⁰ Ladipo, situated in Mushin, is a used spare parts and cars market at its edge. Along Ladipo Str, about 40 warehouses have turned into a wholesale market of different kinds of imported used goods. While containers can be off loaded in Computer Village as well, Ladipo is one of the main offloading sites in Lagos city.

standardise for the market. Obviously, Steve and Festus knew each other, but I always assumed their paths did not really cross, since they operated in quite different lines of work, and (since) I never saw them hanging out with the same people. Until the day I arrived at Festus's shop, and they were both sitting there. Festus was adding Wi-Fi cards to some laptops. It was explained to me that Steve received an order for 40 laptops. He bought them in the market and asked Festus to add the Wi-Fi cards to match the client's expectations. While working, they were chatting and joking about a pretended lack of ambition. Steve was somehow pushing Festus.

Steve: "Maybe you enjoy sitting here under the sun?"

Festus: "So now you are mocking me? You are mocking your son?"

Steve carries on, talking to both of us, saying that this is the reason he's bringing this laptop to him, so that maybe Festus can see that this is the way. "I bring this thing, but he still there with this desktop, desktop, desktops. . ." The discussion goes on and being ambitious translates into traveling⁷¹. And Festus closes the joke: "You need to do more and then help me travel outside this country." (Lagos, 2015)

Once all the Wi-Fi cards installed, Steve would pack everything up and bring it to his office and close the deal with his client toward whom he is responsible for quality, quantity, and price. Once he receives payment, he would pay the traders from whom he bought the laptops, the Wi-Fi cards, and Festus for his work. No big deal, just an example of everyday life in the market. The exchange between Festus and Steve opens up to two aspects: collaboration around services as well as the bulk and retail non-specialisation.

This collaboration could be read through the lens of the support that those who are well off are expected to give to those who are still growing. The kind of help that is part of the emic narrative on redistribution is what they were joking about. However, here, this cooperation simply recalls the cluster: different enterprises along the same line of work working together. Steve could satisfy his client as he had a whole market behind him, with computers, spare parts to upgrade them, and engineers who could do it. It is a form of cooperation with mutual benefits: he could close his deal thanks to the market, and the other people would benefit from Steve's deal, via a redistribution of

⁷¹Travelling here means to emigrate. Note that in pidgin English the word travelling stands for migration and migrating, and it carries the same positive connotation attached to the mobility of people from the 'Global North'.

the benefits. It is not just about helping within a network of survival; it is a system based on cooperation.

My first understanding about this cooperation leaned on the fact that in Computer Village there is no bulk and retail specialisation. This is the case in other markets in Nigeria (Trager 1981) and in West Africa (Garlick 1971; Bauer 1954), without being a standard West African practice (Kumasi market traders for example are commodity specialised, but also bulk, middle wholesale or retail specialised (Clark 1991, 1994). In Computer Village, traders operate at the same time on retail and wholesale levels. At any time, a customer can walk into Computer Village to buy a phone charger or 200 computers. Bulk transactions are very common. Traders regularly deal with clients from Kaduna, Owerri, Lagos, or even outside Nigeria. They usually receive orders via WhatsApp or Messenger; they will find the commodity in the market, assure safe packing and send the whole thing up North or far East (in Nigeria) via the long-distance bus network as a delivery system. Usually, the order is shipped when the seller *gets the alert*⁷²: the SMS notifying that the buyer's payment has arrived onto the seller's bank account.

Again, with time in the market, I came to realise how *extremely* common it was to see goods being pushed around, usually by young Hausa men. Armed with a wheelbarrow, they are for hire and provide a fundamental service that smoothen movement in the market by pushing goods within the market. Their presence is proof of the density of this internal circulation of goods. So yes, the feeling that "they all work here" was right because a substantial part of the deals is carried out on a bulk level, for clients who are not around. What I got wrong was the feeling of a failing market, where everybody is a seller, and nobody is buying. They are not just working, but they are working together. The market was moving and moving is sharing.

It is by combining the central role of same level trade with the importance of bulk selling in the market that I came to understand one of the central pieces of Computer Village: a common inventory. Thinking in terms inventory was helped by putting the economists' cluster theory perspective on the Africanists' description of these practices. It made me understand that this intra-market trade actually acts as the management of the common inventory. Economists stress how one of the advantages of clustered structures is facilitated inventory management. The closeness of enterprises evolving along the same line of work makes orders and deliveries much easier than travelling halfway across the globe, across different borders and legal systems (Porter 1998). Cluster theories think of

⁷²*Alert* in pidgin English refers to the SMS sent by the bank to the account owner, at the very moment money is transferred onto said account.

inventory management facilitation mainly among lined-up companies. Computer Village defiantly benefits from a similar geographic concentration of lined up companies, as is the case from the example with Steve finding engineers to upgrade used laptops a short walking distance from his office. However, the Computer Village system is more than proximity helping communication, and therefore supplying and inventory management. The exchanges in Computer Village are so dense that the management of inventory can truly be understood as shared inventory. The constant flow of “You get this?” “You get that?” is a way to keep up with the general inventory: people know what is in the market, what is scarce, what is abundant. It is way to know the market. They know what is in the market and traders have access to the whole. Potentially, traders can sell anything in the market at any time.

I argue that this shared inventory is more than a cost-effective advantage offered by proximity. It is the sharing that allows to overcome the difficulties specific to the trade of used stuff, and particularly to the trade of used electronics. This common inventory is one of the main aspects that makes the market, and by extension the global trade of used electronics, possible and profitable. Internal circulations of goods, via this intra-selling system, is one of the strengths of this economic model; it is a real answer to the fragmented feature of the used goods trade due to the snowflake factor (Crang et al. 2013). These aspects will be even more flagrant in the discussion addressing the repair industry, its spare parts trade, and tools and skills sharing.

Repairing e-stuff

The importing industry of used electronics would not exist without a number of engineers, who amend, adjust, adapt and adopt the imported commodities to the Nigerian market. Trading used electronics would not make sense without a thriving repairing activity. Trading and repairing are interrelated businesses, depending on and shaping each other. And together they shape the flows of stuff, constantly redrawing the lines between used, reusable and waste. As the history of Computer Village showed, not only have traders and engineers been rubbing shoulders in the market since its very beginning, but this joint venture is one of the reasons Computer Village turned from informal settlement of a few traders into an internationally known cluster.

Moreover, the repairing industry exposes the different forms of cooperation taking place in the market, consolidating the argument that cooperation is a *sine qua non* for the success of UEEE trade. The central element of the demonstration is structured around one of the main challenges faced by engineers in Computer Village: access to spare parts. The focus on spare parts allows, on the one hand, a further exploration of the same level trade. And if the bulk and retail question opened the

understanding of this practice, it is with spare parts that sharing really blossomed. Spare parts are the next-level answer to snowflake factors.

On the other hand, this will lead to challenging and completing some aspects of narratives of e-waste. The commodity-waste tension at the centre of the debate on exportation regulations around the repairable or not repairable question is here observed from the importers' point of view. The repairing industry adds a layer of complexity to the understanding of UEEE flow. I make explicit the link between the flow of used computers and the access to spare parts. This allows a confirmation of the main reason the internal circulation *running the market* became important in such a manner as to become one of the main features of Computer Village's singularity. It also shows how the categories *repairable or not repairable*, as established by the regulations' makers, are not relevant without taking into account other factors impacting local repairing activity.

Spare parts 1: sourcing

As in Apple Stores and other computer and smartphone repairing shops around the world, the repairing industry in Computer Village is more of a replacing industry. Test, unscrew, open, replace, close, screw back. The basic protocol for engineers in Computer Village may seem simple, but it numbers a few challenges with regards to the skills, the tools and, of course, the spare parts. Access to these is a main point. A point that can turn trash into a useful used computer, and the other way around.

Usually, the customer enters the shop, hands the computer to Chuks, explains what the problem is and sits in the office while Chuks starts the diagnosis. This may take some time; he may need to open the system and check some parts. The client may stay or go. Once the problem is identified, the bargaining starts. The price depends almost entirely on the cost of the part, and this latter depends mostly on its availability in the market: is it easy to find or scarce? The labour cost is quite low and the value of spare parts is not directly related to their price in the country of origin. Once an agreement is reached, the work can start. Before leaving, the customer will marker-sign the battery, the hard-drive, and the RAM sticks, as a preventive measure⁷³. Computer, signed parts and screws will be put in a plastic bag, with the name of the customer written on a piece of tape stuck onto the bag. The plastic bag is a simple and efficient organisation tool. Now the engineer needs to find the parts.

⁷³This practice was explained by the same narrative about (lack of) trust. Some Computer Village engineers have been notorious for their cheating, usually by substituting perfectly functional, generally original parts, with lower quality parts or (simply) taking them and then swearing the computer didn't come with them. Besides the question of trust, this also speaks of the 'hotcake-ness' of certain spare parts.

Unlike Apple Stores and other computer and smartphone repairing shops, Computer Village does not benefit from a factory-sourced supply system. Other sources of spare parts substitute factories (and all the middle players). For analytical purposes, I distinguish two channels of sourcing: imported and locally “produced”.

Importation of spare parts was essential to the birth of the market, and the diaspora was one of the main sources. That is still the case today. This source of supply is based on personal relationships. For instance, Chuks could count on two main sources. A friend from secondary school based in London, where he worked as an IT person, who regularly sent him *fairly-used* stuff, mainly motherboards, and family members living in the USA, who occasionally would send him laptops. Also abroad, but to the ‘East’, he had different sources in China, mainly among Guangzhou-based Nigerians: “I tell them what to buy, what I need, just like I did with you” (Chuks, 25.08.2012). In China, he also bought directly from a Chinese trader who spent some years in Computer Village till homesickness called him home. He was the only Chinese trader Chuks ordered from, without leaning on the Nigerian traders in Guangzhou. Finally, access to imported spare parts happens within the market. “From people like you, coming to sell things now and then, parts or computers, laptops.” (*idem*) And, of course, via the same level trade, with some privileged partners such as Donatus, whose brother in Chicago regularly ships spare parts, such as the motherboard he was holding while telling me: “This one is new, brand-new from the US; it’s not China, it’s not *fairly-used*, it’s not refurbished, it’s brand-new US.”

Along with direct importation, there is a kind of ‘production’ of spare parts within the market, production by *scrapping*. *Scrapping* means to dismantle into components, in this case, to turn non-functioning and non-repairable computers into a source of spare parts:

“Everything in laptops is very essential, very important. [For example] some people will see the body of the laptop is old, is bad, is broken. We call it carcass. So, when it spoils, you see somebody looking for carcass. . . ‘you get carcass HP...?’. It is money, now! What you need to do: dismantle this one [another laptop] that is not OK, then sell [the carcass] for the person.” (Igwe Kamanu Benjamin, 30.12.10)

What he was saying is that laptops are like pigs: everything but the squeal. I can’t count the number of times I was told to “bring everything, bring everything. Even what doesn’t work, here we use it.” This injunction was explained by a common distrust in the *first world’s* inability to understand what is useful and what is not. There are countless jokes about the over consumption of the ‘West’, its

inaptitude to solve problems without specific tools, and its belief that each tool has one purpose⁷⁴. *Scrapping* is a fundamental activity in the market. And an important challenge to the e-waste narrative as it is an important source of spare parts and a step often overlooked in the studies on e-waste.

The dismantling of used computers is generally discussed in terms of urban mining, aiming to recover precious metal in a recycling approach, and is not mentioned in the literature about used computers as access to spare parts. *Scrapping* as creation of spare parts is similar to what has been described as the things *downstream*, such as the dismantling of end-of-life ships in Bangladesh to recover metals (raw material) as well as furniture that became very fashionable among Bangladeshi middle class. (Gregson et al. 2010). With the important difference that, in this context, the production of scrapping is injected directly into the same business and is essential to the success of the business. Scrapping's essential role is key in challenging the regulations on the circulation of UEEE. In particular, these practices show the limits of both positions regarding the question of the exportation of broken (repairable or not) electronics, and more generally the waste-commodity tension.

As a reminder, the Basel Action Network (BAN) and the Sustainable Electronics Recycling International (SERI), while both aiming for an unarmful management of discarded electronics, disagree on what can or cannot be exported (mainly from OECD to non-OECD countries). The R2 "ready to repair" by SERI claims repairable stuff should be exportable, while the BAN understands *repairable* exportation as a loophole to bypass the Basel Convention (Pickren 2015, 165; Lepawsky 2018). Indeed, access to spare parts in Computer Village shows that neither of the two positions is satisfying nor tenable in the field. Concerning the SERI approach, the main issue is the fact that repairability is treated mainly from a technical point of view. Obviously enough, a laptop that has left the UK with a broken screen is repairable if a functioning screen is available. Outside meetings, conferences, or courts, repairable or not repairable does not depend only on the machine's condition nor on refurbishing friendly original design. The pro-exportation stance should consider the context in which such repairing is supposed to take place. For the R2 to decide what is repairable without taking into account the contexts in which such repair will take place is somewhat hypocritical.

On the other hand, the BAN's stance is problematic for two reasons. First, broken stuff is an essential source of spare parts, as explained by Igwe Kamanu. But computers that don't work anymore are not dismantled only if somebody is looking for a specific part. Their essential role is proved by the fact

⁷⁴ The *first world's* limited capacities go along with the valorisation of the *System D*, within which their superiority is clear. A testament to the complexity of relationships and hierarchies.

that *scrapping* is not only a side gig: it is a business in itself. Some traders' business model consists of buying batches of *untested* used computers, dismantling them and selling spare parts separately. Ifeanyi, for example, worked in Computer Village for three years and had a shop in Metro Quarters—the section of the market next to Megacity. He was selling only desktops spare parts, mainly specialising in motherboards, powerpacks and fans. And he was buying *untested* desktops only for the parts. This kind of shop shows how the recovery of spare parts from old computers is a systematic and central activity to the functioning of the market, and not merely a side gig.

Second, importing broken stuff makes economic sense, while importing *only* working stuff doesn't. This is true for both importers and traders in Nigeria. As an importer, importing not-working stuff alone is not profitable⁷⁵. Broken stuff in the 'Global North' can be gathered at a very attractive price—most of the time for free—but it will also be sold very cheaply in Nigeria. So cheap, that transport and clearing costs would not be covered. So usually, broken stuff is used to fill up empty volumes in cars and containers ready to go. As a sole business it would not be sustainable, but as part of larger shipments, broken stuff becomes extra money made at almost zero cost. Second, the gathering of used computers in the 'Global North' usually happened in batches. For example, by buying the whole ancient IT equipment after the upgrade of a company's IT equipment or during auctions following a bankruptcy. As an importer, there is no interest in testing everything before shipping, not just because it takes time, and time is money, but because in Lagos, at this level, there is no such thing as the market for *tested*, the emic category for used computers in working condition. In the warehouses between the port and the market, such as Ladipo, everything is sold *untested*⁷⁶.

For traders in Computer Village, it makes economic sense to buy *untested*. For example, when Festus explained his job, he said: buy it *untested*, test it, repair it, clean it, and standardise it for the Lagos market. Obviously, he always hopes for the best working/not-working ratio in the batch he bought, and part of the tricks of the trade are about how to identify a load with a good ratio. For example, loose screws are interpreted as a bad sign, a sign that "they may have tried to fix it *over there*". The country of origin is also an interesting piece of information⁷⁷. Screws and origins aside, the point is,

⁷⁵ This is an interesting input in the understanding of flow of e-waste as a criminal activity.

⁷⁶ The same thing happens for containers off-loading directly into Computer Village and the Alaba International Market.

⁷⁷ I was often explained that, for example, Germans overuse their stuff, while Americans replace things that still work. While I was given culturalist explanations about these differences, there are other interesting aspects, such as different laws (and sensitivity) about personal data protection. This explains for example why German used computers are often not in a working condition because their hard-drives are often drilled through before exportation, in order to avoid any possible data recovery. Meanwhile, I have seen desktops coming from the San Francisco Police Department with data and all. Should be said that in Computer Village there is no real interest in data extraction for potential blackmailing.

for traders in Computer Village, to buy *only tested* wouldn't be a viable business. It is easy to understand that *tested* is more expensive than *untested*.

As such, one could say that importing only *tested* would remove the added value linked to Festus' work. It is by testing, repairing and standardising *untested* stuff that Festus can make money. If only stuff in working condition and *tested* was imported, his supplying cost would be much higher and the added value from his work drastically reduced⁷⁸. On the other hand, to keep his income he would need to raise the final selling price, excluding the less privileged part of the population, thus reducing IT accessibility.

Even without drawing parallels between the exportation of raw materials and the importation of leftovers, reducing the added value of middle-level players such as Festus may simply put the whole operation in danger. In this case, reducing the added value means reducing their profits, thus their interests in the business. But middle players play an essential role in the functioning of the used stuff trade by turning a shapeless mass of used stuff into (semi-)standardised merchandise fit for the local market. As mentioned before, the snowflake factor makes the trade of used stuff the trade of the small players because they are the only ones able to match the mass of unique pieces to the taste of the consumers (Rivoli 2005). Crang et al. (2013) discussed this aspect about importers collecting the stuff, in terms of governance within the networks of used stuff trade. I suggest that the same principle applies to the traders in Computer Village—which probably addressed the question of governance along the networks and among importers and local resellers. But here, I want to stress that depriving local traders of *untested* supply would put their profit in jeopardy because they would not be able to add and fix much value. Without profit, their jobs would be less attractive. This not only would put the traders in further precarity, but also endanger the whole trade.

Spare parts 2: sharing

The snowflake factor and its fragmented trade is also at the base of the second element I want to discuss about spare parts in Computer Village. How to handle parts from different periods, different brands, different models, imported in small and medium quantities, by a multitude of micro and small enterprises, along the whole formal-informal spectrum?

⁷⁸ Interestingly enough, this would be a disturbing similarity with exporting industries—from palm oil to crude oil. These are characterised, among other things, by the fact that the transformations generating important added value are only very rarely carried out on the African soil.

In such a diversified and fragmented market, the supply network would be a logistic monster. The answer is the intra-selling described above. *Every trader in Computer Village has one or more external sources, as well as an inventory in the shop. But every single one of them buys daily within the market.* With spare parts, this takes an even greater importance. Intra-selling is a key step in every repairing process, as Igwe put it when explaining how he would proceed to replace a screen:

"In the process of changing it, I will loosen it, bring out the model, enter market to look for screen n6000. By the time I see it, and it has been tested there, I can bring it here and assemble it here." (Igwe Kamanu Benjamin, 30.12.10)

Through this constant circulation, traders have access to everybody's stuff, they have access to all the parts in the market. Computer Village is made of hundreds of micro and small enterprises, but it has one single inventory for the whole market.

This collective inventory is not described as such by the traders. However, it can be sensed in the vertical exchanges: between traders/engineers and their customers or between traders and their suppliers. When settling a deal with a customer, after the diagnosis, "this is in the market" or "this is not in the market" are the key sentences establishing if the deal can or cannot be made. The answer, "I don't have it" is simply not part of the repertoire. During negotiations, the traders always and only refer to a global vision, to the whole market. The personal level can appear through the pride displayed in terms of ability to get the stuff: if it is in the market, it will be found; it may take six minutes or six months, but if it is in the market, they will get it. When it comes to the communication with suppliers, the same overall vision dominates. When I was selling stuff, once the deal was closed, traders would usually proceed to tell me what to bring the next time—and with years passing by, they would also contact me when I was in Switzerland, asking when I would come back and told me what I should bring. They were somehow placing orders. I say somehow because there would be no obligation for them to buy what I would bring, as I had no formal obligations to sell to them. There is an economic politeness by which we would prioritise each other, but not at the cost of personal benefit. It is a thin line to walk between economic freedom embedded in social and personal relationships that makes sense in the cooperation-competition structure of this market (see next chapter). But besides the balance between nurturing personal relationships and maximising personal benefit, this non-obligation to buy reveals that the collective aspect prevails. It shows the importance of the overview, of the big picture. Nobody was asking for what they wanted or needed for their own business, they were telling me what the hotcakes were: what was scarce and in demand. They were telling me what the market needed.

Cluster theories pointed at proximity as a facilitator for inventory management (Porter 1998). Again, economists inspired the understanding of these exchanges in terms of inventory management and not mutual help. Indeed, the literature about Computer Village, mainly written by economists, addresses the market as an industrial cluster and points out the existence of “joint warehousing in response to the limited spaces in the cluster” (Bamiro 2012, 22). To be honest, I have not witnessed any such thing as shared warehousing. But I can imagine that the regular supply into larger warehouses, such as the one in Ladipo, could be understood as joint warehousing. Except for the fact that in Lapdio goods are not stored; they are yet to be bought.

Most important, optimised inventory and management may still be an understatement to describe what is going on in Computer Village. The circulation of spare parts within the market is so intense and constant that it should be understood as one big, shared inventory. Spare parts are constantly found in the market at the very moment they are needed for a specific repairing gig. *Enta market*, asking “you get this” or “you get that” is the way to access to the *common inventory* that is spread out in each shop of the market, and to which each trader or repairer can source at any time. This *common inventory* is not only the answer to lack of space in Computer Village. It is the answer to a lack of factory-like, standardised, steady supply of parts, and to a snowflake-like fragmented market. It is the manifestation of a very efficient economic structure.

Tools & skills: co-working

As they sell and buy to one another, people in Computer Village work together. Just as goods, skills and tools also circulate constantly. For example, Festus can walk up to his neighbour to get a motherboard’s password reset. He knows how to do it but doesn’t have the jumper to do so. Chuks may *enta market* to find a welder or a digital multimeter⁷⁹. Then he could come back to his office to work or decide to stay somewhere else because his generator is out of service or because there is an interesting discussion going on or because he wants to have a look at the new arrivals at his neighbour’s. Again, these are all answers to the question “Who is this guy?” that was constantly popping in my mind in Chuks place! A trader or engineer coming to buy a screen may stick around to replace it, to make sure the screen works, because he needs tools or assistance to do the job, or simply to take advantage of the electricity in the shop or take part in the discussion with this *oyinbo* researcher.

⁷⁹ “A multimeter or a multitester, also known as a VOM (volt-ohm-milliammeter), is an electronic measuring instrument that combines several measurement functions in one unit. A typical multimeter can measure voltage, current, and resistance. Some meters have a facility for testing transistors and capacitors.” [https://en.wikipedia.org/wiki/Multimeter – page consulted on the 8 May 2018.]

This incomplete list of situations pushing people to work outside their shop helps to understand some of the reasons behind the constant flow of people in Computer Village. It doesn't even remotely do justice to the extent of exchanges, whose fluidity is such that it made me think of a co-working space: personal spaces structured around constant exchanges in a structured collaboration.

Unlike the circulation of spare parts, tool and skill sharing has been discussed by other scholars, mainly mentioned as an example of horizontal collaboration characterising clustered markets in the 'Global South' (Nadvi; and Schmitz 1994). Literature on Computer Village mainly follows this approach, addressing it as a cluster, a truly innovative (Bamiro 2012), industrial cluster (Abiola 2008b; Oyelaran-Oyeyinka 2003; Bamiro 2003, 2006). As such they all mention the cooperation on a horizontal level, through easy access to credit, education sharing and tools sharing. Such collaborations are often understood as coping and survival strategies, helping to overcome challenges due to different lacks, gaps, needs, and access to economic growth. In short, to fight poverty (Oyeyinka 2017).

To a certain extent, I agree with these analyses: the coworking space is an answer to the lack of capital, limited access to formal and performant education, and the multiple difficulties due to a lacking infrastructure (unsteady power supply, water supply, security,...). However, I believe these analyses are reductive. Inspired by the economic theory of clusters, they list type of synergies, but they fail to communicate the degree of collaboration; for this reason, I suggest the idea of a co-working space.

Meagher's (2010) descriptions of inter-firm collaborations in both shoe and garment clusters in Eastern Nigeria are close to what I observed in Computer Village. Meagher stresses how networking is absolutely central and how physical proximity of shops and working tables, along with the social connection, simply forces tools sharing. However, she reports complaints about tools getting lost (and designs stolen), which bring her to analyse this forced sharing as a coping strategy with negative impacts on the market success. Through her book, there is a watermarked question: is cooperation a stimulator or an obstacle for economic growth? She identifies two networks in which such cooperation happens: networks of accumulation and networks of survival—both simultaneously at work in each market. She understands tool sharing as part of the network of survival—more than half of the traders in the shoe and garment clusters do not have the necessary tools to carry out their work. And she argues that the network of survival can be an obstacle to success: "The intensity of cooperative networking within the two clusters is impressive. [...] However, many producers cooperate with their colleagues, not because they feel it improves their efficiently, but because of moral compulsion and economic insecurity." (p. 132) She gives examples of traders complaining

about sharing undermining their business, or others expressing that cooperation could have a negative impact, but if they didn't play ball, they wouldn't get subcontracted, nor helped in difficult moments. Meagher draws the conclusion that too much embeddedness becomes an obstacle to economic growth.

Studies on SMEs' networks in the 'Global South' clusters are dominated by economists and development studies, as such their outcomes often offer either praises or critiques of the cooperation. I guess this reflects the fact that development studies and economists looking at clusters in the 'Global South' have the inbuilt idea (not always explicit) of finding the grail for economic growth, the key to exit poverty. Their underling research questions seems to be: is cooperation a help of an obstacle to rich the economic growth? Indeed, to develop her argument, Meagher leans on studies on informal small, clustered firms in Ghana, Kenya and India. With Computer Village cooperation, I want to bring a different point of view. I suggest that cooperation is simply the only way to make this trade work. And this for two reasons.

First, in Computer Village, I never heard a complaint about tools getting lost or other undermining practices. There were complaints about bad payers (see next chapter) and general complaints about the overcrowded, congested situation, referring to both disorganisation and strong competition, but none about skills and tool circulation. Economist Oyeyinka (2017) and engineer (Bamiro 2003, 2006, 2012) explain this difference by the fact that a computer is more complex than a t-shirt or a shoe. Thus, IT trade demands multifaceted knowledge and as such stimulates exchanges. Without dismissing this explanation, I think the complexity of the goods shouldn't be overestimated. Considering that repairing often means replacing, the knowledge is not super complicated.

Second, shoes and clothes also have different production stages, with a system of subcontracts. The difference may be in the kind of production. The shoes and garment clusters that Meagher addresses are industrial, or at least manufacturing—if not handcrafted—clusters. Regardless of the industrial–handcrafted continuum, these forms of production have personal designs and quality as a central element. “[The traders] cited copying and undercutting as the most serious downsides of clustering.” (Meagher 2010, 136). Whereas Computer Village is not really about production but about assembling and repairing at best. Even though the literature on Computer Village addresses it as an industrial cluster, I think that, even considering its cloning activity, Computer Village cannot be addressed as industrial hub. It is a cluster where the main activities are selling and repairing, selling and servicing. As such, it should be considered as something like a cluster in the tertiary sector.

Beyond these quasi-technical issues of industrial or tertiary, the important aspect here is that Computer Village is a mixed market, a market of new and used and I focus on used stuff. As such Computer Village is a cluster, but a cluster within the economies of recycling. Meagher's discussion on the Igbo clusters in Aba, shows the extent to which cooperation characterises the Igbo cluster. I suggest that the economic practices Igbos manufacturing clusters are based on have also been mobilised in Computer Village, where they meet the ultra-fragmented long-distance trade of UEEE and make the trade a success. I argue that this would have not existed without cooperation. And this may explain why, unlike other less fragmented market, complaining about too much cooperation is not common in Computer Village, particularly in the used stuff section of the market.

The point I want to make here is that unlike other development studies on closers in the 'Global South' Computer Village shows to what extent the question is not if cooperation fosters or obstructs success; the thing is in Computer Village without cooperation there would be no market.

Following the money

One can't talk markets without talking money. I close this chapter on cooperation, with a glimpse on how money circulates (and doesn't circulate) among same-level traders. After goods, spare parts, tools and skills, money is the last item circulating internally I want to explore, in order to shape the argument of independent traders working as colleagues, in a system of shared resources.

I said I didn't see much money; it is only partly true. In merely 500 sqm of market, one can count at least ten banks. So, definitely there is money around⁸⁰. If I had been surprised by people popping up to Chuks's shops picking up stuff without paying, I later regularly noticed money exchanged without goods being involved. And then finally got it: Computer Village is a dense, endless flow of credits and paybacks. This was constantly in front of my eyes, but I didn't really see it until Chuks, casually and friendly, complained about Chinyere: "She is not going around to collect my money!" Collecting is a thing. Collecting is one of the reasons to *enta market*. As common as not paying, it is common to see somebody enter the shop asking: "Where is my money?" or being welcomed with a: "You want your money", "Come and take your change", "See your balance" and on. The frequency of these sentences

⁸⁰During my years in the field, payments via bank transfer became more frequent, with the Nigerian bank system becoming more efficient and accessible. However, the country is still a few steps away from the cash-less society the government has been promoting, mainly for security reasons.

gives an idea of the thickness of the network credit and debt: being in Computer Village means having a number of open businesses, being entangled in a dense network of open credits⁸¹.

So, this is certainly no breaking news. One, having open credits and debts is simply part of being in business, whatever the branch or the context. Second, in the tradition of economists, the existing literature on Computer Village mentions inter-firm facilitated credit access as one of the advantages clustered firms benefit, however, without further details (Bamiro 2012; Oyelaran-Oyeyinka 2006; Oyelaran-Oyeyinka and McCormick 2007; Oyeyinka 2017) as does the literature on other Nigerian, specifically Igbo, clusters (Brautigam 1998; Meagher 2010). On a more general level, anthropologists have understood credit in marketplaces as a manifestation of personalised relationships and, as such, is often mandatory (Clark, 1994; Cohen, 1965; Meagher, 2010; Trager, 1981). It is also simply a vital institution to the markets' existence (Cohen, 1965; Forrest, 1994; Guyer, 1997; Meagher, 2009, 2011; Geertz, 1979, Trager 1981). Computer Village is no exception. However, following the circulation of goods and skills from above, money circulation within Computer Village may present a few specificities that deserve extra attention.

See your money

Basically, the *ideal-type* of a commercial transaction goes like this: trader 1 gets a job from a customer—for repairing or selling. He proceeds to *enta market* to find whatever is needed for said job, collecting stuff and/or services from trader 1, trader 2, trader 3 and so on. He closes the sale and gets paid. At this point, he pays all the traders involved⁸².

The obvious advantage of this practice is to overcome any possible—and common—obstacles due to a lack of liquidity, credit acting as the grease of economy. This is a form of credit based on goods advance, which usually refers to exchanges along the trading segments (producers, wholesalers, suppliers, retailers, customers). This kind of credit obviously also exists in Computer Village. However, here I want to address the credit system happening among same level traders⁸³. And

⁸¹This kind of credit system also takes place with other parallel businesses, such as food, drink, among others. Most of the time, the sellers come at the end of day collecting their money, sometimes they will pass by later to give you your change. Sometimes it is forgotten.

⁸²Note the difference between Computer Village's and services from other entities, such as provided by mechanics, electricians, and others in Lagos, where the common practice is to want the customer to advance the money for the spare parts, and (most likely) the transport, and then pay the balance at the end of the service.

⁸³Same level traders credit systems are less common and usually described in the context of savings credits networks. These rotating credit associations are largely described in Asia and Latin America and Africa from their pre-colonial, colonial and present forms as a way to guarantee access to credit (as cash loans) to those to whom banks would not lend (Geertz 1962; Ekejibua 1995; J.I. Guyer and Stiansen 1999). This kind of savings network also exists in Computer Village.

among same level traders, as for goods and services, everybody is a seller and a buyer—and when it comes to money circulation, everybody is a creditor and a debtor. It is a network of *mutual* credits/debts.

The first possible particularism I want to point out is that within this mutual credit and debt network, money circulates *always and only* on a credit basis. This means that in Computer Village, access to credit is not only easier, as described by economists addressing clusters, nor is it guaranteed or mandatory because “not to extend credit where it is expected [means] to lose business to those who do” (Clark, 1994, p. 174). Credit is the rule! When it comes to intra-selling exchanges, no one ever pays directly. Second, credit at the intra-selling level is established when the final sale is technically already done. This means in guaranteeing credit there is practically no risk of default, delayed and partial repayment. These two elements brought me to think this practice less as granting credit in terms of advanced goods than taking part into a (common) sale. Thinking of the example of Steve, buying and upgrading the computers in the market to fulfil the order he got from a client, helped me understand two things. First, for Festus the option of not extending credit to Steve was simply unconceivable. And when Steve paid for the services and the goods, I understood this money, less as the paying back of a debt than the distribution of the benefits made out one (common) deal.

As such, the network of mutual debts and credits in which each trader is entangled is the money manifestation of the different cooperation discussed above. As I argue with the circulation of spare parts and goods as one shared inventory, I consider the circulation of money in Computer Village as one common capital. Not literally, as the shared inventory is not literally one either, but in fact, since the networks of debts, credits and paybacks turn money into a resource that is accessible (to a certain extent) even when traders don’t have it (yet).

Clark (1994) also describes an example of credit among same level traders, often for fast perishable stuff, such as tomatoes. But unlike tomatoes, in Computer Village credit does not revolve around same day cycles. It does not revolve around any time-framed cycle. The settlement could come a few hours later, a few days, weeks, sometimes months. It depends on when the final deal will be closed, which depends on how fast the needed parts are found, how fast the work is done, which may depend on access to skills, tools or power supply.

Finally, as in any credit-debt situation, the debtor behaviour remains a variable⁸⁴. In short, long and short-term credits not only coexist in the market but cannot really be told apart. Unlike other contexts, where different credit terms can be related to different goods or different trading situations, such as perishable or storable goods, short or long-distance trading, inter- or intra-groups (Trager 1981; Clark 1994; Meagher 2010, 2009, 2007a) in Computer Village, the same motherboard can be exchanged on long or short credit terms. Unlike other businesses, there is no general clearance—nothing as the end of the day, the week, the month, or the year when debts and credits are balanced and paid. There is permanent flow of credits, debts and pay backs; money is constantly in circulation.

As for the shared inventory, traders do not consider this practice as one common capital; they explain it in terms of friendships. As Festus would repeat, “We are friends”. This resonates strongly with the answers of Kusumi market women when questioned about trust and credit: “I know her stall” (Clark 1998). Trust is based on proximity and friendship. It is obvious that traders at this same level of trading trust each other. Among same level traders I rarely heard complaints about people who do not pay back. This obviously does not mean it never not happen. But there is a flagrant difference with what happens among different segments of trading, particularly on the long distance, where complaints are regular stories and credits follow different rules. Within the market, credit is less about trust than simply about the way things circulate. This endorses the idea of common use of resources: skills, inventory, tools, and money, as discussed here. Access to credit as a resource. A common recourse. A common capital. Among those with whom trust had been built.

Come tomorrow for your balance

On a more general level, the circulation of money in Computer Village contributes to enriching the list of ethnographies that question the common idea that considers credit as beneficial and debt as a burden (Peebles 2010, 226). In Computer Village credit is less as an about hierarchy, about who stands above or below (Gudeman 2016) and more about inclusion: who is in, who is out (Roitman 2005). As the last element of this chapter about cooperation, I want to address money circulation as part of the trust-building process. An aspect that shows a long line of suppliers, resellers, and which marked my personal experience.

⁸⁴ The trader may decide to delay the payback, due to other urgent deals—buying goods from a supplier, paying back other creditors. It may also be because personal matters—such as a wedding or funeral.

Every sale I made, always had a kind of payment issue. Every single time we reached an agreement on the price, the *wahala* of actually getting the money would start. Not one single time I did get the (full) amount of money at the moment of the sale. Always that sentence: "Come tomorrow to take your balance". I did not like it. It was a waste of time that frustrated me, it actually used to drive me mad. It felt like: I came all this way, with all this stuff, and now I was going home without my money? Before going any further, note that I was the creditor, supposedly the one in the strong position. But I was not. They were forcing their debts on me. It felt like a power game I didn't know how to play. It made me nervous. With time things smoothed over: the money wasn't coming in any faster, but it *felt* less difficult to get. I learnt that the money *will* come. And on one of my last trips to Lagos, I was finally at ease:

I went to see Sunny and Ogu Livinus. Their shop was on the second floor, I was walking up, when somebody followed me and informed me: "They are downstairs". Livinus was there, at the end of the compound, sitting with five or seven men I didn't know. All on the young side of life. It was a laptop place. It was somehow quiet. Livinus' gen was not working so he came down here to work. We chitchatted about food, chocolate, horse meat, and problems the light problem, the fuel problem, the leaders, the politics...

He asked me if I had anything for them. Did I come with anything? I say, I had a few HDD. I had come with 4x 320Gb, 2x 250Gb, 5x160Gb and 4x120Gb. And, thinking the bigger the best, I kept the 320 and 250 for Chuks. Somehow, I felt I owed him something because he opened the doors of his shop for me, and I spent a fair amount of time with him, Chinyere and Sandra. So, I came here with the 120 and the 160. Ogu Livinus: "Let me see!" He checked the size. "Show me your price" handing me his phone. I don't know the people around, and my guess is that Livinus knows my prices are so cheap he doesn't want other ears to hear them.

Last year, the price for 160GB was 1500-2000. But the naira had dropped badly. From 240 to 330 to the dollars. So, I punch 3.5 on my phone screen. He doesn't say anything.

Meanwhile, Sunny is back. I follow him upstairs; we chitchat a bit and then I show him the HDDs and the RAM 2gb DDR1desktop I have for him: "See this". He checks the sizes. "How much you are selling this?" I tell him the price. He goes somewhere to check the 120GBs and comes back: "They are perfect, remaining to check the RAM

and the 160". The total goes for 26500. He gives me 20k, while there are still things to check. I leave the stuff with him. He will check the RAM in the evening at home but not the HDDs. I leave the place thinking, it's nice to work with him; he smiles, he thanks me, and he pays very fast.

The next day, on my way to Sunny's, I met Paul in Otigba Street, I told him "I have to see somebody to collect my balance. I will come to see you later". He paused, smiled: "You are one of us, you know how we do here, you sell something...and come tomorrow to collect your money!" I fel happy, this is one of the reasons being an anthropologist is dope. Observing, learning, trying to understand. All this time outside your comfort zone, with no clue, till something happens. I'm in. A new comfort zone or a wider one. Anyway, I smiled and carried on. (Lagos, April 2016)

If Sunny did not pay the whole amount at once, it was not because of a cash-flow issue. He did not need to sell the memory sticks to get that 6k. He was creating a debt where there was no need for it, at least not an economical one. With time and practice I came to understand that paying the whole amount at once also means telling the person not to come around anymore: take your money, and get out, business is over. By postponing the transaction, there is place for opportunities: as long as the deal is going on, we have reasons to meet up. It is a form of clientelisation, to use Geertz' words "to establish continuing relationships" (1978, 30). The credit system is a way to build (long-lasting) relationships.

Finally, from personal experience, I would also add that the main point in learning how to play the credit power game, was to understand that it was not a power game. I remember getting angry at traders because they would not pay. There is an interest in stretching out the deal period. This is when the bond is being built up. On my side, I will see him coming back with my balance. On his side, he will value that I left the door open for him. Reading my notes today, I realize how, from anger and frustration, I came to understand the beauty of getting the money the next day. Because I learnt that the payment *will* come. I *learnt to trust* that the payment will come. Credit is part of the process to build trust. And trust is part of becoming member of a group, as discussed in the coming chapter.

So what? Cooperation is the secret of success

I opened this chapter with an ethnographic description of Chuks' office to convey a sense of the constant flows and ongoing exchanges characterising Computer Village, but also to show one of the

paths that led me to understand the economic practices at work here. I labelled these practices *enta market*, borrowing one of the most common sentences in the market.

I traced the origins of today's *enta market* to a well-known, long-lasting economic practice described in other Igbo, Nigerian and West African marketplaces, which consists in buying from a fellow trader in order to satisfy a client. I argue that this 'traditional' economic practice was adapted to the particularity of trading manufactured and used goods, evolving from a once-in-while thing into a constant flow of goods circulating internally among same level traders. By establishing this link, I understand today's market in terms of economic diversity and not a mere out-of-need creation or "survival economics", as it shows the adaptation of traditional marketplace practices to fit with contemporary markets embedded in global trade. As such, this speaks against the 'globalisation from below' / 'from above' dichotomy and to the diversity of globalization.

I then observed these internal circulations of goods, inspired by economists' observations on inventory management within clusters. While the concept of the "cluster" usually refers to the co-presence lined-up (*upstream* and *downstream*) enterprises which are functionally differentiated, I borrowed it here to help me see that the circulation of goods among same level traders in Computer Village could be conceived of as creating a *common inventory*. And I argue that this *common inventory* is a very effective response to one of the main challenges in the trade of used stuff: the snowflake factor, that is, the unicity of each object, in opposition to goods that are produced through standardised procedures in factories.

The advantages of *shared inventory* are particularly compelling when it comes to repairing, a *sine qua non* activity for used computers trading. I articulate the discussion on repairing around the question of access to spare parts, an element as central to repairing as underdiscussed in the UEEE and e-waste literature. In Computer Village, access to spare parts comes via importation, mainly from China, but also via *scrapping*: dismantling broken down computers to reuse the parts, which I conceptualise as *downstream* sourcing. Focusing on access to spare parts allows me to foreground two main arguments, the first addressing the question of e-waste and UEEE, the second, the question of the economic diversity at work in contemporary global commerce. Highlighting *scrapping* as an essential practice in the market demonstrates the limitations of UEEE and e-waste and export regulations: the former allows exports objects qualified as 'repairable' (Ready to Repair, R2R) and the latter only allows the exportation of goods on working conditions (Basel Action Network, BAN).

What I show is that, on the one hand, the R2R discusses repairability mainly in technical terms, at best underestimating and at worst ignoring the contexts in which said repairing takes place, and such

'repairability' lose its meaning. On the other hand, the BAN's rule allowing export *only* of 'working condition' computers is economic nonsense from the point of view of the traders in Computer Village. Imports in Nigeria only happen in the form of *untested* UEEE. The import of *tested*—emic categories for the BAN's category of in 'working condition'—would put the local middlemen and women out of business, endangering the whole trade. Indeed, middle players are a cornerstone of the used goods trade, as they are the ones turning the shapeless mass of used stuff into (semi-)standardised merchandise fit for the local market.

The access to spare part proves without doubt that cooperation is the key to success—at least in Computer Village. Repairing different models of used computers from different brands, without access to standardized spreadsheets from distributors and/or factories, is what could be called a logistical nightmare. This challenge is gracefully handled by the internal circulation of stuff. When it comes to used computers, "being many", to use Oga Rainbow's words, is not enough. Many need to work together. In the context of the highly fragmented trade of used stuff, marked by the snowflake factor, sharing is the way to succeed; in Computer Village they share goods via what I call a *common inventory*, but also skills and tools, which I conceptualise as a *common working space*, where knowledge, competencies, tools and techniques are also constantly exchanged.

I close this chapter with a glimpse at the circulation of money, which I described as a dense network of debts and credits, stressing how among traders the circulation of goods, spare parts and services is always and only done on credit. Always and only! This led me to discuss the existence of what could be called *common capital*, which supports the argument that these independent traders work as colleagues in dense cooperation.

In sum, in this chapter, I answered the question that puzzled me so at the beginning of my research: how can they make it, if they all do the same thing? They succeed *because* they all do the same thing and they do it together. They make it because they cooperate. I understood these successful practices of cooperation, as highly adaptive answers to the specific situation of Computer Village, allowing an optimisation of resources. It is thus the manifestation of an economic system, with norms and values, and should not be interpreted as mere coping. This is what Oga Rainbow's words in the epigraph, "Let us be many", is about.

Ethnicity is a central factor of this emic understanding of this system. However, my personal experience with credit and debt also sheds light on the fact that, despite the ethnicity-based narratives, there is a process to becoming part of the group that benefits from this cooperation. A process that I will discuss in the next chapter, via the last circulation: access to information.

9. Information, cheating and belonging

After discussing the circulation of goods, skills, tools, and money, I address the circulation of information in this section. If the circulation of used goods, skills, and money point to the extent of the cooperation going on in Computer Village, the circulation of information addresses the following questions: Who takes part in this cooperation? How is the group that shares resources constituted?

Emic narratives seem to rely on ethnicity for their interpretive framework. However, my fieldwork also shows that being Igbo is neither a necessary nor sufficient condition for becoming a part of the market.

I first discuss the spatial organisation of the market in relation to the traders' lines of work; this allows me to highlight how Computer Village is a cluster that functions along a particular economic logic that I call *fluid specialisation*. After showing how *fluid specialisation* is information-related, I focus on the circulation of information. Through a detailed ethnographic example, I describe the process that allows access to information. My fieldwork demonstrates that accessing information is in fact the process by which one becomes part of the group among which cooperation and the sharing of common resources take place. I then discuss cheating and/or being cheated as a central element in this process of belonging and argue that it functions as a substitute for the apprenticeship institution, a central part of the Igbo economic model.

By stressing the importance of the process of becoming "one of us", I counterbalance the ethnic explanations behind these economic practices, but I also add a further element: the role of cheating, which will be discussed on the global scale below.

Specialisation & fluidity

I opened my reflections on the internal functioning of Computer Village with the observation that the traders all do the same thing. But the description of goods, tools, skills, and money circulation made so far already clarifies this much: there are specialisations. Now, a closer look at the market organisation, based on spatial materialisation, will add a layer in the understanding of the circulations within the market and how these collaborations take place—introducing the process of becoming a part of the group, thereby accessing shared resources.

A first look at the spatial organisation of the market shows the first layer of specialisation. There are two major sections: phones and computers. Both offer the range of related goods along the *fairly-*

used to brand-new continuum. Obviously, this geographic repartition of the market is not a sharp line, as the market is not regular and homogenous. This bears saying even though homogeneity is rarely a concept in marketplaces (or any other social matter).

Zooming into the computer section reveals a second level of specialisation, with a major subdivision between *fairly-used* and brand-new—as illustrated by the evolution of Tonia's business. Megacity and its parallel, Metro Quarter, are both *fairly-used* lines. Along the lines, things get even more specialised. Chuks repairs laptops, as does Lawal, a few shops down. Festus sells desktops, and his neighbour sells and repairs printers. At the beginning of the line, there is an ink-refilling shop, facing the (pirated) software stand. Moses, one of the first traders who bought our stuff, at the opposite end of the line, used to sell *fairly-used* screens. After attending computer sciences evening classes at the Open University of Lagos, he migrated to laptop and networking services. His neighbour was selling used keyboards, mice and power cables. I already introduced, Regina, who owns the shop opposite Moses, and was selling new mice, USB keys, cables and UPS units. In the last store before getting to the Police barracks' parking lot, Oga Rainbow was selling office furniture. In Metro Quarters, Ifeanyi was specialising in desktop spare parts that he would get from *scrapping* untested *fairly-used* desktops he bought in bulk. The neighbour opposite his store was selling laptop spare parts, mainly screens; the next one, hard-drives; a third one sells webcams, new substandard webcams...and so on. Other streets have the same spatial/activity configuration.

This short description shows diversity and complementarity: when Chuks repairs, buys or sells any computer, he looks around for the parts, but also for the operating system, new cables, as for the printer repairer, he will need an ink cartridge seller, and an ink cartridge re-filler. This complementarity is part of the very core of the classic cluster definition: a system of vertically and laterally lined up companies (Porter 1998), and is definitely part of the explanation behind Computer Village being addressed as a cluster. Anthropologists on the other hand refer to this kind of structure as a commodity-based market, which has been described in West African markets, North African bazaars and India (Clark 1994; Geertz 1979; Sundaram 1999) and it is apparently so common that anthropologists look for one, even when there is none (Bestor 2004, 272). The spatial organisation of commodity-based markets, such as Computer Village, the Kumasi Market (Clark 1994), and the Moroccan Bazaar has been described as mosaics: an agglomeration of specialised, yet different enterprises coming together in a bigger picture.

What neither the economists nor the ethnographers seem to have described is the fluidity of this specialisation. I do not refer to the geographical overlapping nor the porous boundaries among the

sections of the market; I do not refer to location issues at all. Computer Village's fluidity brings market heterogeneity to a new level, and "mosaic" is not the right metaphor.

This fact is that the specialisation depends on the distance of the gaze: the big picture appears only from a certain distance. But unlike with a mosaic, a closer look at Computer Village reveals each piece as a picture in itself not a monochrome piece of glass working as a pixel. Computer Village is like one of those photographs made up of thousands of smaller pictures. Up close, each picture shows different colours and shades, but as we take a few steps back, each picture reveals its dominant colour and shade. From a distance, the picture becomes a plain colour square, a pixel of a completely different picture. This is specialisation and fluidity, all in one.

Each shop is one of these pictures. Each shop has multiple colours, can trade almost anything—but each picture has a dominant colour, a main activity, a specialisation. From afar, everything looks the same. This distance is the level of knowledge: the less a customer knows about the market, the wider the range of actions of the seller. The more one knows about the market, the clearer the specialisation. In Computer Village, specialisation adjusts to the situation depending on the parts involved. Specialisation here is fluid and traders constantly move along the very specialised to the non-specialised continuum. This is *fluid specialisation*.

This simultaneously specialised and non-specialised organisation was one of the difficult aspects I encountered in understanding the market's dynamics. The sequel of the ethnographic anecdote that led me to realise the role of the web of mutual credit is a good illustration of the crux of the specialised / non-specialised organisation. The sale of those hard drives was useful in exploring how this fluidity is directly related to level of knowledge about the market, ergo to the information access and circulation, giving an insight in to the market dynamics.

Before going back to see Sunny to collect my balance, I wanted to sell the bigger hard drives to Chuks. I walked to his place. We greeted each other. He smiled, as did Sandra, who was busy behind the showcase. After some chitchat, I showed him the HDDs. He seemed interested; he checked the size. He asked for the prices. I told him 320 goes for 5k and 250 goes for 4k. He answered that these are not the prices. That he bought 320 for 3.5k. That he would call somebody who buys them, put him on speaker so I could hear: "I'm not lying to you". He made the call and what I heard (among all the Igbo, I'm ashamed to say I still don't understand) 5k and 4k. Chuks heard it too and didn't say anything. The person added that he only wanted to buy the 250. Bigger is not always better [!]. Now, Chuks said he wanted to check them. I

asked how. "They will connect them to a machine and put it under some stress to see if it resists. If it's less than 85% they don't buy". I told him not to put it under too much stress. Sandra smiled and reassured me: "They won't spoil them." He gave the HDD to the boy who worked for them and I asked if I could see how the test is run, so I could learn. "Eh, no problem, follow him." Pepple Str, second gate on the left, first floor, third shop on the left. The place is small, one table, a few chairs, a lot of natural light. A guy was sitting behind an office table, some HDDs on it. The greetings were short; I assumed he knew Largess's boy, and he knew what we wanted. He looked at the HDDs and said he wanted to test them. Oh, so he is not the tester. He gives the HDDs to his boy. Largess's boy was sitting in the shop, I followed him. We didn't talk. We walked, same plaza, same level, opposite side. We entered a shop, they said no, they are not testing anything. The same shop, the other half. He was the one testing. He plugged in the first HDDs, I asked to see screens. He ran HD Sentinel for Microsoft. Full green. The HDD are 100% OK. We went back, the boy gave a discreet nod, meaning the person is ready with the money: "Who should I give the money to now?" — "Me" and I counted and pocketed the money. Before this, I saw Chuks coming by (for some other business or to check out what was going on). I asked him: what he wanted "Is he the one buying or are you?" "He will buy, and I will buy the 320." "Ok" and then we waited for the other HDDs to get tested. It took a while, so I decided to go and see Chris/Afam. We met last year in Hong Kong and came across each other in Computer Village. Since then, we met in the market a few times and chatted, mainly about the exchange rate, the dollar scarcity due to the barrel price, and the lack of stability in business. I reached his office in Pepple Str, and his brother told me he had already left on a trip to Hong Kong. I sent him a WhatsApp to wish him a safe journey. He replied, "Thank you."

I walked back to Chuks' place. Where there was a young guy interested in a MacBook Pro. I told him about Apple's qualities and showed him the interface. He finally bought the machine, priced 45k, instead of 50k. He needed the charger. Largess' boy got up and escorted him out to buy it. When the new Mac owner came back, he asked for a guarantee. Chuks and Sandra laughed in a gentle way: "There is no guarantee on fairly-used."

Back to the hard drives' sale, Chuks had called another person in the market, to find out the buying price was at 4,5k-5k. Meanwhile, I had sent a message to Sunny, who

also confirmed 4.5k–5k. I asked Chuks if he was the one buying. He said he was the one, and he was going to sell to somebody, adding that this time, he would not take me there. He would give me 4k each, keep one for himself, and sell the rest at his own price: "It's business now!" I offered either to sell him the one he needed for 4k and I would sell the rest for 4.5 to another buyer, or that he bought everything for 19k. He asked if I would sell at 4.2k, showing me the accountancy book where Sandra wrote down a three-week-old purchase: "hard drive 320 GB - 4.2K NGN". Cheaper than the 5k I was asking for, but higher than the 3.5 he called before. He kept scrolling on a WhatsApp chat where he discussed HDDs prices with his friend in London. I told him that the chat referred to last year's prices anyway, when the dollar was 240. At the end of the day, I sold everything for 17k, he wanted 16k, I wanted 19k." (Lagos, March 2016)

The selling of four hard drives involved eight people in four shops for a few hours: Chuks, me, the two boys, two buyers, the tester, and Sunny (to confirm the prices). Sure, this is not always the case; there are faster and more direct sales (see the previous one to Sunny), but it is far from being an exception. Quite the opposite. Besides being a perfect little example of the lateral and horizontal complementarity, typical of clusters, it is an illustration of the fluidity I'm talking about⁸⁵.

It is fluid because eight people came together around one deal, and just at the time of the deal. An ephemeral group in which everybody brings something and gets a share. The market is based on fluid alliances: there are constant creations and dissolutions of groups, alliances articulating around a deal. And this can happen for four hard drives, a semi-bulk selling of forty laptops, or the arriving of a 40 ft container. Obviously, people have their favourite partners, recalling Geertz clientelisation.

More specifically, it is fluid because Chuks wanted to buy the hard-drives as a middle-man. He is an engineer: he usually buys to repair not to (re-)sell. But here he saw an opportunity and he *middle-manned* between the importer and the reseller. When I discussed this with Tonia later, she explained it as if it were common sense: he is not using his money to buy, he will wait to get the money from the buyer then pay me back. It is even possible that he is not buying anything for himself. He will sell everything and make 500 NGN on each hard disk without investing one *kobo*.

⁸⁵ The amounts of money at stake here are really small, however, the dynamics are similar for larger deals. And as illustrated later with the example of trading in China, the fact that there is space for smaller deals is part of the principles of this market.

There are a few interesting aspects here. One, he is expected to do so. If he has the opportunity, he will go for it. Second, despite the feeling that he was skimming me off, I didn't have a chance, and even less a guarantee to find a better place. Any other traders I knew would call the same price Chuks was calling; somebody I did not know would have called even less (or offered a better price but then find it difficult to pay). Usually, nobody buys to keep goods in their shop, unless that is their field of expertise; like Chuks, anybody buying would end up selling to a specialised trader. Specialised people build up small stocks since they have a faster turn over because they are the first addresses visited when *running the market*. Traders invest money only in goods that they are specialised in. As an importer, selling directly to a specialised person is the best option: I would get a better price and I'll receive the money right away. The only problem was I did not know a specialised person for my items. I knew Sunny specialised in RAM sticks. But the only hard-drive specialist I knew had already said he wasn't interested in the 320 GB. Unless through a lucky unlikely accident, such as running into somebody who really needed that model right then, selling to Chuks was the best option. Technically, I made less money but I was getting my money fast enough, avoiding bad players, and maintaining a good relationship with Chuks.

My transaction costs were higher because of my lack of information. That 500 NGN was the price of one piece of information Chuks had and I did not: he knew who the traders specialised in hard drives were. This specialisation fluidity is directly linked to the access to information. The movement along the specialised to non-specialised continuum depends on the market knowledge, ergo information access, of both the buyer and the seller. The person with the larger knowledge is the one more likely to work outside of his/her specialised line of business, and the bigger the gap, the further from the field of specialisation. Basically, a complete JJC can sell or buy anything from anybody. The wider your knowledge of the market, the more likely you are to address the specialised guy.

To sum up, Chuks' main business was laptops, repairing and selling, but he could sell anything else: one should always be open to close a good deal when the opportunity knocks at the door. At first sight, this may look like a trader grabbing the chance to make some money here and there, and on a personal level it is true. However, on the market level, this practice participates in guaranteeing a wider volume of transactions, smoothing the whole system, and participating to a more fluid circulation of stuff. Everyone has a centre of specialisation, but also participates in channelling the stream of stuff within the market. They all do the same thing, but they don't.

And it depends on the circulation of information, which in turns is related to the belonging process, as discussed subsequently.

Information & the belonging process

The understanding of *belonging* mentioned above is best understood when looking at information circulation. Each form of internal circulation discussed above revolves around the centrepiece that is the access to information. After discussing internal circulation, which I understood as cooperation, it is pertinent to explore how to be part of the group within which said exchanges take place. This is because information travels within a group and along the channel of personalised relationships and not, for example, through open display of prices or coded quality systems. This will help to complete the understanding of groups and ethnic solidarity-based markets, but also information theories and the role of personalised relationships in economic activities.

I want to explore the circulation of information by exposing the contents of information and their evolution. I think that knowing the market means being part of it and being part of the market means knowing it. In other words, I want to explore the link between information access and *belonging*. And I want to do it by presenting this articulation as a process. Knowing the market is a process: it takes time to gain access to information, it takes time to be part of the market and it takes time to become a trader. Not just because it takes time to learn something about anything, but in terms of becoming part of a group: to go from newcomer to having membership privileges.

The information exchange and its impact on the economic activities are copiously mentioned in cluster literature as in the little literature that exists on Computer Village. Yet, it comes with quite a superficial description of the actual contents of said information, and with absolutely no mention of the process of gaining access to it. This process is often overlooked in the studies of markets by economists as well as by economic sociologists and anthropologists. Some economists barely consider information access as worthy of discussion; they believe in symmetric information, which is more mythical than concrete. Even Nobel prize winners discussing information asymmetry (Akerlof 1970; Spence 1973) and recognizing the need of a theoretical frame to understand the economy of information (Geertz 1978) do not mention how economic actors manage to access the network of information.

Despite a reflexive critique of the discipline's tradition of freezing their subjects, others usually mobilise temporality, either to describe their own access to the field, widely discussing time as a *sine qua non* for trust building (Bouillon and Fresia 2005; Weber 2009)—or to supply ethnographic studies with a historical perspective. Once those tasks are completed, the most common thing is to describe and analyse the *status quo*: who is in, who is out, what draws the lines, how porous they are, and how all of this is relative. Ethnographers often describe in great detail the personalised relationships

within markets, and less the process of building them up. This may be partially due to incompatibility between research temporality and *real-life* temporality (and the *publish-or-perish* zeitgeist is probably unhelpful). I had the chance to travel to and from the field for six years and to (try to) start a business: the long-term experience brought multiple insights, one being the very existence of this process.

I will expose 3 steps (level zero to level 3)—so defined for analytical purposes. These are outlined here based on my personal experience. However, they have emerged through a large series of discussions with current and former traders, both inside and outside the market. This allows me to gauge the specificity of my situation: time needed to access the field and possible delays due to the anthropologist's specific need to entertain relationships with good [as in, willing to talk] informants. In Computer Village, there is a time frame necessary to overcome the gatekeeping addressed to newcomers to the business. This subject came up in countless discussions with importers, traders, and middlemen.

The process of accessing information is how I went from "bring everything" to "bring DDR1-256 150/200, they are super-hotcakes and DDR1 1GB sells pretty good". This happened with years of mistakes, a fair share of frustration, and a hint of anger caused by the feeling of being openly cheated. This alternated with the feeling that the market was run by a cartel, but it was actually nothing but the active exclusion of some, through the withholding of information, as I witnessed on a Monday morning in Chuks's office. A guy I had never seen before was sitting there, asking Chuks what he should import and what the prices where. I had known Chuks for almost 3 years, and for the first time I saw him almost angry and quite irritated: "It doesn't work like that!" he said.

He explained the basic supply-demand law within a long-distance trade: the hard drives were rare at that time in the market, which made them expensive, but if in two months everybody brought in hard drives, the price would drop. Basic supply-demand law mixed with a bit of long-distance trade issues. But there was another question at stake. When the guy left, Chuks insisted: "Everybody wants a brother in the market, I have been here for a long-time." And he continues: "It doesn't work like that, people are always coming to ask, ask, ask, but it is not like that." Sure, it works like that: the information circulates through personal contacts; what does *not* work *like that* is to get a brother *à la carte*. A brother is a person of trust that is ready to share his information about the market. Traders in Computer Village know the value of their knowledge. As Festus said loud and clear one day, while checking the prices of spare parts *over there* on eBay: "We should know the prices, to know if what they tell us it is true." And insisting right away on the value of *his* knowledge for people *over there*, "I should use what I know; I know the market, they don't, you understand?"

3 steps: goods, prices, specialisations

Level Zero: the broke-down car, three weeks demurrage, and everything else stolen. I will not further describe this step; however, I want to stress how, in retrospect, even this was an important learning lesson. As a reminder, after selling what was left (clothes, iMac, and the car), we learnt that in Computer Village men's clothing and shoes actually sell very well, while the iMac was as good as stool. So the first insight was that the market is selective. But this experience mainly pointed out the importance of learning-by-doing. The accumulated empirical experiences and the directly transmitted knowledge were both key in the process of being part of the market. Indeed, one cannot access directly transmitted information without passing through the stage of empirical learning.

Level One. The first stuff Frank and I had to sell in Computer Village were strong, perfectly working IBM Lenovo laptops. They came in the suitcases for security reasons (which was good idea, since the car arrived empty). We walked into the market, our computers in a bag. Somebody called us, asking what we were looking for (later I would understand it was an *oso ahia*). We said we had some laptops to sell, and we followed him to a shop behind a compound. It was Ifeanyi's place, the one specialised in desktop spare parts. The bargaining arguments revolved around comments such as: these do not move well in the market, they are not very popular, people don't like them, they are ugly. All the way to laughing out loud at some of the goods: "Ahahah, what is this? This in Nigeria? we don't use this thing."

We checked some other places, just to encounter the same reactions. It was always the same protocol: during the bargain process our stuff was ugly, unwanted, unfitted for the Nigerian market. We finally managed to sell the laptops to different traders, included Ifeanyi (who I had no idea at that time he was specialised in spare parts). And at the end of each deal, I was always told: "Next time, bring everything, I will give you a nice price." Obviously, this meant that I could bring anything, but it did not mean they were going to buy it, let alone at the right price. During this first period, my bargaining power was low. Partly because once in Nigeria with the stuff, I needed to get as much as possible on my investment. But also, because I really felt there was a wall in front of me and I didn't know how to break through.

On first impression, one could understand that the arguments about the ugliness and/or the unfitness of the goods could be interpreted as information about what sells and what doesn't within the market, in terms of bargaining as channel of information circulation (Geertz 1979). However, years later, it became obvious that the goods were not that bad. It wasn't given information via bargaining, but rather misinformation via bargaining. During the years in Nigeria and abroad, I heard and had countless discussions with Nigerian importers complaining about this practice. The point is this is not

a malpractice. It is part of the game, not in terms of a learning by doing narrative nor a valorisation of first-timer mistakes. But in terms of the first steps to become part of the group. During the first steps into the market, a newcomer will only be given bad deals and information—via bargaining or direct channel—ranges between the partially relevant and plain *intox*. There is an active effort not to share information with newbies. And it seems to be a mandatory process.

Level Two. With time I had sharpened my goods selection and I knew the prices (some better than others). Yet, I didn't know how to put the prices I heard in the market into my pocket. This was probably the most difficult period. This is when I really felt a cartel was running the market. I knew the price brackets and yet I had no wiggle room. They were all calling the same prices. As it appeared so clearly when we sold screens and other things to Moses before he moved to laptops.

Moses first checked the desktops screens that were wrapped one by one. No need to switch them on, he looked at them externally, checked the support and pressed the display here and there to see if everything was OK. The first one wasn't, he shook his head and put it aside. I was nervous, I hoped the others were OK, I couldn't avoid feeling responsible for how things were going on. Two faulty screens, he bought ten. He priced them at 5k each, Frank had asked for 10k, we got 5k. [Later, at home, Frank commented]: "Eh, this is robbery! He sold a small screen to his neighbour for 6500, the neighbour is an oso ahia!!" [...] The keyboards packed 3 by 3 went for 250 each; there was an attempt to price them: Frank insisted that they were Dell, HP [market beloved brands, unlike IBM] but Moses pointed out that one that wasn't. They opened the box with the hard-drives, they complimented us on the packing, adding that sometimes people pack them anyhow resulting in 50% to 70% of damaged goods. Moses stated that the hard drives would be tested, and that he would pay only for the functional ones. The counting continued. 21 motherboards for 3k, 28 mouses for 150, 20 power packs for 450, 8 power cables at 50 each. We sold everything for 150k. Moses did not show any enthusiasm while the bargaining process lasted. But at the end of it, he was definitely happy. The deal was so good for him that when we came back the next day to let him know that the calculation was incorrect and that he had to pay an "extra" 50k, he was still smiling! (Lagos, January 2012)

This happened with the chargers, spare parts, laptops and it happened multiple times. What Frank called robbery, and what felt to me like being openly cheated, was a new, different level of knowledge and belonging. We knew the general market prices were higher than what we were getting but the

possibility of selling at a better price was not on the table here or elsewhere. Anybody would give us the same price; the price we had access to, was the same everywhere.

Years later, during a casual discussion, Frank put it in terms of loyalty. It was 2016 and he had not travelled to Nigeria since 2012. I was updating him about who had left the market, to whom I had sold what, and who had a new shop. Whilst we discussed the difficulties of the business, he linked information and loyalty:

"These people [the traders and repairers] they know the market, and they know each other. And, you know how it is, if you want to go and buy [or sell] something, they will always give you some stories why you should pay more [or get less]. [...] They are so loyal to each other." (Phone call, 2016)

This loyalty is the cartel I was talking about earlier. This is the gatekeeping attitude encountered by any trader willing to access the market. But it is also the process to go through to become a trader, to become part of market. And despite my frustration, it was a step closer. At this stage, we got less than what we wanted and were openly underpaid. But at least, the discussion was not about stuff anymore: not the goods, not their quality nor their popularity. With Moses, besides a general laugh at the floppy disk reader (which was not bought), the main discussion on the table was about prices. It was a new step. While their loyalty was strong and healthy, and prevented us from been able to sell to the neighbour at the price Moses could, we were getting access to more information, it was not *intox* about the ugliness of our products, but information communicated by the direct channel. For example, we were told to avoid importing screens with power supplies, since the notorious instability of the Nigerian power distribution system made them difficult to sell.

Level Three. After years in the market, I had no more questions about the goods. I knew what a hotcake was, what it wasn't, and the whole range in between. And I was regularly given direct information. After years in the market—and years of attending weddings, child dedications, graduation days, drinking Star and eating *suya*—traders started calling me during my stays in Switzerland. After the small talk, they would ask me when I would come back and what I would come back with. They were gathering information and sharing information. They would ask: "What are you bringing?" and add something like: "You get hard drives? Bring 250, 320. Don't bring that 1 TB, it is not selling." Sometimes, I was asked to send pictures of the goods for them to tell me exactly what to bring and what not to. I was getting *brothers* in the market: becoming part of the network. This trading information circulates entangled with personal information. While sharing market related aspects, we were building a friendship. The phones calls were a way to keep in touch, to create a

bond, while asking how my family was doing, they will tell me what goods to import. The directly transmitted information was always and only goods-related, the prices were not included. However, on the bargaining level, things were so much less painful: the bargaining was shorter, the discussions on the prices had drastically reduced, as was the gap between what I demanded and what I pocketed.

Finally, at this moment, I knew somebody in different lines of the market, and in different lines of business. Yet, as the sales of the hard drives showed, I had not reached the next level: the specialisation. I didn't know who *exactly* did what. However, the door to the next level was about to be opened, and six years after I picked up an empty, broken-down car, I finally sold directly to a hard-disk specialist, maximizing my profit. Chuks may have made a little strategic mistake. But I believe that if he really didn't want me to know, I would not have known. That door was left ajar.

That same year, during different casual discussions with the traders, I was being given information I did not ask for (because I didn't know it existed). For example, during a discussion around closing time, Lawal, a Megacity laptop engineer, and I were casually remembering the first time we met and how long we had known each other. I was telling him that he was among the very first people I had met in the market. And then he added: "Ehen, you remember those Acer you came with? I'm the one who bought the scraps." It was 2016, I found out we (indirectly) did businesses in 2012. I had no idea. No idea at all, and he most certainly knew I didn't know and now he was telling me.

In the same year, a few months before, I was walking with Festus through the parking lot in the police barracks behind Megacity. We passed by a bar, some traders were having a beer, he greeted them. Among them, there was Chinyere's brother, Eze. I told Festus, I had not seen him since I came back to Lagos; I had to give him a proper salute. When I got back to Festus, he casually told me: "Do you remember those hard drives you wanted to sell last year?" "He is the one who wanted to buy!" At that time, I had told Festus about the hard drives that were destined for desktops, thinking he may be interested. I knew he had asked somebody for the price, but I did not realise he was, like Chuks, playing the middleman. I have known Ike since 2012, I met him at Chinyere's birthday, and since then I had seen him around the market. We just exchanged greetings; he knew me as his sister's friend (besides being the white lady). I knew he was into *fairly-used* desktops; I knew his wife, the best caterer in the market. I had even spent time in her compound preparing food. But I didn't know he was on the other end of the deal. And neither he nor Festus had told me till then. And now they were opening the door. They were feeding me information that gave me a new perspective on the market, on the organisation of the market. Also, by letting me know how excluded I had been.

Obviously, I am not saying the information was finally given out *because* I had the six-years-stripes on my shoulders. And sure, the steps described here are more of a suggestion than clear, defined stages. But I think they serve what I propose to show here: there is a process to gain access to information. A process that goes like this: access to information about goods, about the prices, and finally about who does what in the market. Access to this last element, knowing the internal organisation of the market, means being part of the group that takes part in the internal circulation characterising the market; it means belonging to the market, to the group that cooperates.

@ the Core

As in every other business, access to information is a *sine qua non* for successful business. In Computer Village, the access to information is articulated around belonging to the group. Geertz's work on the theory of information gives a useful framework to understand Computer Village. "The level of ignorance about everything from product quality and going price to market possibilities and production cost is very high, and much of the way in which the bazaar functions can be interpreted as an attempt to reduce such ignorance for someone, increase it for someone, or defend someone against it" (Geertz 1978, 28). As in the bazaar, Computer Village has poor information: prices are not displayed, quality is particularly challenging for UEEE, and finally quantity is anything but clear in such a fragmented market.

This is particularly accurate for outsiders, such as external or occasional customers and novice traders. To them not only is the information poor, but there is an active effort to keep them in the dark. That is what Frank referred to as the "loyalty *they* have." However, when it comes to insider traders, the situation is pretty different, and I am not so keen on following Geertz's description of "information [as] poor, scarce, maldistributed, inefficiently communicated, and intensely valued." (Geertz 1978, 29). This is because Computer Village seems to show that among traders that belong to the market, among insiders, the communication is fluent and open. Chuks could simply call a few guys in the market to ask for the price, as I could with Sunny. Walking around, discussing about who travelled, the exchange rate, or new orders coming in are also ways to exchange information. In the market, information flows openly among the traders who are part of the core.

Computer Village is not the open layout of the Ghanaian market described by Clark, where physical presence is the only condition to access information, since prices and goods are on show and information is available even to the casual passer-by (Clark 1994). But neither is it the secret centred system described by Geertz. As in Moroccan bazaars, contacts are central to find out, for example, when goods have arrived. But this information circulates constantly, alongside the circulations of goods, tools and money. These are constantly shared and convey general knowledge about the

market. Simply by carrying out their everyday business, traders constantly gather and share pieces of information. They know what is scarce, what is moving, what is cheap and what is expensive, they know who is selling what, who has which spare parts, who is about to receive a container and from where. In the same way they know their offices, as described in the ethnographic opening of this section, traders know their market. It's like constantly reading the stock exchange page in the newspaper.

Information about prices, quality and quantity move along other information: personal information—who is getting married, who lost their father, who became a mother; everlasting discussions about politics, football, the power supply situation; as well as general events of market life, such as the last KAI intervention or the police presence in a different line. Information about the market, the marketplace life, and the market people's life were all mixed up in a constant flow of words moving around with goods, tools and money. It is a constant brewing of friendship and business that participates in making the bond between colleagues and friends stronger. It builds the inner circle, the privileged group @ the core of the market.

This is the case in different markets and in bazaars. But what I observed in Computer Village is that the access to information seemed directly related to the aspect of belonging. Geertz stresses how the bazaar revolves around the attempt to reduce ignorance for one person and increase it for another: "The search for information one lacks and the protection of information one has is the name of the game." (Geertz 1978, 28) I would rather say that information is one aspect of a bigger game, which, in this case, is becoming part of the group. Six years of going back and forth selling stuff in Computer Village showed the different levels of information: from "Bring everything, bring everything" to "Bring DDR1 250", to finally having access to the structure of the market and getting to know some of its specialised players.

Linking this up with the steps described before, it appears that despite the Igbo narrative of "Let us be many", it takes time to be "one of us" as Paul put it. And sure, I was not one of them, but I was on the way to become one. The few steps I covered were my chance to unveil the fact that there was a process to gain access to information, and that information, as with other things, flowed differently within the core. In a business that so heavily depends on cooperation, belonging is essential in order to do business, to make money.

Obviously, this process of building a group is not specific to Computer Village. Quite the opposite. The existence of a hard core, privileged group, defined by the access to information and the benefits drawn from it, exists in different economic systems. What may be different is the fact that traders in

Computer Village acknowledge its existence, the process to access it, and its role as central element of business practices. The financial markets and insider trading felony (*délit d'initié*) may use a bit of this straightforward attitude.

Cheated all the way in

I want to close this chapter by exploring a few cheating-related aspects. Mainly because cheating and trust are part of any market, but also because cheating and trust are part of a lot of discussions in Nigeria. Here, I will discuss cheating within the market as a practice that is part of the learning process, and as such is part of the process to belong.

I brought up the frustration generated by the fact that more than once I felt openly cheated. I have already implied how this has to be understood to see the bigger picture. Chuks, Moses and Ifeanyi were simply doing what was good for them, and, more importantly, what was expected from them: making as much as possible out of a newcomer. It was the beginning. I wasn't *really* being cheated; I was being kept out of the inner circle of information and loyalty.

The concept of cheating has occupied a lot of my thoughts but I haven't come up with a global understanding of it. However, a simple short fieldwork anecdote helps me to communicate the link between cheating and belonging:

[In 2015], I was joined in Lagos by a friend, Major, a Nigerian man based in Spain, who tried his luck in Switzerland and was then taking his first steps in the import industry in Nigeria. He had shipped a bus filled with gas cylinders (among a certain class, cooking in Nigeria is done almost exclusively with gas), as well as shoes, clothes, and electronics.

On my side, among other things, I had come with some hard drives for desktops. Since he was into desktops, I asked Festus if he wanted to buy them. He gave me the prices [that I was later told came from Ike]. As usual, I thought the price was on the low side. Major insisted I should let him deal with the sales: "I'm a Nigerian, I know my people"; "Don't worry, I go make my shakara", implying that his 'Nigerian-ness' would get him better prices. A few days later, I was hanging out at Largess' office when a trader popped in looking for some parts. On his way out he looked at me, and he asked me if I had some more hard drives [note that Sandra was not interested in them because they weren't laptop material: my specialisation knowledge was already a bit higher by then]. I told him no, he walked out. As soon as he left, Sandra

looked at me, and quietly asked if I had sold him anything and she warned me not to do so; he is a bad payer. He never pays back. Joy in my heart! After years of unfair prices and fictional bargaining arguments, here came the information, free of charge, about another trader and his habits.” (Lagos, 2015)

This was another level of information. Even though I hadn't sold to the source (actually I was not even aware of the specialization), and despite I wasn't completely satisfied with the price I was about to realise that I actually got a pretty fair, *shakara*-free deal. While Major, who established the link with that guy, despite his self-proclaimed real Nigerian business attitude and *shakara* skills, was a newcomer; as such, he was (more) exposed to cheating. He got the worst deals, the lowest prices and it was harder for him to collect his money. Major helped me realise that in the process of becoming part of the group, along with goods, prices and specialisations, there was another level: information about people. It was a level of belonging that opened the possibility of being protected rather than getting cheated.

Obviously, I wasn't part of the hard core of the market, but I was not the newbie anymore either. This was enough to see the importance of the group and how being part of it came with a different treatment. But most importantly, it helped me understanding cheating as one of the fences around the group, and time and experience as the keys to open the gates to the different levels of belonging.

Apprenticeship and cheating

The fact that it takes time to become part of a group is not exactly breaking news. The Igbo apprenticeship institution dates from precolonial times (Dike 1979). Named *Imu Ahia* (Imu = to learn, Ahia = market, marketing) or *Igba-odibo*, it has been described as a traditional business school, and prized as a dynamic system that allowed local and global trading to succeed (Agozino and Anyanike 2007; Chinazor Lady-Franca 2016). This institution is present in contemporary local clusters in Igboland (Meagher, 2010) as well as outside Nigeria (Abimbola, 2011). The basic apprenticeship agreement sees the recruitment done on a kinship and kindred basis. After being recruited, the *boy* will work for the *master* for a five to seven years period without being paid, but in exchange for accommodation, food and transport money. At the end of the service period, the *master* will *settle* the apprentice by providing a start-up capital in money and/or goods. The former apprentice will then start his own business, and soon becomes Oga.

This system has been explained as one of the reasons behind the trading networks structured in specialised lines of business among people from the same hometown (Meagher 2007a). It is the process to learn the tricks of the trade, to learn about the goods, the prices (Chukwuezi 2001), the

people and how to deal with them: apprenticeship is part of the process of becoming a member of the group. For example, Abimbola, in his work on the long-distance trade of used clothes, explored apprenticeship as an essential means of transferring skills (such as learning how to handle credit, getting a good supplier or creating and sustaining a relationship with customers). However, he stressed that “probably the most important thing to learn is how to navigate the relations within the market, the main reason that someone who was never an apprentice but who goes straight to Cotonou to start importing second-hand clothing would have problems is that he would be cheated in the market by traders [...]” (Abimbola 2011, 85-86).

If the link between learning and apprenticeship is obvious, Abimbola makes explicit the link between apprenticeship and cheating: the lack of the former exposes you to the risks of the latter. I understand this link as a manifestation of the fact that both practices are ways to become part of the market, implying cheating is a way of becoming part of the group. The general idea is that the apprenticeship is not just a learning process, but also the way of integrating into the group. In the same way, being cheated, for example, by being denied the *fair* price during a deal, is also a message: you are not part of this group, yet.

Abimbola illustrated this with the story of a Nigerian trader who had taken some time off from business and who knew that on return to business “He would be cheated out of his first two consignments [...] because the traders would know that he has lost touch with the reality of the markets and that he does not know how market works anymore. He would have problems with pricing of the goods, [traders] would claim that they do not trust him with credit, many of whom would default [to pay]” (2011, 86). This implies that being an insider is not a once-and-for-all status and *being cheated* is a way back into the group; thus, *being cheated*, is not to be understood as a hazing, a once and for all initiation, but as a process.

Unlike other *purely* Igbo markets and trades, Computer Village never really had a *classic* Igbo apprenticeship institution. Chuks explained how: “[Computer Village] didn’t started as an Igbo market, that’s why you don’t see the apprenticeship system here.” (Lagos, 2012). Besides the ethnically mixed origins of the market and its rapid development may also have had an impact on the evolution of the apprenticeship. The success of the market resulted in a very sharp rise of the rents⁸⁶, which, combined with the Lagos real estate practice to ask for two years of rent as down payment,

⁸⁶ In Computer Village, it was common for the owners to ask up two five years of rent as down payment, and this despite Fashola’s government attempts of regulation.

made the cost of the settling explode, and discouraged the potential *master* from taking any apprentices:

"You know normally we the Igbos in Nigeria, we are specialised in taking people as apprentices. Serving for some years, then you settle the person when it's time to start his own. But here it's not possible, why? Because how much are you going to give to the person? He will be serving for 5 years...the shop is about 1.8 mil. Naira, how much are you going to give to the person? Are you going to give the person 5mio Naira? It's not possible. So, we started to take people on employment. You hired them for maybe 6 months, 1 year. Depending on how the person wants it." (Paul, Lagos, 18. 11. 2011)

I suggest that with the apprenticeships out of the way, the cheating may have become more central in the process of learning the tricks of the trade and becoming part of the group. Being cheated is a way to learn that may have replaced the formal apprenticeship in Computer Village. In retrospect, I could understand Frank's approach to carry on with the business after the total fiasco of the Chrysler as the capacity to understand what happened in terms of a learning process. He had the ability to understand—even though it was not expressed as such—the link between being cheated and learning as the way in.

Cheating as a process to access a group regulated by dynamics of support, solidarity and protection can help to counterbalance the understanding of cheating, common in the 'globalisation from below' analyses, in terms of fighting for survival, coping strategies or resilience.

The Nigerian factor and the cheating continuum

Besides the belonging process, the question of cheating is also related to broader issues. I will not go into details here, but it may be awkward to discuss cheating and trust in the market without addressing the so-called *Nigerian factor*.

Once again, the example of the Chrysler may help. In this case, the cheating wasn't about overpricing or underpaying: the stuff was stolen. And this resonated widely among the traders. Every single time I shared the story of the empty, broken-down car with two weeks demurrage, people replied with a story: a personal one, one of a cousin, a brother, a sister, a neighbour, or a friend that had also been cheated. From there, the discussion would generally move along a well-marked trail: from how difficult it is to make business in this country, to the criticising and blaming of the political class via the lack of a safe and stable economic environment. In conclusion, it would be explained to me again

that in “Nigeria people do not make it thanks to the government, but in spite of it” and I would be asked to “Bear with us”. Along this this path, I would also come to be given the general advice of not trusting anybody. While living in Lagos, (almost) every day, someone would warn me about the Lagosians and Nigerians reputation. It seemed like I was constantly talking to the only honest person in Lagos, the only honest person in Nigeria. Agbiboa (2017) explores this idea in his study on *danfo* drivers: “the golden rule is to ‘trust nobody’ [...] This lack of trust mirrors a deeply embedded problem in Nigeria. For example, the nationwide survey *Afrobarometer* (2013) found that four out of five Nigerians (80%) are actually very careful when dealing with other Nigerians and only around one in seven Nigerian citizens (15%) believe that most Nigerians could be trusted.” (Agbiboa 2017, 952)

I think both these elements somehow refer to an umbrella idea: the Nigerian factor. This emic term refers to practices ranging from the NGN500 to *show appreciation* to the massive looting by political leaders. “The very expression ‘the Nigerian factor’ suggests that Nigerians have concluded that corruption is so endemic that it defines the nation.” (Smith 2007, 8). It goes without saying: corruption and cheating are not characteristics of nor essential to Nigerian political and/or economic realities, they are nevertheless highly spread. Smith described corruption as “stuff of everyday life”. It is an ambiguous relationship Nigerians have toward it: condemned and reproduced at the same time! Similarly, cheating and being cheated is part of the market life, also condemned and reproduced.

Obviously, I don't want to deny the difficulties related to an absent state implied by the expression “bear with us” and their impact on economic activity. However, I think that understanding scam and the risk of being scammed as part of a process building cohesion and solidarity may be an interesting insight to balance the narratives on competition articulated around the idea of the survival of the fittest. With cheating as a process to belong, the question revolves around what cheating is condemnable and what is not. Obviously, not-sharing information with outsiders, underpaying, or overpricing, is not condemnable. As Chuks put it: “It is business now!”

There were other less obvious examples, that forced me to think in a more flexible way. Among these, the business of original HP black cartons. This is because HP factory-refurbished computers are issued in brown boxes. I was made aware of this during a discussion with a trader, a friend of a friend. He was selling brand-new and *fairly-used* laptops. I inquired about the price differences between *fairly-used* and refurbished ones: “They are the same, it depends on the processor”, he said and carried on explaining that some *fairly-used* are so clean that he could even put them in a carton. And he pointed some HP boxes, that were not new, but some of which were in very good shape and as good as new. He concluded by explaining that this will make the customer happy. I could not understand if this was cheating or not. On the one hand, he was selling *fairly-used* as if it were brand-

new. On the other hand, he suggested that this practice enables the customer that would not be able to pay for a new HP laptop to get as close as possible to the first-hand consumer experience, without putting in the price.

There was an artistic blur around the awareness from both sides in the fact that they were taking part in a staged first-user consumerist experience. Surely not everybody in the market would agree with this practice, but clearly everybody knew it was happening, and there was no fuss about it. The black HP cartons business was no secret.

The second example comes from a discussion with a lawyer friend, a member of the Okoye family (Tonia, Steve, Mega Rich and Oga Rainbow). It brought more interesting insights to the link between apprenticeship and cheating, as well as the role of cheating in the market. His office was walking distance from Computer Village, on my way home. So, occasionally, I would stop by for a little chat. One day, I asked him if he had ever worked on any cases from Computer Village, possibly cheating related. In my mind, by cheating I meant not respecting an agreement.

He laughed out loud and said: "What is it that you call cheating?"

I explained again my Chrysler fiasco, how this never failed to bring up stories, and how generally I can't even count the number of times I heard about this one eating that one's money, and that one eating this one's money... it is almost as if cheating was part of the game.

He laughed even harder: "Yes you are right". He found it funny that I called this cheating. And he gave me an example: "One gentleman went to buy something in China on credit. He sold everything and didn't pay the company back. He travelled to the East and took a picture of a burial. The wife sent the picture to the Chinese company and said the husband had died. Three years later, this Chinese company came to settle in Nigeria, and they sent some people here. So, one day, one of the Chinese recognised the person who was supposed to be dead for three years in the market. The Chinese called the police. Now, for you, it may be strange to do so, but even for me this seems normal. [If I had to argue the case] I would tell the police that this foreigner doesn't know anything, that please they should forget this (and you give them some money). The matter is closed. And even if, somehow the matter goes to court, the judge will not do anything else than adjourn the matter. Every three months, he will adjourn."

He added that this is what they [the traders] value, what they think is smart. "What do you think they learn in five years of training. The prices? That one you can learn in 2 months; they learn how to cheat." (Lagos, April 2016)

Obviously, they learn more than cheating. However, this short exchange brought up, once more, the question of the link between apprenticeship and cheating, adding another point to what is considered a scam and what is not. This shows that the line between what falls into being business-smart and into condemnable actions is blurred. Again, referring to belonging, who the *mugu* is may also have an effect on where the line would be drawn.

In fact, I wonder if, this is not just a blurred line, but rather a continuum, one that stretches from non-sharing of information with outsiders, underpaying suppliers, via selling *fairly-used* as brand-new or fufu-filled smartphones, all the way to up to staging one's own death⁸⁷. With the arrow constantly moving based on the identity of the victim.

Belonging and control

Finally, the circulation of information is also a form of control. Along with prices, rare parts and imminent arrivals, information about the traders' business attitudes is also circulated. When Sandra informed me about the bad player, she was helping me but also controlling him. Being part of the group means access to information, the chance to be part of the cooperation: better deals but also being controlled. This could be understood as a "self-regulating mechanism created by market participants themselves" (Bestor 2001, 9228) that would push or exclude the bad players out of the game, but fosters the business of the good ones. As illustrated by the follow-up of the sale to Sunny. When I discussed with Paul how nice it was to deal with him, he told me he knew him very well: "his master and mine...they were really close. He is a very honest person" and he added, "These people you did business with who didn't want to pay, are they still around? If you are not honest with your business, you don't last...."

⁸⁷ In the context of Computer Village, I addressed the question of cheating as part of the process of belonging. However, it would be exciting to explore these practices in a wider context, in relation to the Nigerian factor, exploring the articulation among, on the one hand, the hustler narratives—as a valorisation of the ability to seize opportunities that benefit one's own situation—that resonates with the business-smart narrative common in the market. And on the other hand, what I refer to as *robinhoodism* that translates to the idea of the purpose justifies the means mentality that shifts justice to a moral level that overcomes the legal frame. A position that, in Nigeria, feeds into the consequences of living in a corrupted state. Hustling and *robinhoodism* manifest, for example in the narrative around yahoo-boys (emic word for the Nigerian prince scam), whose activities can be understood as bringing back the money looted by greedy political leaders.

On another level, these elements of control could also be put in perspective and considered within the wider question of the complex relationship between economic freedom and social duty in the market. An afternoon beer in the police barracks was a good illustration of this tension. Festus, some traders I knew by sight, and I were sitting with a man, who was a bit older and better dressed than the rest of us. In fact, we were drinking because of him, as he was the one buying beers and groundnuts. The men were absorbed in animated discussions, mainly in Igbo. I was barely able to get part of the gist. Later Festus explained to me the whole issue at stake. Apparently, the *big guy*—a term used to address an established and quite successful entrepreneur—usually bought screens from one specific person. For his last purchase, he suddenly went for a better price from another trader, leaving his usual supplier, who counted on him, in trouble. The man gave an argument advocating his right to buy at the best price, as well as his general right to buy whatever and wherever he wanted from whomever he wanted. The other traders agreed with him and blamed him at the same time! If the freedom of market is a cardinal point, so is his responsibility, as a successful businessperson, to help the ones who are still growing. The young supplier needed his help and encouragement.

There would be no punishment of the *Oga* who decided to buy somewhere else, but at the same time, he would hear “the voice of the market”. It is possible that he would not be able to act this way in the long term without exposing himself to the judgment of his peers and trading partners. Sooner or later, he might pay for his actions with his reputation and possibly at the price of exclusion, since the market, as shown before, works on internal circulations: everybody needs somebody.

What I call the “voice of the market” is the light yet straightforward way in which things were said. There was an issue, people complained, everybody defended their position in a friendly and yet decided manner. The judgment of the pairs was out, and yet none of them could force him to do differently. I may be romanticising the situation, but I see beyond this approach, the cohabitation of two apparently opposed principles: the one that guarantees everybody the free to do what he or she wants and the principle of mutual support. Somehow, I think this is an interesting starting point to think of how society could be.

So what? Becoming one of us

To close Part 1 on the internal dynamics of Computer Village and their roots in Igbo economic practices, I addressed the last of the internal circulations among same-level traders that structure this market: the circulation of information. I did so by describing the organisation of the market, and I point to what could be a particularity of Computer Village: *fluid specialisation*. This allowed me to discuss the articulation between organisation, information and belonging.

At first, I understood information as hidden, protected and dissimulated, similar to the competition that prevailed in Geertz's bazaar. However, thanks to long-term fieldwork and first-hand experience, I came to understand that in access to information, the key word is *process*. Based on my frustrations and satisfactions, I describe this process in four schematic steps: from getting cheated to gathering information on goods, prices, and finally people.

I argue that this is the process by which one becomes part of the group and enters the core of the market, where information circulates freely and fluidly. As shown in the former chapter on internal circulations, being at the core of the market means accessing shared resources by taking part in the cooperation that makes the trade of used computers viable.

Finally, I discuss cheating and trust, part and parcel of every form of economic practice but here also part of the process of belonging. This argument is supported by the link between cheating and apprenticeships. The latter, a well-known practice in Igbo markets, has been documented as central both to learning and to become a member of the market. Due to Computer Village's inter-ethnic origins and rapid growth, the apprenticeship institution was never implemented in this market. I discuss how cheating came to fill the gap created by the absence of apprenticeships. It is replaced by cheating, which plays a central role in both learning and belonging.

On a more general level, the material presented in Part 1 of this dissertation allows me to draw two intermediary conclusions. First, my long-term fieldwork allows me to counterbalance the ethnicity-based emic explanations for how this market works. My observations and my own first-hand experience strongly suggest that being Igbo is not mandatory, nor even necessary to being "one of us".

Second, by conceptualising cheating as part of the process of becoming a member of a group organized around cooperation and shared resources, I lay out the pieces of the argument I will further develop in Part 2 against understanding the economic behaviour of Nigerians in China, being similar to the one at work in Computer Village, outweighing coping or survival strategies, often implicit in the work of many scholars working on African traders in China under the label 'globalisation from below'.



Computers and umbrellas. Computer Village, Ikeja. Lagos, 2011



Selling *fairly-used* phone batteries. Computer Village. Lagos, 2011



Containers arriving at the market. Computer Village. Lagos, 2016



Morning dusting. Metro Quarters, Computer Village. Lagos, 2016



No food for lazy man. Everyday business in Computer Village. Lagos, 2010



Megacity, Computer Village. Lagos, 2016



Festus Nwabuka in front of his shop. Megacity, Computer Village. Lagos, 2016



Festus with a customer. Megacity, Computer Village. Lagos, 2016



Early morning quiet. Megacity, Computer Village. Lagos, 2016



Moses and Frank discussing screen's prices. Megacity, Computer Village. Lagos, 2011



Moses Igwe. Megacity, Computer Village. Lagos, 2011



Igwe Kamanu. Megacity, Computer Village. Lagos, 2011



Lawal changing the screen for a customer. Megacity, Computer Village. Lagos, 2012



Frank waiting in Paul's shop. Metro Quarter, Computer Village. Lagos, 2010



Paul Ajuta, in his shop Adonai's Global Ventures. Metro Quarters, Computer Village. Lagos, 2010



Frank and Paul discussing IBM laptops' price. Metro Quaters, Computer Village. Lagos, 2010



Ifeanyi in his shop selling fairly-used desktops' spare parts, Metro Quarters. Computer Village. Lagos, 2011



Ogu Livinus troubleshooting. Computer Village. Lagos, 2016



Ogu Livinus troubleshooting. Computer Village. Lagos, 2016



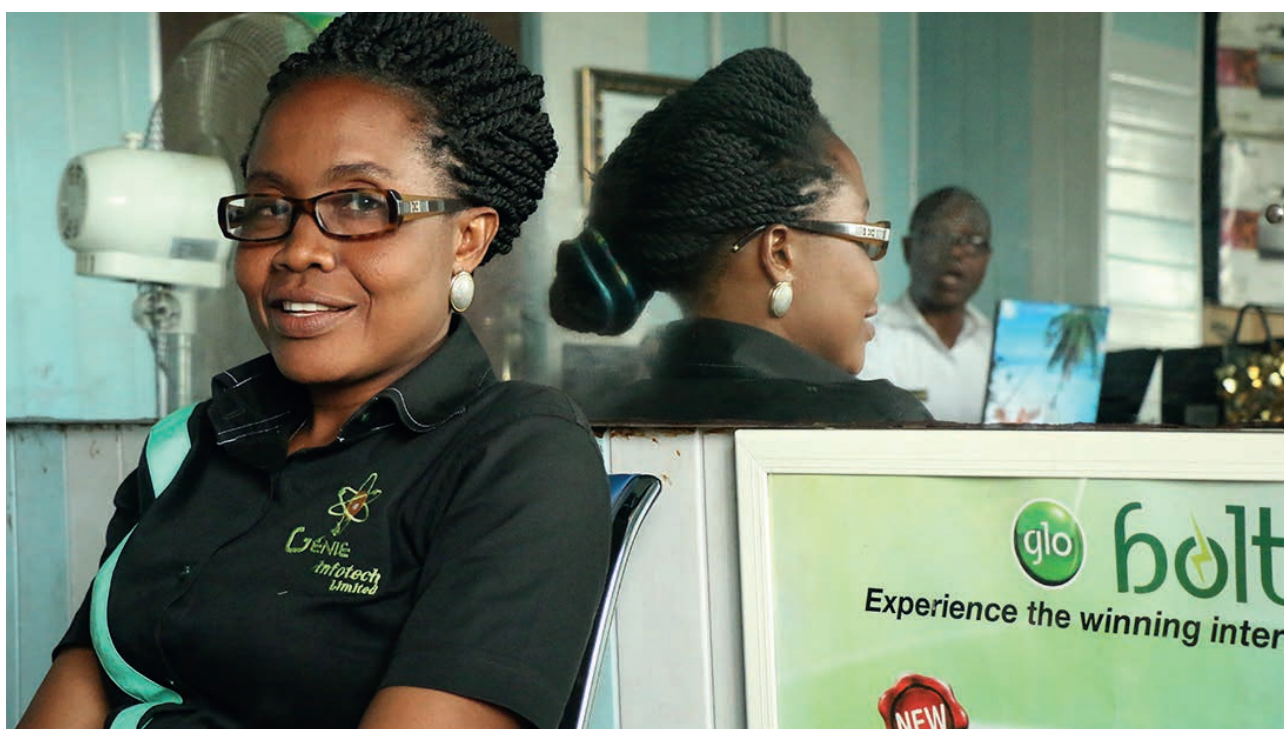
Fellow trader working at Chuks' shop. Megacity, Computer Village. Lagos, 2016



Chuks in his shop. Megacity, Computer Village. Lagos, 2016



Repairing with scraps. Megacity, Computer Village. Lagos, 2016



Tonia, and her brother Steve, at the Génie main office. Computer Village. Lagos, 2014



Steve and Sabine in Génie's main branch. Otigba Str, Computer Village. Lagos, 2014



Steve Okoye and his employee Sabina, registering SIM-cards at Génie's main office. Otigba Str, Computer Village. Lagos, 2014



Joking at the office. Festus. Megacity. Computer Village. Lagos, 2014

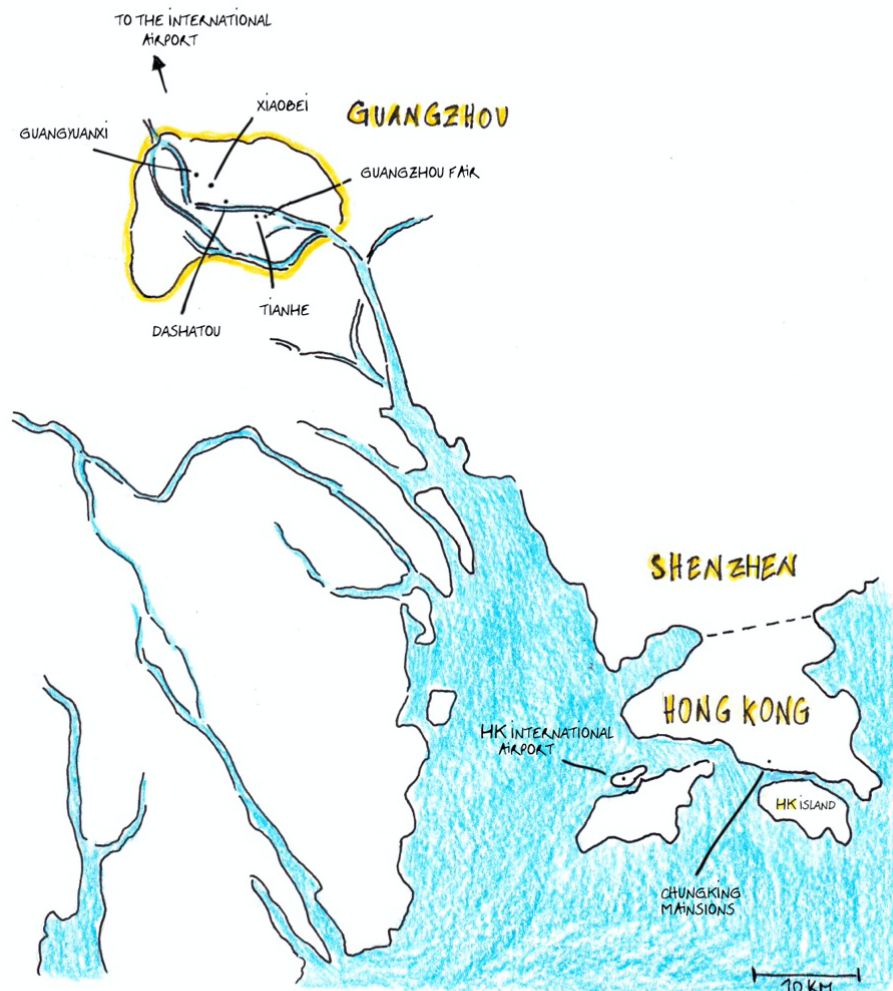


Tonia and other traders, in front of Génie second branch. Megacity, Computer Village. Lagos, 2013



Moses Igwe in his shop. Megacity, Computer Village. Lagos, 2016

Part 2 | Naija no dey carry last



PEARL RIVER DELTA

Naija No Dey Carry Last can be translated to mean "Nigerians will not come in last regardless of the contest", implying that Nigerians are either the best or close. They will do what it takes to not finish last; they will not give up. It is a common expression used in songs, jokes, books, and everyday discussions. According to naijalingo.com, it is almost the country's unofficial motto.

After zooming into the details of Computer Village, it is time to zoom out, and have a look at the big picture. Part 2, *Naija no dey carry last*, sets Computer Village within the global trading networks that supply it. I will focus on China, and more particularly, the Pearl River Delta (PRD).

A few years into field work in Lagos, I had the chance to take part in academic trip to the PRD and it seemed logical, given the trajectory of my work. ‘China’ was massively present in Computer Village: as an object category and as a supplier of goods; it was constantly mentioned by traders. I had the privilege of observing markets in China with background knowledge about market organisation in Lagos. And I had the privilege to visit Guangzhou guided by the family and friends—and often suppliers—of traders in Computer Village, to whom I was introduced as a family friend and trader. These two elements together offered an advantageous position from which to observe the trading activities of Nigerians in Guangzhou.

This part is in four chapters. I open with a general presentation of the PRD region and my fieldwork sites, with an accent on the Nigerian traders’ point of view. Then, I focus on the links between China and Lagos. Both of these chapters benefit from insights into the economic model observed in Computer Village and focus on pointing how this model deploys itself on a global scale, arguing for an understanding of globalization in its diversity. The third and fourth chapters focus on objects, and cast light on the complexity of their categorisations on Nigerian agency and, going beyond the Sino-African question, on the China-Africa-‘West’ triangle that structures the circulation of second-hand computers.

In short, as the title indicates, Part 2 discusses how, by mobilising a specific economic model and despite structural exclusion and disadvantages, in the global trade of second-hand computer *Naija no dey carry last*.

10. This na China o!

When I landed in Guangzhou for the first time, I had a shopping list in my pocket, an achievement on its own, as access to information is a process. When I knew I would be traveling to China, I started asking the traders in Computer Village what to buy *for them*. As it turned out, not only would they not commit to buying any of my future purchases, they would also not tell me what was selling in Lagos. I wasn't an insider yet. But, eventually, Chuks wrote a list for me.

A few months later, I flew to Guangzhou, and a few hours after landing, I called Obinna, who was waiting for my call. I got his number from Favour, a batteries and accessories reseller in Megacity to whom Chuks introduced me to. Favour had spent some years in China, and, at that time, he was traveling back and forth to buy batteries and accessories he would sell in Computer Village—where he had a shared shop—and to resellers in the Alaba International Market. He and Obinna were from the same village. Frank had called Obinna from Lagos, telling him he should wait for my call. We agreed we would meet the next day. We met at the entrance of Canaan Market, a plaza in Guangyuanxi, one of the two areas with a high concentration of African traders. We walked into the plaza, where shops were about five by four meters; goods—mainly clothes and jewellery—were piled floor to ceiling and squeezed wall to wall. Most of the sellers were Chinese women. We walked into a cargo elevator: down to level -3. I followed him along different maze-like hallways, wondering if I would be able to find my way out. We passed by mountains of jeans, piles of t-shirts, etc. Dozens of shirtless young Africans were packing them into huge plastic bags and cartons. I forgot to care about the way out, I was overwhelmed with the feeling that I was walking into the heart of *globalisation*. These were its foot soldiers and the constant noise of the tape being wrapped around bags and cartons was its official soundtrack.

The shops had the same small size as those upstairs, but the owners were mainly Africans, Nigerians according to the shop's name: *Mmiri Shipping*⁸⁸, China-Lagos Cargo, China-Lagos Express. These were shipping companies. Cartons, scales, more cartons, large plastic bags and tape, tape and more tape. We arrived at Obinna's office "China-Lagos, Express Kilo/Cargo" that had an airplane as its logo. More cartons and plastic bags piled up in the back of the office; at the front, there was a desk with two chairs. When we arrived, a Chinese guy was waiting for him. Obinna told me the man was: "a customer, he is into women's earrings and had done business with his brother."

⁸⁸*Mmiri* means water, stream, river in Igbo.

Obinna sat down and the two men started discussing money and debts, as was explained to me later. They spoke Cantonese sprinkled with English words. When the Chinese guy left, Obinna apologised for wasting my time and asked what I was looking for. I explained that I was doing research of academic-wise, and businesswise, I was into computers and looking for laptops, screens, and motherboards. He said 'OK' and moved on. I followed him wondering: "what now?", as we walked out in the opposite direction we came in and found ourselves in the loading area behind the building. We climbed up an external staircase; from the top, I could admire the dance of trucks coming and going. Globalisation's blood cells.

We left Canaan Market, crossed the street. And without any questions, he started to explain to me that he migrated and had to send money home, that it was hard to be the man in charge of the whole family. We walked down to another plaza. Two golden lions were guarding the entrance. Inside, there was an open space with the display-units lined up, behind each showcase, a seller sitting on a stool. They all sold cameras, phones, and wristwatches. We climbed up to the third floor and walked along the corridors, turning left and right and eventually entered a door to Lingos Group, Computer Branch Guangzhou. The place was about five by seven meters, the door and walls were in matte glass, the place fresh and neat. Behind the desk, a Chinese man—later I would be told he is known as Mr. Screen—was sitting in front of four Africans. The place was silent, the only sound came from the cash-counting machines, *trrrr...* On the table, there were stacks of RMB⁸⁹. When the four clients left, Mr. Screen greeted us.: "How now?" with a perfect Nigerian accent. Obinna asked for his business card and we left.

We climbed into a taxi. I asked where we were going. "Not too far, it's 25 RMB." I had landed the day before and used the subway once, so I had strictly no idea what it meant. After about 20 min, we arrived in an area filled with electronics shops. We entered one main plaza. Four floors of used, refurbished and substandard electronics. The first floor seemed exclusively dedicated to phones; upstairs there were computers, laptops and accessories. All the sellers were Chinese, but we were always greeted in English, in the most familiar English, Nigerian English: How now? How far? I shared with Obinna my surprise to hear pidgin English: "Yes, they speak that way to you, to make you feel good, so you buy from them." The whole floor was dedicated to laptops and they looked new. They were refurbished. I stopped at one stand to have a look at the configurations. The seller came to greet me: "How far, sista?". She showed me the quality of the screen and the long-lasting battery by

⁸⁹ Renminbi, literally the currency of the people, is also known as Chinese Yuan (CNY). In this text I use RNB as Nigerian traders do.

launching a clip of the pop duo P-Square. They really wanted to make me feel at ease. I moved around and realised almost all the laptops were HP and Dell, the most common models in Lagos, and they were playing Wizkid, Davido, and other African pop hits. Afro-pop played in Cantonese plazas before blasting in European and USA clubs, and finally reaching Coachella. Globalisation's soundscape: taping, cash-counting machines *and* Afro-pop music. There was a sense of familiarity. A sense of closeness, with the young Chinese women selling electronics. We had all learnt English with Nigerians, picked up the accent, mixed English and Pidgin, and used the same Nigerian computer lingo. I thought about what Favour told me back in Lagos, when I was trying to gather information about what to buy in Guangzhou: "They know the Nigerian market, they will tell you what to buy." We gathered some more information about models and prices and left. We climbed into a taxi to reach the subway station. Obinna paid the taxi, gave me a subway card, and made sure I could go home before saying goodbye: "Tomorrow, then."

The third day, I went back to Obinna's shop, and called Chuks in Computer Village to confirm the items and prices on the list (a few months had passed since we talked, and I wanted to make sure we were still on the same page). I had tried a few times before, but the calls never went through. *Network*. Outside Obinna's shop, in the hallway, leaning on a pile of packs ready to go, I was on the phone shouting prices and inches, when I realised, the guy on my right was doing the same as was the guy on my left. "Oh my God, I'm doing it!", I am doing it like them." Ethnographic climax. I was at the centre of this business with them.

These moments in Guangzhou were marked by a feeling of connection, an exciting everything-is-possible feeling. The feeling of being at the heart of globalisation. Outside, a whole city was somehow dedicated to packing and shipping. The taping sound that was filling Canaan Market could be heard all around the city, along with the sound of cartons, bags, strings, sack tracks, and forklifts. The city smelled of international trade, the city attracted people from everywhere⁹⁰.

There was a shift, A shift that was probably the most obvious when Obinna took me out to eat a few days later. At the opposite end of the corridor from his shop, at the end of the hall, there was a glass door covered in a zebra pattern. Behind it was a restaurant, with only Nigerian customers, waited on by young Chinese boys, working for a Brazilian transgender woman. I ordered pounded yam, *egusi* with fish, he had *garri*, *egusi* with meat, and while getting to know Obinna better, before talking business, I enjoyed the sweet feeling that the centre of the world had shifted. I was fascinated and

⁹⁰The feeling I was tasting with enthusiasm and surprise, has been discussed by scholars: "As starting point of the Maritime Silk Road, Guangzhou is one the most important foreign trade cities of China during the last 2000 years" (Li et al. 2007, 5).

happy to feel, to witness, an *intercultural* exchange that did not care about white people. This may finally be the shift between the central and the periphery. The feeling grew stronger the more I observed all the declinations of the Sino-African interactions in the city, from mixed couples, families, business partners to churches, and bars, as well as the African-centred market: wax with African president's faces, Nigerian flags, but also gates, padlocks, doorknobs, etc. All around me was the material culture I had been learning to be familiar with during the last years in Lagos. And I was peripheral.

Africans traders in China

When I told Tonia, I was going to China, she smiled: "My brother Mega Rich is in China, he is the one sending these computers," she said pointing at a *fairly-used* HP 6220 on display. These were the *fairly-used* laptops she started selling to take part in the goods circulation characterising Computer Village. When she decided to add *fairly-used* stuff to her inventory, she discussed it with her brother Steve, who put up the money, and her brother Mega Rich, who shipped things from China. Since then, she had been buying about four or five used laptops every week. She would check models and prices in the market in Lagos, communicate them to Mega Rich—via Facebook or WhatsApp. He would then check prices and models in Guangzhou. He would add the shipping cost (about 5 USD/kg); she would add the clearing tax (NGN3,300–3,500/laptop, depending on the weight). If it checked out, she would send the money through "the guys at the airport"⁹¹. One week later, she would go back to the airport to pick up her package.

Mega Rich, aka Mega, aka Rich, is Chizoba Gabriel Okoye's business name. He had been living in Guangzhou for almost 10 years (2009–2018). He is fluent in Cantonese and Mandarin and knows his way around Cantonese markets. China wasn't his first attempt at travelling. He was in the car spare parts business "when *things* were coming in from Germany" and transited via the Antwerp port. He applied multiple times for a German visa. Nothing. He applied for a Belgian one. Nothing. As people were going to Europe through Libya and Morocco, he tried to as well, twice from Libya and once from Morocco. He never crossed the sea. During his last stay in Libya, he was robbed. Stranded, he managed to make enough money to go back to Nigeria. He was at his lowest: "I had a job and a car, only to come back to no shop to open, no car to drive". He started selling shoes in Computer Village—

⁹¹ She is referring to an informal transnational money transfer service. Outside Muhammed Murtala Airport there are traders, mainly Hausa, sitting in the shade with *Ghana must go* bags full of money. They will take the money and note the name and number of the sender and the receiver. According to different sources, the bags of money, can travel as hand carry. Chinese customs, knowing this is money that will be spent in the country, may not be too formal on cash importation. It will be redistributed in the informal banks.

imported from Ghana—at the front of a shop owned by his in-law Oga Rainbow, who was married to Tonia's and Mega Rich's elder sister.

Oga Rainbow had come back from China in 2007 and opened a shop at the very end of Megacity, selling office furniture. He came across this business in China, just before coming back and after going through different other businesses, such as the highly competitive phone and accessories' business. Meanwhile, Mega Rich got his own shop in Otigba Str, selling network accessories, phones as well as shoes.

Between 2006 and 2009 Rich travelled twice to Guangzhou to buy goods. On his third trip, in 2009, he overstayed and settled down in China, just after marrying Ikeh, his three-months pregnant partner. In Guangzhou, at first, he was into computers and phones, but as Tonia put it: "Somewhere along the line, he came to meet shoes, and clothes. During the years of fieldwork in Lagos, the question about Mega Rich's return would come up here and now. While he was able to provide for his wife and daughter, the whole family wanted him back, more than his money. Ikeh, in particular, wanted him back; she was managing their shop in Computer Village, while raising their child and graduating from the University of Lagos. On his side, Mega Rich wanted to ensure a long-time trade before coming back. He spoke highly of China's business opportunities, which he compared to the USA's and Canada's. He considered both countries *has been*, stressing, for example, that Steve's choice to keep dealing with the 'West' was a mistake. But he also complained about the evolution of the computer trade: "Everybody is an importer now!" In June 2019, he made it back to Lagos, as an exclusive importer for a Chinese tires manufacturer, somehow, going back to the original car spare parts business.

When Mega Rich landed in China for the first time, Oga Rainbow was on his way out, he wanted to come back and be a father to his four children. By then, he had spent five years in China, where he landed in 2003. It was his second attempt to migrate, his first attempt turned into a failed 8-day-long trip to Japan. Born in 1954, he grew up in the East (of Nigeria). After the Biafra war, he followed his senior brother in the South-East, working as a quality controller of palm oil for export. He later followed an apprenticeship in the car spare parts business, at the end of which he tried to settle down in Kaduna, with only half of the money his apprenticeship master was supposed to pay him. After a first failed businesses attempt, he moved to Lagos. For the next few years, he went through different ups and downs, facing radical changes in importation policies, tax imposition, or the constant demolishing and rebuilding dance between Lagos State (K.A.I) and the more or less informal markets. At the top of his success, he was selling Nissan spare parts in Idumota Market. Then the whole market got demolished, again. He lost everything, again. He decided to travel to Japan, from where he was

importing the parts he was selling. He received a visa for NGN15,000 and bought a ticket for USD2000: Lagos-Tokyo via South Africa and Hong Kong. Once in Tokyo he got turned away at the border and sent back to South Africa. After five days at the Johannesburg airport and an extra USD500 for the migration officer, he made it back to Lagos. Depressed and with no goods to sell, in 2004, he got a Chinese visa. "I got it from an agent, not directly. They took 25k at that time, now [2016] it is almost 300k⁹² through agent with a virgin passport. But if you have been going before is 150k." With the visa in his pocket, he started looking for the ticket. He had NGN100'000, Steve added a bit more than 200 000. He travelled again via South Africa and Hong Kong, but this time it was a smooth journey.

In Guangzhou, a friend came to pick him up at the airport, hosted him for some time and showed him around. Then, he started *hustling*, working as a middleman. It took him a year and a half before he could send some goods to Nigeria. A year and a half of difficulties. He was approached by Nigerians in Brazil and Pakistan with opportunities to sell drugs. He declined: "I am a man of God". He was approached to teach English in Yiwo, but the working conditions and pay were hard to take, and the obligation to teach on Sunday was a deal breaker for him: "When will I preach my God if I work on Sunday?"

Finally, a thousand dollars anonymous donation from the church allowed him to get into business. He started sending phones to his wife, who supplied people in Computer Village, among them, Mega Rich. The GSM market privatised a few years before, and it was absolutely booming. He and his wife got cheated a few times selling to people rushing into the business. It was a stool that finally made his success. A very good simple stool that became a hotcake. From that success, he moved to office furniture. Chairs, tables and computer tables. He could finally make enough money to come back to Nigeria, even though President Obasanjo's new protectionist policies to improve domestic production, turned the furniture into contraband.

These biographies are simply a background. However, they offer a range of information and general context that help to complexify the tension between agency and structure. Particularly, they bring some nuance to the pre-written migrant speech, 'I came here to feed my family', and introduce an international entrepreneurial angle to discuss mobility.

As such, my work follows the call for ethnographies, and the following analyses rely on these backgrounds. But, if I insist on telling these stories in such detail it is to remember to what extent life

⁹²NGN25 000 was USD200 according to the exchange rates of the Central Bank of Nigeria in 2006; it would have been less on the black market.

paths are marked by a multitude of factors and contexts, ranging from the privatisation process of telecommunications in Nigeria to the life conditions of migrants in Libya, passing via urban planning and policies.

Africa China relations

Oga Rainbow and Mega Rich are part of the African trading diaspora in China that, in the past 30 years, has grown rapidly, attracting significant scholarly interest. These studies were a sub-subject of a larger and only slightly older field of research that had come to be known as 'China-Africa' or 'China-Africa relations' (Monson and Rupp 2013). While historical and archaeological evidence has shown China-Africa contacts since the Han Era (300 CE), rare are the works that have discussed those relations across the different Eras, throughout socialism, colonialism and post-colonialism (Siu and McGovern 2017).

The interest for China-Africa trading and mutual impact date from the 1960s possibly in relation to the first import-export fair, but China-Africa Studies really picked up in the early 2000s; the 2006 Forum on the China/Africa Cooperation (FOCAC) marked the sharp rise of China's investments in Africa as a major milestone. Most scholars—and media coverage—were dominated by macro-economic and political-economic approaches (Wekesa 2017). The focus was mainly on new Chinese activities in Africa (which partially explains why this new field of research has been named China-Africa and not the other way around) and was often articulated around their significance and impact in international affairs, in particular for Western powers (Siu and McGovern 2017). Concerning the African continent, these new relations have been acclaimed as a solution provider, as new development possibilities (Brautigam 2009), as well as denounced for their racist and neo-colonial dynamics—western scholars seemed to be the most vocal about the latter. On China's understanding of its actions in Africa, Siu and McGovern (2017) explained how the absence of the former colonial relationship and the shared experience of western hegemony domination have been considered a "reservoir of goodwill toward China in many African countries" (Siu and McGovern 2017, 342). This narrative was mainly built during the postcolonial and socialist periods by Chinese politicians and diplomats keen to draw a straight line between the cold war, the 'South-South' solidarity and their contemporary actions in Africa. "This sense of solidarity would empathize the commonality of the historical exploitation of China and the rest of the peoples of colour by the imperialistic and capitalist West." (Adams 2015, 92; Fennell 2013). On the other hand, African countries could value the proximity with China, could be inspired by its fast economic growth and could hope for a "commitment to sharing a political economic formula that has produced rapid economic growth in China." (Siu and McGovern 2017, 342).

Migrants and traders

The first call for studies based on ethnography that could complete and introduce nuance into these macro approaches dates back to the 2010's. Monson and Rupp (2013) stress the idea that 'China-Africa' studies would benefit from a "historically grounded and ethnographically specific research [analysing] engagement between China(s) and Africa(s) as a flexible and emerging process that links two areas of the globe—including their people, businesses, governments, ideas, networks—in ways that are both fundamentally rooted into the historical process and unfolding before our eyes" (Monson and Rupp 2013, 28). The attention to microlevel and everyday life was needed to shift the analyses from the national to the community and individual levels. This was so to overcome and complete macroeconomic analysis, while nuancing the understanding of Africa-China relations. Particularly, ethnographic approaches appeared more suitable for the studying of African activities in China that are not directly framed by Africa-made policies⁹³. On a more general level, these ethnographic approaches also intended to go beyond the vision often suggested by the macro-level approaches of a binary partnership premised on political and economic imbalances. Geographers, sociologists, and anthropologists answered the call. The field has been growing fast and steadily and has begun to cover the wide variety of activities in which Sino-African relations are manifested.

Early ethnographies on Africans in Guangzhou gave a general insight of the trading diaspora, identifying two different categories of actors: those who settle and those who travel. Also called tradesmen vs salesmen (Li et al. 2007), traders vs *circulants* (Bertoncello and Bredeloup 2007) and later addressed as mobility and sojourning (Haugen 2019b, 2019). The first are the ones bringing the products manufactured in the region to a market place, where the second can buy, in order to export to their countries of origin (Bertoncello and Bredeloup 2007). Mainly based on geographical unity, these studies focused on the areas of the city where many Africans were living and/or doing business. Little Africa, Chocolate City⁹⁴, as the media named it, was at first referred to as an ethnic enclave by geographers and urbanists discussing the socio-spatial segregation in urban China, as well as the transition social space in opening China (Li et al. 2007). The diaspora has been described by pointing at its diversity of economic status, nationalities and level of education; and at its homogeneity, when it comes to gender and age, with an overwhelming presence of men between 25 and 40 (Bodomo 2010;

⁹³ On the African continent, ethnographies have also brought a finer understanding of the difficulties that Chinese entrepreneurs and migrants on the African continent can face (Liu 2019; Lan; and Xiao 2014) and participate in avoiding further circulation of rumours and distortions (such as Africans working in slave-like conditions in Chinese owned factories) often conveyed by the media (Park and Huynh 2010).

⁹⁴ African areas in Guangzhou have been called Little Africa and/or Chocolate City in the media, but also sometimes by scholars as well as Chinese and African authorities. However, I never heard any African trader using these terms. Nigerians address the Guangyuanxi Lu area as Guangyuanxi; so will I.

Li et al. 2007). It is worth mentioning that counting African traders in China, more precisely in Guangdong is not an easy task. As is often the case, when it comes to undocumented and politically pressured people, numbers are far from precise. Different sources give radically different numbers, with variations ranging from 500'000 to 16'000 Africans living in the Guangdong province. This massive gap is partially explained by the confusion between entries and residents, documented and undocumented as well as Guangzhou and Guangdong (Lan 2017; Haugen 2019).

Numbers aside, scholars carried out their ethnographic investigations and turned their interest to different aspects of the everyday life of African traders. A fair number of studies pay particular attention to the *migrant* aspect of African traders in China. They focus on mobility and immobility issues, discussed immigration policies (Bertoncello and Bredeloup 2009; Lan 2014), and questioned stuck-ness, lack of agency, and *alternative* mobility (Lan 2016; Haugen 2012; Adams 2015). They describe the hardening of Chinese immigration laws, the state monitoring mechanisms and immigrants' avoiding strategies (Haugen 2019b, 2019, 2012). They observe coping and integration strategies, via football, religion, student visas, churches, and marriage (Haugen 2019; Castillo 2015, 2014; Zhou 2017; Haugen 2013). They explore the differences and similarities between the migration experience in China and other destinations, such as Europe or the USA, exploring the relation between immigration policies and African embedment into Chinese society (Lan 2016, 2017; Haugen 2012). The continuum between mobility and immobility has been recalled and the limits of a binary understanding of legal and illegal status challenged, stressing the particularity of the Chinese context, where the opposition between migrant (African) and local (Chinese) has to be understood, along the specific situation of internal migrants⁹⁵ in China (Castillo 2015; Lan 2017).

Other scholars focus on the economic aspect of the migrant-trader's activities—even though the migrant aspect is never too far even in economic analysis—and looked at the transnational trade. Bertoncello, Bredeloup and Pliez (2009) focused on the new African trading posts in Guangzhou, discussing their continuity with other spaces of international trade, describing them as an intersection between trading posts (*les comptoirs coloniaux*, whose main purpose was to sell goods produced on colonized lands) and the *Zongo*, areas in West African cities where Muslim traveling traders on the road could rest. Thus, opening up the African enclave from its inward stare, and placing it within global trade. Bodomo (2010) addresses the African traders in Guangzhou as bridges and stresses their active

⁹⁵In China, the term 'internal migrant' describes the situation of Chinese people (often from rural and agricultural areas) who left their province (seeking urban employment). They are massively present in the Guangdong, where they become factory workers. To settle in a different province, they need permits they do not necessarily have, which adds to their economic precarity and the insecurity of the illegal status.

and central role in transnational trade. In this way, he distanced himself from an understanding of African traders in China that tends to deprive them of agency (Bodomo 2010, 2012). The ethnography-based studies that followed have been detailing economic practices: describing the middle man figure (Haugen 2018; Mathews 2015), the settler-traveller's interface, the social networks' impact (Marfaing and Thiel 2015), and shipping practices (Haugen 2018, 2017; Mathews, Lin, and Yang 2017). The trust issue has been explored, as has the interface between Chinese and African traders, with examples such as the *calculator-language* (Bodomo, Che, and Dong 2020)⁹⁶ or the partnerships between African and Chinese workers on a more general level. Matthew, Lin, and Yang (2017) offer one of the most complete descriptions of the Africans (and other foreigners) in Guangzhou, bringing to light different businesses-oriented details.

Besides the migrant-trader question, the complexity of China-Africa relationships has been explored in other regard. For example, contemporary arts emerged to address the manifold and diversity of China-Africa engagements. Simbao (2012) addresses this field by analysing the video production in China and in different countries in Africa. She highlights art as a space to express individual experiences with all the "contradiction and complications"⁹⁷ that it usually includes. Jedlowski and Röschenhaler (2017a) also address the complexity of praxis and discourses on the subject of the China-Africa relationships via media interactions from both Chinese and African perspectives, focusing on both popular and official cultural productions. Centred around soft power and discussing visual and textual mutual representations, their work provides an analysis that is as detailed as necessary, going far beyond migration issues or economic needs and stresses the complex, multi-layered and interwoven relationships between Africa and China. They also engage the discussion about the limits of considering the activities of African traders in China as 'globalisation from below' (Jedlowski and Röschenhaler 2017b).

Finally, it would be difficult not to mention race and racism when talking about China-Africa relationships. Racism in China—from government, citizens, and private companies—against Africans appears regularly in the media and social media⁹⁸. As mentioned before, the early studies on a macro level have been denouncing Chinese policies and activities in Africa as neo-colonial. On the micro

⁹⁶ It is worth mentioning that a large number of Nigerians I met spoke Mandarin and/or Cantonese, and the Chinese traders spoke English, business English and/or Pidgin English.

⁹⁷ Monson & Rupp (2013) talk about paradox and contradictions, while Simano uses "contradictions and complications". I guess these could also simply be addressed as complex and multi-layered situations, with a different sense and meaning according to the point of view, as it happens in actual situations.

⁹⁸ The discrimination carried out by the Chinese government as well as Chinese private businesses toward African traders during the Covid 19 crisis have been discussed by the BBC, the Guardian, as well as shown in Tik Tok videos.

level, ethnographic descriptions regularly mention/denounce the everyday racism faced by Africans in China: from police and immigration officers' targeting and abuses, to (more or less micro) daily aggressions (such as on public transport, by taxi drivers) or the discrimination from landlords and hotel managers (Castillo 2015). Anti-Sinicism in Africa has also been discussed, in the observation of the difficulties encountered in everyday life by contemporary migrants and small independent businessmen (Lan; and Xiao 2014) but also in a longer historical approach discussing how "colonial governments and white workers led anti-Chinese protests; [which] today are more likely to be led by African laborers, African trade associations and businesses, and opposition parties" (Park 2019, 97). On a more general level, by drawing a connection between racial violence on university campus in the 1980s⁹⁹ and today's manifestations of racism online, Cheng (2011) discusses the thesis of race as a "central element in the construction of Chinese nationalism and to define China's place in the world order" (Cheng 2011, 562).

As Park's work on anti-Chinese racism in South Africa, Cheng opens the discussion on race on a wider level: anti-black racism in China and anti-Chinese racism in Africa have been discussed within the complexity of a triangular racism. On the one hand, the 'West' denounces the neo-colonial and human rights abuse by China, while China reminds the 'West' of its colonial past and present abuses. One could almost say that the question about racism, is less about Africans, and more about the changes in the balance of power between the 'West' and the 'East'. Racism against Africans is a materialisation of power. Despite slightly different legitimization narratives (we respect human rights vs we didn't exploit them), it seems that access to power includes—among other things—the right to exploit. The fight must go on.

Nonetheless, treating racism is not within the scope of this work, at least not directly. This decision reflects the situation I was faced with in the field. One, racism wasn't really a topic in discussions with the traders. Of course, not talking about something doesn't mean it doesn't exist (quite the opposite¹⁰⁰). In this case, I believe it simply suggests that we had other things to talk about. Mainly, thanks to the possibility of interacting on a business level as well as on a personal level, thanks to common friends and shared experiences in Computer Village. Again, the few times racism came up, the stories weren't much different from what obtained in Switzerland. This is not to suggest that all

⁹⁹The Anti-black sentiment of Chinese students in the 1980s is discussed by Sautman (1994). Campus violence toward African students in China has been covered by international media dating back to 1978, see for example the New York Times (visited on the 14.04.2021 <https://www.nytimes.com/1986/06/10/world/africans-accuse-chinese-of-racism.html>)

¹⁰⁰ #sayhisname, #sayhername, #balancetonporc, #metoo

racisms are the same, and thus not worth discussing. Racism manifests itself in multiple ways that all need to be unveiled, denounced, and fought.

To this discussion, I bring input based on first-hand knowledge of practices and discourses about economic exchange, addressing how mutual representations and generalisations are both based on stereotypes and personal experiences. I will conceptualise them as part of a China-African-‘the West’ triangle, and for a number of reasons. First, I wish to stress that the very existence of Computer Village is the product of this triangulation, but mainly as a reflection of the discourses and practices of Nigerian traders. In Guangyuanxi and in Computer Village, the relationship with *China* (as a general emic category that can stand for the Chinese government, small traders, big construction companies and/or small business partners) was mostly defined in comparison with ‘the West’. From the Naija-centred point of view, China came with more or less explicit references, often implying a difference, but also a complementarity, with ‘the West’. By discussing the narratives Nigerians mobilised around ‘China’ and ‘the West’, I hope to contribute to the general discussion of the complexity of power stakes in a three-way system, using business to cast a light on global multilateral links between different regions and their populations.

The Pearl River Delta on the used computers trading map

It is not a coincidence that so many Nigerians are in Guangzhou. A historical springboard for the Silk Road of the Sea (Vogel 1989) this city has a long history of international trade with links to the Middle East and Europe and is exposed to multicultural influence (Li et al. 2007). However, it is after the “transformation of the Pearl River Delta (PRD)—the hinterland of Guangzhou—from an agrarian-oriented economy to a centre of labour-intensive manufacturing industries that the city developed into one of the fastest-growing metropolises of the world” (Gilles 2015, 26). With massive presence of factories comes massive presence of foreign traders buying products (along with domestic migrants making these products). Guangzhou is the capital of the Guangdong province, part of the Pearl River Delta Special Economic Zones. SEZ are usually structured in specialised cities; in PRDSEZ for example, Foshan is known for ceramics, Dongguan for shoes and clothing, and Shenzhen for electronics. Guangzhou is known for clothing, but mainly because virtually every imaginable product, from solar panels to construction equipment, from furniture to electronics, from school bags to make-up and wigs, is available from suppliers (Mathews, Lin, and Yang 2017). Guangzhou is the showcase of the world's largest factory concentration.

Here, I want to describe the fieldwork site in the PRD, and at the same time introduce some of the elements that will be further developed in the next chapters. I travelled to Guangzhou three times in

2012, 2013 and 2015. Each stay lasted from two to four weeks. On each occasion, I met new people who brought new information and points of view to my attention, but I usually spent most of my time with Obinna, Mega Rich, and their circle of friends. During working hours, I would sit in their offices, chatting about this and that, sometimes helping here and there to pack and/or count. I escorted them on their errands, shared a meal and discussed with other traders along the couloirs of the plaza. It was a perfect research situation: discussions were spontaneous, stimulated by the ongoing transitions, and the general economic activity around us.

I would regularly take walks around the area, checking goods and prices (you never can tell if a good opportunity to make money will find you) and carrying out discussions with other African traders and Chinese sellers. After working hours, we grabbed something to eat and had drinks. These situations were good opportunities to get an idea of their social life, catch up with the traders' work and personal life, as well as discuss wider topics: the market evolution in Lagos and in China, Nigerian politics, racism, migration or the English Premier League. Between stays, I generally kept in touch with both Mega Rich and Obinna via WhatsApp and Facebook¹⁰¹.

Guangyuanxi and Xiaobei

Mega's shop was in the Tong Tong Plaza, Obinna's in Canaan Market, both situated along Guangyuan West Road, or Guangyuanxi as Nigerians call it. Sometimes addressed as Sanyuanli by scholars, this is one of the two main areas of the city with a high concentration of African traders. Situated north of the North Railway Station of Guangzhou, Guangyuanxi is dominated by English speakers. Nigerians, mostly Igbos, are the overwhelming majority, despite few Yoruba and Ghanaians. Whereas three to four kilometres south west, Xiaobei Lu is dominated by Malians and other French-speaking African traders, as well as Arabs and non-Igbo Nigerians (Mathews, Lin, and Yang 2017; Lan 2016). Some scholars suggest that the linguistic separation is deepened by the religious one, Guangyuanxi being Christian, and Xiaobei Muslim. I would say Guangyuanxi is almost exclusively Christian, while in Xiaobei, Muslim presence is substantial but not exclusive.

Beside these differences, both areas are mainly constituted by plazas—as in buildings with different shops, restaurants—American chains, such as KFC and McDonalds, as well as African restaurants and, in Xiaobei, Chinese Muslim restaurants. There are also a range of business-related services, such as

¹⁰¹ Mega and I are still in touch, on a more or less regular basis, but I always get his news via Tonia. She was actually the one who told me Mega Rich finally made it back to Nigeria in early 2019. The last time I had news from Obinna, he was in Switzerland. Favour had told me Obinna was sent back from China and made it to Europe. He contacted me when I was in Switzerland, but we couldn't meet. His number stopped working; I lost track of him. As did Favour. According to the last news, he may have moved to Portugal.

(informal) banks, exchange rate offices, packing and transport-related services, etc. Both areas are business oriented, and it seems safe to say, mainly men oriented, as the welcome note in the hotel room hinted at: a selection of condoms accompanied by anti-scam advice concerning the informal currency exchange¹⁰². Besides language, origins (ethnicity) and religious division, the two areas are far from impermeable; exchanges are as common. Obinna, Mega Rich, and their friends frequented bars, clubs and shops in Xiaobei, and I can only imagine the other way around being just as common. I spent most of my time in Guangyuanxi. During my last trip I stayed in a hotel in Xiaobei, which allowed me to meet traders from Francophone areas during informal dining and drinking discussions¹⁰³.

Unfortunately, the literature doesn't give solid explanations on the socio-historical reasons that lead to the development of these two areas. In some ways, it seems like these two areas are defined as Nigerian/Igbo vs the-rest-of-the-African-continent. Malian and Nigerian traders were the first to move closer and closer to the production source, as they moved from Dubai to Hong Kong and then Guangzhou (Bredeloup 2012). The Francophone community, predominantly Malian, established trading networks in Asia by selling precious and semiprecious stones before moving into export-import and settling in China. While Nigerians, who didn't have anything to sell, directly set up shops for export (Bertoncello and Bredeloup 2007). These differences do not necessarily explain the evolution of two African neighbourhoods and my research doesn't offer definitive explication either. However, I would suggest that the size of the Nigerian market—one out of five Africans is Nigerian—combined with the Igbo economic model may be a part of the answer. In fact, Guangyuanxi's organisation recalled the one observed in Computer Village: many micro and small enterprises evolving within a cooperative system. So, the massive size of the Nigerian market guarantees a lot of space for business before reaching saturation; a space filled by micro and small enterprises (MSEs) means a very large number of traders. Considering that these MSEs evolve in clustered structures ("Let us be many") where every trader has a shop, could explain why the Igbo community needed a large space to evolve in, thus impacting the geographical structure of the predominantly African neighbourhood in Guangzhou. Besides religion or ethnicity, I suggest that the diversity of economic models operating on global level should be taken into consideration when addressing the shaping of international areas.

¹⁰²Trust issues are common on both sides. For example, in the hotel in Xiaobei, credit or advanced payment were off the table; the hotel payment functioned on a night-to-night base.

¹⁰³ As a woman, sometimes sitting alone is encouragement enough for men to approach and to start to explaining life: very annoying but also an anthropologist's dream.

Business aside, Guangyuanxi (and probably Xiaobei) offered number of services that are not directly related to the import-export, but important for the quality of everyday life. On my second trip, the first day in the field, I went to meet Mega Rich for the first time. I had been trying my best to hang around, observe, ask, and listen, but my period cramps were killing me. I asked Mega for a pain killer: “No problem we can go to see a lady; she speaks English, has an Igbo name, and is the best doctor here.” And so, we went to Ada’s pharmacy, where I could buy ibuprofen and correct the mistake I made in the morning, when I tried to buy a painkiller in a Chinese pharmacy without Google translator but with what I thought was a perfect art of mimicry: pointing at my womb while mimicking pain. It turned out that, since morning, I had been taking fertility drugs. Besides the joke and specifics of field-working as a woman, the visit to Ada’s shop triggered some thoughts. Ada is a Chinese woman. She owns two shops in the area and sells western drugs, Chinese traditional treatments and teas, and some Nigerian (African) market-oriented products, such as anti-malaria drugs. She explained how she took an Igbo name¹⁰⁴ to encourage her clients and boost her business.

This speaks—along with other examples such as the Brazilian-owned Nigerian restaurant or mixed couple’s child dedications—to the level of social and cultural mixing, supporting Bodomo’s understanding of African trading posts as open and organic, and testifies to the complexity and variety of Sino-African exchanges in China. Via the collaboration between African traders and Chinese actors, Guangyuanxi has been developing into a small area centred on Nigerians needs and lifestyles¹⁰⁵, yet it is influenced by the local inhabitants’ and other migrants’ input, becoming an area of mutual impact and exchange. The extent of these interactions speaks to the cosmopolitan experiences of traders evolving in these international spaces, where KFC, *amala* and Chinese medicine are all part of everyday life, along with business, pleasure, family, and friends, in a multilingual environment.

Dashatou and Tianhe

There were a few other important places to pin down on the Guangzhou map of used electronics trade: Dashatou and Tianhe. Two areas further south (Dashatou) and east (Tianhe) from both, Guangyuanxi and Xiaobei. Both areas hosted important electronic markets. They both sold mainly (exclusively) refurbished and substandard goods. Unlike the areas described above, shops here were run only by Chinese, and African traders are not their only target. Customers came from the whole of the African continent, the Middle East, South-Asia and, of course, China. Despite these similarities,

¹⁰⁴ Ada is an Igbo name commonly given to first born daughters.

¹⁰⁵ Everything but housing. While both Xiaobei and Guangyuanxi used to be residential area for the African traders (Li et al. 2007), today, most Africans live in peripheral areas, such as Foshan.

other aspects told them apart, and those elements bring some insights on the global trade of used computers.

Dashatou's main plaza is called Shen Xian Dashatou Second-Hand Market: four floors of refurbished computers, phones, substandard and fake accessories, but also sound systems, headphones, earphones, cameras, tripods, etc. As described during my first visit with Obinna, computers here run Nigerian clips and sellers speak *pidgin* English¹⁰⁶. During my first walks around Tianhe, I realized how comfortable I was in Dashatou: the language, the pop-culture, and the goods were familiar. I felt much more of an alien in Tianhe. Apart from the language barrier—English was much less spoken—I was struck by the fact that the models on offer there were not interesting at all for the Nigerian market—at least as far as refurbished laptops are concerned. Indeed, there were no African customers. Dashatou's shops offered products assortment mainly consisting of HP laptops—with characteristics that matched my shopping list. Thus, I assumed, those were popular in Nigeria because they were largely available in China. But the visit to Tianhe showed me a different picture. Floors packed with Lenovo, IBM laptop (that, at that time, did not sell in Nigeria, as I painfully learnt by being laughed at when trying to sell my 'ugly' Lenovo laptops in Lagos the year before). In addition to the language, presentation, and the laptop assortment, another aspect would tell the two areas apart. In Dashatou, within the main plazas, as well as in the smaller shops around the area, goods are *refurbished*, *substandard* and mainly assembled. Tianhe's shops offer assembled and refurbished but there were many shops specialised in spare parts: from small stalls outside the plaza to offices in the high-rise buildings, where engineers and salespeople worked side by side¹⁰⁷.

Unlike Xiaobei and Guangyuanxi (and Chungking Mansions in Hong Kong), Dashatou and Tianhe seemed to be completely under the radar of media and scholars interested in China-Africa studies. And yet exchanges in these markets are probably valuable sources of insights on the trade.

¹⁰⁶The market also addresses French speakers, but English is often used as a commercial language by non-native English speakers, but it is common to check phones and computers with a French operating system.

¹⁰⁷On one occasion, Ellen Hertz, Yvan Schulz and I went a one-day-long trip to Shenzhen, the very first SEZ (Lehmann and Leonard 2018). Shenzhen, aka the Chinese Silicon Valley, is known for its high concentration of IT businesses. Despite being a flash visit, it was an enlightening one. Two aspects were particularly interesting. First, following what has been said above about the different levels of the UEEE trade, if Tianhe was one step further along the line as far as spare parts were concerned compared to Dashatou, Shenzhen was yet another step further along: micro-components! Plazas full of capacitors, chips inductors, etc. And for those, there was no market in Computer Village. Second, visible to the first-time stroller was the number of schools and training centers, testifying to the accessibility of the know-how. Without going into further details, these are two elements that speak of the structural limitations that African traders face in their business.

First, the differences in between Dashatou and Tianhe show that second-hand electronics market in China makes efforts to adapt to the customers: English and Pidgin speaking sellers, pop culture and an assortment selection show a clear effort to target African markets. A similar phenomenon can be observed in the selling of clothes, as I was made aware of by a Chinese saleswoman whose family own a clothes factory and has a shop in Canaan Plaza in Guangyuanxi. In an informal discussion, she educated me on the different fashion trends (e.g., skirts lengths, jackets shoulders width, V or U-shaped collar) of different African countries: she knew what Cameroonians like, what was popular in Nigeria and so on. Concerning electronics goods, the observations of these element are important to contrast the narrative that still implies a “dump-it-in-somebody-else’s-backyard” attitude in the circulation of second-hand electronics. These marketing and selection efforts are a chance to read the interaction between Chinese and Africans on a business and professional level, with mutual and compatible interests.

In Tianhe, Hellen Chen, a businesswoman at the head of a workshop where technicians would refurbish motherboards stated it clearly: it is mainly about business. When answering the question about business with Nigerians, she gave almost exclusively professional and technical details. What she offers, the quality of products, quantities, and prices, showing very good knowledge of the Nigerian market. In a sense, this business over racism attitude puts economic mutual interests at the forefront and participates in challenging the understanding of commercial activities of Africans in China in terms of coping and surviving. Thinking about the interface between African and Chinese markets also allows one to think about the mutual impact of said markets. A phenomenon described for example in the evolution of wax market and illustrated by the idea of “made in China, designed in Africa (Sylvanus 2016, 2013; von Pezold and Driessen 2021).

The Canton Fair and Hong Kong

The Canton Fair and Hong Kong close this presentation of my fieldwork sites. These were short visits marked by fleeting encounters. Nancy, Patrick, Afam and Diallo are the kind of traders I briefly met and that brought small but central pieces of information to advance my understanding of the global picture. They brought new perspectives enabling me to see the diversity of the jobs that make the machine run, the performance of the logistics machine, and some of the specificity of this region of the world in relation to the global trade of second-hand computers.

In 2013, I visited the Canton Trade Fair. Launched in 1957 for exports, its size has continued to grow since 2001, when China joined the WTO and the fair opened to imports. “As the 100th CECF (Chinese Export Commodities Fair), the CIECF (Chinese Import and Export Commodities Fair) has seen around 190,000 foreign traders from above 200 countries and areas, the contracts of which amount to about

34 billion US dollars.”(Li et al. 2007, 5). Twice a year, thousands of foreign businesspeople, mostly from traditional industrial nations, attend the Canton Fair, where one-third of annual Chinese exports are traded (Gilles 2015).

I went alone, but Nancy was waiting for me at the entrance. I got her contact from Mega Rich. Nancy (her English name) was a twenty-something Chinese woman; she studied international business and, at 18, started working for a make-up factory. She had already worked in many fairs and greeted me in Italian, letting me know she had worked in Bologna. She had started working for the factory she was at the fair with the year before. She met Mega Rich in Guangyuanxi, where her boss, the owner of the factory, sent her looking for new clients: “He has been in this business for long, so he knows where to go to ask for clients”. She explained to me that Africans were selling but they didn’t have factories. “So they need us.” By us, she meant the factories and the factory reps. She carried on telling me about Mega Rich. “He is more stable, he has a shop,” implying that it is safer to deal with African traders who own a shop. We walked into the fair. She led the way to their booth; we greeted her boss and then she took me around for the grand tour. One of the first things that stood out is that there were almost no sub-Saharan visitors. Nancy confirmed it and she gave me the numbers of the previous day: 40,000 visitors with only 5,000 African nationals. According to her, the largest portion of visitors are Chinese and Asian, followed by Europeans, Middle Easterners, Indians, and, last and least, Africans. She explained that African traders in Guangzhou do not need to come to such events since they already have steady suppliers—via the African traders leaving in Guangzhou. It should also be mentioned that access to the fair is free, but passport control is mandatory so being undocumented constitutes an obstacle (to say the least). The second thing that stood out was that, when browsing around looking for possibly interesting items for the Nigerian market (mainly solar lamps), sellers will always have the same reaction: “This is too expensive for Nigeria.”

There are two points to be made here. The first one concerns the globalisation dichotomy. The prices and entrance controls, which are an obstacle for many African traders, could lead to a confirmation of the separation between ‘below’ and *above* globalisations. Yet, the encounter with Nancy suggested that some actors and companies were servicing both the ‘globalisation from below’ and the one from above. She had been to a make-up fair in Bologna *and* in Guangyuanxi, and this was not only a movement along *her* biography. One of Nancy’s tasks in her then current job was to find clients. To do so, her boss sent her to build connections at the biggest Chinese international fairs *and* to Guangyuanxi. The fact that the same actors are involved in these two environments supports the need to overcome the dichotomy between the two globalisations.

The second one concerns the diversity of jobs. One of the most interesting aspects of this day trip was to spend time with Chinese women, and to realising that women play a central role in the trade between South-East China and the rest of the world and Africa specifically. After the visit, Nancy and a colleague of hers insisted on inviting me for dinner. They shared the experiences they had with clients from different African countries: details on the down payment with factories, container-clearing practices in different African ports, and differences in the behaviour and attitude of traders according to nationality. Despite the trust issue and obvious stereotypes on which some of the arguments were based, the quality and quantity of their knowledge was indisputable, and I came to value their role in making 'South-South' globalisation possible¹⁰⁸. Their knowledge opened my eyes on the role of women, who were everywhere in Xiaobei and Guangyuanxi. This was an army of young Chinese women with French and English skills, experience in the export industry, and knowledge of the production landscape that made global economic exchanges possible.

But even with this overwhelming presence, Chinese women in Africa-China studies are invisible. When they are seen, it is usually through the filter of interracial romance/marriage or the business-romance overlap. Some studies pointed at the double exclusion of Chinese women in Guangzhou: they are considered as internal migrants who have married down (Zhou 2017). Others had a more positive approach and described Chinese/Nigerian couples via the complementarity of skill sets that benefit their businesses (Lan 2017). Haugen (2019) portrays these situations in terms of opportunity for the women, explaining how young Chinese women fronting shops in the malls and catering for Africans get a chance to learn English, acquire import-export business skills, along with the possibility of getting romantically involved with foreigners. She insists that women "from modest background are thereby offered access to a cosmopolitan experience that previously was reserved for well off urbanites. The contact with foreigners may thus be experienced as a way to break social constraints." (Haugen 2019, 50). This analysis stresses agency and avoids victimisation, yet I see two issues in Haugen's words. First, it is important to highlight that they are not being offered a chance nor being offered access: they are working for it. Second, and most importantly, when asking what globalisation (from 'below' or wherever) does for these women, it is just as important to ask: what are these women doing for globalisation? They provide fundamental services without which global economy wouldn't happen. To formulate things in terms of what they offer and provide, instead of

¹⁰⁸ It is interesting to point out that exportations to the 'Global North' depend on women with the same profile, in fact some women work along the whole spectrum of the Chinese exportation business. This shows that 'North-East' and 'East-South' relations may not be so different, and among other they share the fact that the work of women is often made invisible.

what they get out of the deal, puts the accent on their skills and active roles, and avoids the risk of confusing agency with the chance to take a little sip of cosmopolitan life.

Hong Kong

Hong Kong was the entry door for the African traders in mainland China (Haugen 2018; Bertonecello, Bredeloup, and Pliez 2009), a significant step in the story of Computer Village, and my last fieldwork site. Thanks to the snowball effect, through some contacts I had via Lagos in Guangzhou, I had the opportunity to spend a short and yet interesting stay in Hong-Kong, gathering a few elements that helped paint the picture of global trading.

Patrick. He had lived in Japan and Korea, and had been coming and going to and from Hong Kong for four years before finally settling in the country the year before my visit. He had sold clothes and phones, before moving into *cargo* and *banking*. I tagged along with him for a few days, following his activities. As in Guangzhou, I was brought to the markets, invited to meals and outings, and given opportunities to informally discuss business, biographies, markets, and life. We moved from shop to shop around Sham Shui Po, a neighbourhood known for its used electronic business; Patrick moved around freely and seemed to know everybody, shaking hands, and greeting people at every corner and alley. Unlike in Guangzhou, there were no big plazas but ground floor shops, with large garage-like doors that opened directly onto the sidewalks, filled with used computers, yet not as packed as in Guangzhou. Generally, shops were run by Hong Kongese and assisted by Pakistanis and Indians.

We entered a shop, only three meters wide but with three rooms, connecting in a line, such as railroad appartement. Computers, laptops, TVs, assembled, in parts, wrapped or not, filled the shop The only piece of furniture was a small table with a working computer on it; on the wall in front was a screen showing the view of the 9 CCTV cameras looking at the sidewalk outside the shop, the entrance door from inside and outside, and the inside of the shop. I was offered a stool. They were selling desktop computer parts and laptops. All around were the same cellophane-rolls to wrap screens and computers that were all around Computer Village; they even had the same wrapping technique.

I asked if they sold HDDs for laptops and he pointed to a small pile on a table. The Nigerian man we came to see advised me not to buy: "Don't buy here, they cannot test for you". Buying untested HDDs is risky, as they are delicate parts, and we carried on discussing what should be bought tested (motherboards, hard drives) and what can be bought untested (RAM, for example). He explained to me that in some

shops in Hong Kong, you can get a one-month guarantee. Patrick then started to talk to him about exchange rate. He sent some money to Patrick's Nigerian account the day before and we were here to give him the money in HK\$. The problem was that, the following day, he sent some more money without informing Patrick and was claiming the same rate as the day before. Patrick was pissed-off. The exchange rate had gone up—"and besides, I'm not the central bank". (Hong Kong, July 2015)

Patrick had an account in Nigeria and an account in Hong Kong. He made money here and there, so usually he did not need to physically transport money. With the accounts system, he offered simple and easy transfer and exchange services, an alternative to Western Union, money transfer being a big issue. Hong Kong is used to avoid the daily withdrawal limits imposed in mainland China and unlimited amounts withdrawn in Hong Kong are smuggled into China (Gilles 2015). Like Gilles, I couldn't observe the smuggling of bags of cash, however, it was explained to me that *Ghana must go* bags full of euros or dollars were brought daily into mainland China without declaration and without too many difficulties: "They know this is money we spend here."

During these business-walks, besides collecting and giving money, Patrick would collect goods. Objects arrived in *Ghana must go* bags, taped-closed, with the name, the city and the phone number of the recipient written on it with a marker-pen. During these business-walks, he also attended to his "Kg-business". We met different Nigerian men, he explained: "They come every two weeks, they are Gold, Platinum, Diamond... with Qatar, Emirates...". That evening, on the way to the airport, he listed the Hong-Kong to Lagos flights: Ethiopian, Egypt, Emirates (2x), Qatar, South African. Five or six flights a day.

Every evening, he would be at the Hong Kong International airport bargaining with the land staff of Emirates, Qatar and Ethiopian Airlines. I followed him, and later he explained "Kg-business". On the one hand he dealt with *passengers*, regular first-class flyers with enough air miles to access the benefit of carrying extra luggage. On the other, he received orders from Nigerian clients who needed fast shipping. He would prepare the pack for the customers, 32 kg sharp, not one extra gram. The customer would be charged USD150 per piece of luggage. Finally, he knew a member of the land staff of each airline, who will get USD100 per piece of luggage. The passenger would be paid a flat rate of 100 us\$, no matter the number of bags he was carrying. Patrick's income varied from 25 us\$ to 100 us\$ per bag, depending on the number of bags. Each passenger could carry up to 10 bags, and he could have up to 10 passengers per evening, with three or four working evenings a week. He claimed earning 500 us\$/day: "Every day I get USD500, why should I go anywhere else? These people crossing the sea to go to Europe are committing suicide" (Hong Kong, 18th July 2015). These numbers were probably

on the high side of the bracket because there were evenings with little or no passengers (every evening there were *passengers*, but Patrick was not the only Kg-business man). However, USD1200– 1500 a week, before cost deduction, seemed reasonable. Precise numbers aside, the point is that traders built a super-fast (one to three days) transcontinental delivery system that may have nothing to envy about DHL and others (USD4.6/kg sounds about competitive). And even though the largest part of the cake (2/3 of it) goes to the airline—although probably absent from the accounting books—money was being made.

The role of Patrick adds up to what already discussed about Nancy: the extended role of *side jobs*. Just like the Chinese woman, Patrick provided an often underestimated yet essential job within the trade. He was part of the management of a complex transnational logistic system. A heavy logistic structure that works within a fragmented system assuring the daily circulation of goods and money on a transcontinental level. And he did so by mobilising elements along the whole formal-informal, licit – illicit spectrum: the bank system accompanied by custom collusion, extra luggage system accompanied by land crew complicity, once again calling into question the suitability of the 'below/above dichotomy'. The strength of this logistic system will be better developed in the coming chapter.

There were two other informants I met in Hong Kong, Diallo and Afam/Chris¹⁰⁹. These were short and punctual meetings that offered interesting insights about the second main point Hong Kong brought to the analysis: specialisation of different regions of the world via the categorisation of objects.

When I called Afam/Chris, he agreed to meet at the Chungking Mansions' entrance, but he was not keen to talk; somehow, he was kind of suspicious. Despite this, he introduced me to his supplier in the Chungking Mansions. He was from Pakistan and he had known Afam for a long time, who he described as a good client, sometimes buying up to 200 pieces a month. We had a discussion about *tested* and *untested* items. He used to buy *untested*, repair and sell them as *tested*. But then, he only traded *untested*, and he advised me to only buy *untested*, explaining that nobody was buying *tested* anymore. In fact, there were practically no *tested* desktops market. This, he said, was because buying *tested* had become too expensive.

In my opinion, however, the situation has to be understood by thinking of the history of Computer Village. Nigerians used to ship full containers of used computers from Hong Kong. Later, they started

¹⁰⁹ Chris was his name, but he used Afam when dealing with Muslims, recalling Ada's practice, which is also common among the Chinese, who often adopt an English name.

to import spare parts and developed skills to repair said computers (to the point of developing the cloning industry and giving birth to Computer Village). Today, it does not make any sense to pay the higher price of tested goods, which explain the rise of the untested market and, again, shows some of the problematic aspects of the Basel regulations.

Finally, I met Diallo. A Guinea Conakry man, he had been in Hong-Kong for years and married to a Hong Kongese woman, whose family was not enchanted with the mixed-race marriage. He worked in construction—installing elevators in skyscrapers, which implies walking up 32 floors—and he was also involved in the stone business. We spent the evening walking around, pricing stuff, drinking and smoking. I was looking for phones. I was told that Hong Kong was known for *7 days-phones* and *14-days-phones*: *fairly-used* original phones that looked like new. These were supposed to be phones coming straight from the 'Global North', where phone companies regularly offer to take old models back in exchange for new models and an extra fee. This detail opened my thoughts to how the business of used phones is shaped by fast-fashion. E's markets highly shaped by planned obsolescence that keeps makers launching new models with minor modifications in order to keep growth up. This planned obsolescence is combined with the competition between communication companies fighting through subscription plans offers. The tag *7-days-phones* and *14-days-phones* comes from the idea that such phones have only been used for 7 or 14 days. Even if everybody knew that seven or fourteen were not the exact number of days, I could see in these phones both a way to mimic 'Global North' consumption, as well as a critique of overconsumption and its unfair distribution. To complexify things a little more, Diallo explained to me that phones arrive in Hong Kong from grade A regions of the world, where they are sorted out in 3 different categories (*7-days*, *14-days* and not in working conditions). The *7-days* and *14-days* are resold as they are. The rest will be smuggled into mainland China to be refurbished with substandard parts and be sold in places like Dashatou, as *China refurbished*, which are sold with the box and accessories. However, apparently, there are rumours about the *7 and 14-days-phones* being indeed *China refurbished* models smuggled into Hong Kong for sales at higher prices. This says something about the complexity of the circulation of goods and the complexity of categorisation.

Hong Kong and the Canton Fair would deserve richer and longer fields, however I wanted to discuss these short trips here, as they helped me bring insights to the different professions, skills, cast objects categories and world's regional specializations at work in the global flow of UEEE.

Bad migrants, good Africans?

I close this section with one last aspect, also pointing at the limits of the 'globalisation from below'. Despite each of my stays being relatively short, the stretch across a four-year period (2012–2015) made them revelatory. The three trips have been three quite different experiences.

In 2015, there were fewer people around, movements had reduced, and the bars were emptier. The beating heart of globalisation was not Guangyuanxi anymore. The exciting feeling of being at the core of globalisation gave way to an it-was-better-before vibe. Other scholars described this shift: "For anyone interested in seeing the potential birth of a multicultural China, Guangyuanxi was the best place to go in China. It was very active until 2014, but is largely dormant as of this writing" (Mathews, Lin, and Yang 2017, 24). They explained this radical change by two, interrelated, factors. First, China finding itself an immigration land, had undertaken massive changes in its policies; Guangdong had been the experimental area for the new migration policies (Lan 2014, 2016). Second, Guangyuanxi counted more overstayers¹¹⁰ than Xiaobei. The high number of overstayers among the Igbo is mentioned by other Africans traders in Guangzhou as well as by researchers (Lan 2017; Haugen 2012), who understand it as the consequences of the "structural marginalisation [the Igbo] face in Nigeria and the tremendous cultural pressure for success in foreign land" (Lan 2017, 21).

These arguments may need nuances, as the wording may over-emphasise the lack of agency. First, the structural marginalisation of the Igbo in Nigeria may not be as clearly defined as suggested. The ethnic divide within Nigerian political and economic activities is more complex than ready-made stereotypical migration narratives built along ethnic conflicts and/or tension. In the same way, the tremendous pressure for success abroad could also be described as encouragement and understood through the prism of a cultural valorisation of the migration-step in the journey toward success. It may be combined with a succeed-or-die-trying attitude, that may differ, for example, from Angolans or Togolese women travelling back and forth (Castillo 2015; Sylvanus 2013) but this is not exactly an obligation. As the biographies of Mega Rich and Oga Rainbow show, it is a combination of circumstances that frames and shapes the decision to travel and/or overstay.

Second, the larger number of overstayers among Igbos may simply also be related to their larger number. There are more Nigerian overstayers because there are more Nigerians. In relation to the reasons explained before, the economic organisation, made up of a multiple of small enterprises.

¹¹⁰Overstayers are migrants that stay back in the new country after the expiration of the visas, and as such become illegal.

More travel and thus more are visible. These factors should be mentioned, at least along the ethnic exclusion narrative, if not as main factors.

Finally, besides the quantity factor, there may be another aspect behind the decision to overstay. A decision that may be a default decision but one that is nevertheless built on self-confidence and not only a lack of alternatives, the confidence in their own value-system above that of the host society. A system of value that places the step to gather capital, that will be the springboard to jump toward a new level in life, above the laws and/or values of the society in which the said jump is prepared for an economic stability that they will enjoy back home.

Obviously, I cannot talk about comparison. And I have no evidence for a comparative approach, and I am not suggesting that this aspect is specific to Nigerians. I simply want to point out that the discourses I have been exposed to do not necessarily reflect the typical narratives about the migrant-victim forced to make sacrifices in order to feed the family. On the contrary, the refusal of (total) obedience to the host society is made legitimate because the society is understood to be unfair; the laws and norms of a society that doesn't respect them cannot stand above their needs and values. Which, without justifying any kind of behaviour, seems to be it can be considered as a healthy attitude. This narrative is based on the idea that they are victims—but victims of a globally unfair geopolitical system, which grants them the right to do what it takes to make it. This is done with pride, as *Naija no dey carry last*. These reflections are sketches that deserve further work but I need to make them explicit here. First, because I heard these so many times and from several of Nigerian migrants, mainly in Europe, but also in Nigeria and in China. Second, to respond to the point of view often stressed by scholars, I think it is important to consider overstaying *also* as a choice, and one that may rest on the value of the migrant's own needs outbalances the host society laws.

This being said, there is no doubt that changes in immigration laws and enforcement have an impact on the market. Migration laws are one of the factors migrants-traders must deal with. In fact, Mega Rich spoke quite openly about it, repeatedly saying that "China takes, China gives" to express the instability of their situation despite their type of visa and permit; he explained some of the strategies to avoid police controls, such as choosing taxis over public transport, accepting a level of cheating, avoiding confrontations that could attract attention or prioritising night work, or, as he put it, coming out when the lions are sleeping. However, if the environment for undocumented migrants has become increasingly hostile, it should be said that Nigerian overstayers were already challenged by Chinese rules and their volatile enforcement before Guangyuanxi went quiet. The evolution in migration laws and its enforcement was a step-by-step process, with major changes taking place in 2008 and 2009 and from then on. In 2013, the police launched major crackdowns in Guangyuanxi.

Mega Rich documented it and pictures circulated on social media among traders and their families. Scholars and the media addressed what was happening and didn't fail to mention cases of migrants escaping the police by jumping out of windows. These accounts stretch back to 2010 (Bodomo 2010).

As much as these stories need to be considered with the gravity and importance they deserve, to understand the evolution in Guangyuanxi through the prism of migration alone is not only reductive, but also wrong. A trading-related element, which I now introduce, needs to be considered.

Only change is permanent

There is another aspect that may have been under the radar of many scholars. When walking along the relatively emptier plaza of Guangyuanxi in 2015, there was one sentence constantly exchanged among the traders: "Yeah, you know, the dollar!". This sentence, since late 2014 (through 2015 and until 2016) had become the number one expression in Computer Village, but also in Lagos during bargains and small talk. It seemed no different in Guangzhou and Hong Kong.

"Yeah, you know, the dollar!" refers to the fluctuations of the naira against the dollar. Since 2001, the naira to dollar exchange rate ranged between 145 to 162 against 1 dollar. In November 2014, the naira started losing value and dropped from 160 against 1 to 204 against 1 in February 2015, with obvious impacts on prices of imported goods. Yet, it was just the beginning. Official numbers show a certain stability from this sharp jump throughout 2015. However, on the black-market, where transactions actually happen¹¹¹, fluctuations have gone from 180 to 241 (17 July 2015), with peaks at 332 at the end of March 2015, coming down to 318 on the 1st April. In 2016, the official numbers report sharp changes, going from 198 to 282 in just a few days¹¹²; the black market witnessed even sharper ups and downs, with rates at 350 in April 2016, rising to 450 during July-December 2016 and down to 400, until it reached 513 in February 2017. (For comparison, between 2008 and 2014 the fluctuations were between 147 and 160.)

The year 2015 was particularly tense. The naira drop was still fresh and exposed to unpredictable ups and downs. Without stability, traders were very cautious before investing, and the local market wasn't ready to pay the raised price. Business activity in Lagos was low and the markets in Guangzhou were empty. In the following months, the situation didn't improve. In 2016—my last year on the field—the situation for importers had become very difficult. Discussions in Lagos with importers from other

¹¹¹ Banks in Nigeria rarely handle foreign currency cash. Even when things are good, withdrawing euros or dollars can be difficult. Customers may need to head to different branches. To change foreign currencies, a Mallam from the black market is usually required. These manoeuvres do not improve during a scarcity of foreign currency.

¹¹² <https://www.xe.com/currencycharts/?from=USD&to=NGN&view=5Y>

fields than IT, and elsewhere than China, showed the gravity of the situation. Chekwas, a former clothes importer who moved into electronics, put it very simply while discussing a down payment for a possible contract in the East: "I am looking for something else. This our business is dead. The importation business in this country is finished". It was the 16th of April with the dollar at 350. In the following months, the naira dropped even more: there was a jump of 100 Naira in three days (198 to 282 in official numbers, 350 to 450 in the black market).

At this point, the import-export difficulties had turned into a proper economic crisis. Any kind of importation-related business was concerned. In Nigeria, with a negative import-exports balance, it impacted basically every economic activity. The change was so important that it was visible in everyday life. The beginning of an economic crisis had been in everybody's mouth and pocket. From fuel to tomato sauce, via shoes and laptops, the price of everything had increased. Discussions in the markets, streets, at the *mama put* or in the *danfo* would revolve around "yeah, you know, the dollar!"

If the trade never stopped, markets were much less busy. Prices had risen so fast that buyers were shying away and traders were frightened by the instability. As Afam/Chris put it when we met in Computer Village, "People will pay whatever the price is; what we don't like is the instability". To combat the rise of the dollar, new regulations limiting maximum amounts of dollars that could be exported were set. Thus, creating another obstacle in transnational trading activities. Not that it would be impossible to bypass this regulation through well-known porous borders, but corruption is costly. These elements explain the lower numbers of orders from Nigeria and less people travelling to buy stuff. This explains the much quieter activity in Guangyuanxi.

The main explanation for such a rapid change was the price of a barrel of oil. In 2014, the barrel price, that had been stable between 100–120 dollars dropped under 75 dollars for the first time since 2009, reaching the minimum of USD 53 in January 2015¹¹³. Nigeria, being one of the top oil producers with an economy massively centred around the exportation of crude oil, faced serious dollar scarcity. Supply and demand laws obliged: the dollar went up; the naira went down and kept dropping, as the barrel touched USD 37 in 2016. And since the NGN-RNB exchange went through the dollar, the consequences in Guangyuanxi were very visible¹¹⁴.

¹¹³<https://www.macrotrends.net/1369/crude-oil-price-history-chart>

¹¹⁴ I left the field since then, but it should be said that things haven't changed since, as the barrel touched a new lower record. The dollar was 470NGN in December 2020. In 2022 on the black market, it was above 700, while official rates were almost 500.

It should be said that few scholars have mentioned the exchange rate, unfortunately, they didn't give it more than a line, as against detailed descriptions of the evolution of migration laws. Moreover, they mentioned the exchange rate evolution between African currencies and RMB. Which is not wrong but not completely correct either. Cutting out the dollar bridging the NGN and the RMB takes out the African-China trade from global trading; it isolates the tree from the forest Sautman and Hairong (2008). First, the simple fact that the NGN-RMB change has to go through the dollar shows how the China-Africa exchange is embedded in the global economy¹¹⁵. Second, the changes in Guangyuanxi are linked, more or less directly, to the barrel price drop, as well as China's migration laws' evolution. To ignore (or overlook) these links may contribute to keep the 'globalisation from below' and the 'globalisation from above' not only separated, but also analysed with different focuses and interests. Again, I am not denying the impact of changes in migration law enforcement on the situation of the trading migrants in Guangzhou, and particularly in Guangyuanxi. But to blind out (or to overlook) economic elements, such as the exchange rate fluctuations in the evolution of trade activities, it takes the trade out of the trading migrants' activities.

So what?

'This na China o!' describes China from the Nigerian (and, more generally, African) traders' point of view. I opened this chapter with an extensive ethnographic description of my first experiences among African traders in China followed by the biographies of two traders I met in Guangyuanxi and in Computer Village. Besides being a general introduction, these biographies helped me to show how the choices made by mobile Nigerian businessmen are motivated by a large range of factors and situations, besides their migration status or social pressure to succeed often stressed by scholars. Both Mega Rich and Rainbow's experiences are proof of the conjunction of obstacles and opportunities, of structure and agency.

I then offered a short review of the literature on China-Africa relations, supplying some basics descriptive elements but also pointing to how scholars often overemphasize migratory experience and lack of agency in their accounts of African traders in China. In this dissertation, I attempt to distance myself from this narrative, not only by presenting the biographies of Mega and Rainbow, but also by showing how problematic it becomes when placed within the broader frame of the 'globalization from below' paradigm. Finally, in a brief discussion on racism, I stress how racism against Africans should be understood as part of a broader power dynamic between China, Africa and

¹¹⁵ A China-Nigeria Currency Swap Agreement was signed in 2018, but things got stock along the line.

'the West'. I don't address racism directly in this work, as I focus on business; however, this triangle will remerge as I from a Nigerian centred point of view, via my discussion the global circulation of second-hand computers. In a word, I use business to cast light on multilateral relations between different regions of the world, the stereotypes, and counter-stereotypes they produce, the ways in which emic discourse builds on but also critiques these stereotypes and the forms of reflexivity that this demonstrates on the part of African traders.

I then proceed to the description of the fieldwork sites I visited in the PRD. This description is articulated around details emphasizing the centrality of economy motivations and calculations in understanding African traders' presence in Guangzhou, as for example in discussion on the major 'African areas' in Guangzhou, or African oriented supply in the Chinese markets. The descriptions of shorter fieldwork visits and fleeting encounters brought essential pieces of understanding to the global picture, introducing new elements that will be developed in the coming chapters, namely: the diversity of the jobs that make this global trade network run, the question of the logistics and the categorization of objects. These descriptions also provide a sense of the level of integration of Nigeria traders in the PRD, of the kinds of exchanges they have with Chinese women and men working in more or less related export activities, and of the experiences cosmopolitanism that business gives them access to, as business has produced cosmopolitanism throughout human history.

In fact, all of these questions are addressed by putting the economy at the centre, the aim being to overcome the narrative of 'coping' and 'survival strategies' that has so marked the scholarly study of these exchanges. I hope thereby to counter some of the implicitly racist stereotypes that pop up in the anthropological treatment of economic exchange among post-colonial societies, creating a distorted vision of 'globalisation from below'.

I close this chapter with an example that shows the importance of bringing the economy back into the understanding of this trading diaspora. This relates to possible reasons behind the changes that have struck Guangyuanxi in the last few years. Other scholars may have blamed the slowdown of economic activity on the hardening of Chinese immigrations regulations, but I discuss how the drastic devaluation of the naira—due to low oil prices—impacted the whole Nigerian economy, hitting import-based business particularly hard, with obvious and drastic impacts on economic activity in Guangyuanxi.

This helps to put Sino-African relations in global perspective, and links up Guangyuanxi economic activities to macroeconomic factors, showing *de facto* how intertwined 'above' and 'below' actually are.

11. China-Lagos Express

If in Lagos being in business was a key factor to accessing the field, in Guangzhou, this was even more striking. I landed and before I could understand what was going on, I *enta market*. I assumed this happened because I knew what I was looking for, as I had Chuk's shopping list to guide my ethnographic moves. Traders could relate to my presence on a business level and thus opened up to me. Yet, two other factors were behind this accessibility, factors directly related to trading practices. First, I was properly introduced and, second, I was introduced to a middleman.

This chapter explores two main import-export related activities¹¹⁶ of African traders in China: logistics and agent/middleman services (one could say middleperson, but the truth is, these traders are mainly men.) As such, this chapter focus on link between China and Lagos. In fact, logistic and middle-man are both are examples of how Africans in China act as bridges, an idea first proposed by Bodomo (2010) and later adopted and developed by other scholars.

I will explore these activities with the insights gathered in Computer Village. As a reminder, I have argued that Computer Village works on an economic model based on the cooperation (*enta market*) among clustered MSEs; businessmen and women are subject to a process of establishing belonging to take part in such cooperation. By analysing the activity of Nigerian traders in China—and between China and Lagos—as a manifestation of this specific economic model, I critique the limits of the 'above / below' dichotomy for understanding globalisation and argue in favour of a diversity of globalisations.

First of all, introduction

Before getting into detail about 'cargo' and middleman activities, I would like to present a few thoughts on the role of the introduction that enables access to such services. During my first days in Guangzhou Obinna paid for my meals, transport and leisure activities. He welcomed me out of respect for Favour. On those first few days, and for the following few years, he would always introduce me as: "A Swiss friend, she knows Favour, she has been to Lagos". In the same way, when I met Mega Rich, I was a friend of Tonia's, of Steve, and of Oga Rainbow, whose son came to Switzerland, visited my place, and attended my sister's birthday. In a certain way, I was becoming part of the network, and, as such, was entitled to some support. The content of this support varied from situation to situation,

¹¹⁶ Among non-trading related professional activities, there are services such as hairdressing, catering, prostitution, journalism and preaching.

from bond to bond, and from need to need. And it applies to travelling traders, as I was, and to settlers like Oga Rainbow, who described his arrival in China in these words:

"Immediately on the 12th of April 2004, I left. And the journey was really smooth. [When I landed] I called one of my friends, he came and picked me...and then life starts! I started hustling...there was no job¹¹⁷, nothing. He was even feeding me".
(Oga Rainbow, Lagos 10.06.2015)

The networks and communities that Africans in China benefit from have been discussed as an essential web of support, both in formal and informal ways, on a social and an economic level and particularly as a help for the newcomers and less well established migrants (Haugen 2012, 2013; Castillo 2015). With the valorisation of ethnography and anthropology making its way into Africa-China studies, scholars started to understand what they witnessed in Guangzhou through the practice of host-visitors explored by classical West African studies on long distance trade (Haugen 2019b; Marfaing and Thiel 2015; Bertoncello and Bredeloup 2007). By drawing a line between Africans in China and, for example, Hausa cattle traders in Ibadan described by Cohen (Haugen 2019b) or Diouf's works on the Murid brotherhood in the USA and Europe (Marfaing and Thiel 2015), they opened up the understanding of China as a spatial extension of long existing trading networks. A capital step in the process of putting the tree back into the forest and putting a stop to making the China-Africa relations a unique, exotic exception. However, this perspective has not been explored fully, for example, by understanding African traders' activities in China, along with what all other traders are doing in China: buying stuff where it is produced.

These support structures are generally discussed by scholars—as well as by actors in the field—through shared ethnic backgrounds. However, despite sharing neither ethnicity nor kinship, I was welcomed and supported, and in the same way being an Igbo trader in Computer Village was not enough to access Mega Rich's services. In fact, Tonia explained how she usually introduces her brother to other traders in Computer Village (mainly from Megacity) by giving his number. "But when you call him [Mega Rich], he will call me: 'So, so person called me, did you give him my number?'". If she said yes, the person could be trusted. In a similar way, Oga Rainbow started every story about his time as a middleman in Guangzhou with the introduction: "So, so person called and told me 'My friend is coming'...". Finally, the situations in which I had less of a direct link, I was welcomed with much less

¹¹⁷ In this case, job means an employed position with a salary. As such, China offers no jobs; there is only the market and trade. There are no jobs in China compared to the USA or Europe, which reveals China's position as an emigration land for mainly businesspeople.

openness, or even with suspiciousness. For example, in Hong Kong, I met with Chris/Afam through a friend of a friend of friend, with no direct referral. This shaped our relationship. In fact, he barely accepted to meet me and simply introduced me to his supplier, he always kept a precocious distance, and surely never pay for my transport or food.

I argue that it takes an introduction to become part of a group; being Igbo is not enough nor necessary to access a support network. This clearly is similar to the process of belonging discussed in Computer Village. The role of the introduction in the process of becoming part of an ethnic, religious, linguistic, family solidarity network, probably deserves further investigation.

If introduction is important, one could also argue that the respect for social norms works better if there are personal mutual interests at stake, possibly economic interests. The warm welcome and the availability shown by Mega Rich and Obinna were as much part of social politeness norms as well as part of the process of building business opportunities. Obinna and Mega Rich are both middlemen, they are logistics operators and agents. These are two of the main economic activities of Nigerians (and African) living in Guangzhou.

Cargo business

Logistics, aka Cargo Business. As Patrick in Hong Kong, Mega Rich and Obinna in Guangzhou were both into *cargo*, as logistics business is often referred to by Nigerian traders. If I was to send anything to Nigeria, they would have been the ones to do it. This partly explains their availability. Their offices—China-Lagos Mega Rich Global Inc. and Obinna's China-Lagos Express—are both at the bottom floors of plazas. With direct access to the truck loading areas, they are surrounded by hundreds of other companies also packing and weighing goods, all day long. Mathews, Lin, and Yang (2017) estimate the number of African logistics companies in Guangzhou at around 200. The pioneers of the African cargo business are Malian traders, with the first office opening in 1998. This was followed by Nigerians, who massively opened businesses in Guangzhou to ship goods to Lagos since the early 2000s (Bertoncello and Bredeloup 2009, 2007). A new commercial route bypassing Hong Kong was born, which spurred Haugen (2019b) to stress the role and creativity of the migration-trade nexus.

Goods can leave Guangzhou via sea-cargo, air-cargo and express. Sea cargo takes between two to three months¹¹⁸; air-cargo takes five days; express delivery will lead to goods arriving the next day.

¹¹⁸ This transport system can take from 35 to 50 days, the extra time depending on the time it will take the port in Nigeria to offload and clear the goods.

The decisions relating to how the goods will be transported depends on the of the weight/volume ratio (sea containers count on volume, while air freight is charged by weight). So, heavy and voluminous stuff, such as construction material, tires, furniture, etc. always travel by sea. While, small, light, expensive goods (such as laptops) generally travel by air. Besides the value of weight/volume ratio, other factors can impact the choice of transport channel. Some goods are, at times, sensitive. For example, Obinna explained that he is into male fashion—mainly suits—because it is less exposed to fast-fashion dictates, which means that the three months needed for sea cargo to reach Lagos is not a problem. Nigerian female fashion, on the other hand, evolves fast. During the three and plus months between the agreement on the sample and the delivery of the goods (production and sea cargo shipping) tastes in Lagos may have changed.

The variety and complexity of the ways goods flow also reflect on computers and other IT products. Generally speaking, IT goods are fast selling goods and need to travel fast. Laptops and laptop parts (mothers boards, hard drives) as well as phone and accessories are small, light, expensive and fast selling; they travel by air. Price fluctuations in the market are also part the time sensitive nature of some goods. Spare parts are particularly subject to sharp fluctuations. This is a part of what Chuks refers to when he says “It doesn’t work like that” to an inquiry. He would refuse to give a price because the market could change fast: what is a hot cake now might not be a hot cake in two months because every trader has been importing the hot cake.

Among these goods, spare parts fly directly from Guangzhou to Lagos, while laptops go through Hong Kong. Goods with batteries travel via Hong Kong due to regulations¹¹⁹. Desktops, screens, printers, and other voluminous IT items follow the price-weight/volume ratio rule and travel in containers over the sea. Yet, it should be said that these actually leave the Pearl River Delta exclusively via Hong Kong. The reason here has nothing to do with regulations, but with the UEEE’s offer: goods from Hong Kong are *untested*, *fairly-used untested*. Used-IT goods from Guangzhou are always *refurbished*, and as such they are mainly laptops and spare parts. This is a little detail that introduces the fact that, in the global economy of used electronics, there are specialisations, and that different regions of the world are specialised in different aspects.

This picture of the different channels for different goods—assembled or spare parts, *untested* or *refurbished*—flowing through different national and international regulations, and regional

¹¹⁹ Mega Rich explained the existence of the regulation without knowing the reasons behind it. I can confirm that my batteries have been taken out from my bag when I travelled from Guangzhou to Lagos, but not when I travelled from Guangzhou to Zurich or from Hong Kong to Zurich.

specialisations, shows the complexity of economic routes at work to guarantee the cheapest and most complete offer to the market in Lagos.

Groupage

One other reason I had access to the field in China is *groupage*. It gave me the opportunity to ask around for prices and goods with the intent to export despite my ridiculously small capital, without being laughed at. Nigerian logistics practice is based on groupage: one container regroups goods from different traders. Technically, each sender buys cubic meters, and the logistics company combines all the goods into one forty-foot container. This service is often carried out by those who enjoy a steadier situation, with established (front) offices and, more or less, big warehouses that are usually run with a Chinese partner (Haugen 2019b; Mathews 2015; Mathews, Lin, and Yang 2017). They collect, pack, measure or weigh, label, and hand the goods over to the next link in the chain, a Chinese middleman that makes the link with a major Chinese freight company. Today, groupage is common among most West African cargo businesses, however, the first African cargo companies worked with the one-person-one-container model. This is probably explained by the fact that Malians traders, who still ship whole containers under one person's name, pioneered the establishing of logistics companies. It was Nigerians, in joint ventures with Chinese, who introduced groupage to Guangzhou (Haugen 2019b).

Groupage has been explained as an answer to obstacles, mainly referring to capital scarcity by scholars (Haugen 2019b) but also by people in the field, particularly when it comes to laptops: "Nobody will have the money to fill a whole container" (Mega Rich, Guangzhou, 07/2015). This is indeed true, but once again, this may not be the only explanation. In fact, *groupage* can also be understood as the logistics manifestation of the horizontal economic system I described in Computer Village (and one of the factors behind the development of Guangyuanxi). Thinking of ways in which other 'marginalised' or 'ethnic economies' have evolved in the global economy may help to explain the impact on the routes and shape of global trade as a manifestation of a value system and not an out of need creative attitude. Networks based on a hierarchical system mobilise different practices to evolve into the global economy. Malians in Guangzhou haven't moved toward groupage, and they somehow look down at Nigerian traders shipping small quantities. Murid's commercial networks' success has been explained by the "total submission to the marabout, which has become the strongest pillar of a brotherhood that controls a vast, dynamic network of disciples and economic activities" (Diouf, 2000, p.694).

These differences support the idea that groupage is more than a practical solution to a limitation. It is the logistics manifestation of an economic system structured around the cooperation and competition of clustered micro enterprises. When Mega Rich says that nobody has the money to fill

up a container with laptops, the implicit fact behind this is also that nobody will agree to pool their capital together and buy as one.

Of course, groupage is indeed a very effective system to overcome the absence of large capital, but understanding it *only* as a practical response to limits and lacks is to reduce (once again) the actors' actions to the level of survival. In fact, this understanding reproduces the idea underlying the 'globalisation from below' of (business)people trying to nibble their way into the great global economy, despite odds and limits. Describing these activities in terms of *creativity*, instead of economic practices related to a specific economic model reduce them to reactions to a situation and makes the diversity of economic actions invisible. Similarly talking about the 'migrant-trade nexus' impacting the routes of the global economy conveys an idea that their actions are marginal and odd, instead of, for example, the setting up of infrastructure that boosts economic exchanges. In short, words matter.

Gold & Platinum

Cargo is one part of logistics activity, there is one other service that deserves to be looked at: Express. Unlike air and sea freight, Express service does not interact with Chinese companies. Goods are transported by Nigerians. To be more precise, they are transported by *Gold & Platinum*, as Patrick called them in Hong Kong, or Passengers, as Mega Rich referred to them when explaining the Express service in Guangzhou to me:

"Sometimes they have many bags, up to 30 even 50 bags, based on how you fly. If you are a regular flyer, you build for more, and that money is refundable. You don't get charged as it is refundable from the airline. [...] They are looking at the miles and at the free ticket. They fly the same airline five or six times, so they get in a free ticket. They do it in two or three weeks. [...] They are serious flyers. Eh, some people immediately they come in, goods are assembled, and they move; take the next available flight and they go. They are serious flyer and all they want to hear is 'There are goods in China, there are goods in Hong Kong or Dubai.' And they go." (Mega Rich, Guangzhou, July 2015)

It is a suitcase trade, common world-wide. It seems safe to think that probably, all over the world, occasionally or professionally, with different levels of organization and intent, people transport for-trade-goods in suitcases and bags. They operate on tourist's allowance, avoiding and/or colluding with customs, with purposes ranging from tax avoidance, access to banned, illegal or rare goods, or simply, as I will argue in the case, to overcome inaccessibility and fill the blank left by other (formal)

distribution networks. A rich literature illustrates the variety of situations within which the suitcase trade takes place. Between neighbouring countries, scholars have described how locals take advantage of their knowledge of the border, for example between Nigeria and Benin, also called warehouse state (Igue 1992; Rosenfeld 2012, 2018); how traders hire transporters, exploiting the tourist allowance, for example between China and Russia (Holzlehner 2014) or in the tri-border area of Paraguay, Brazil, Argentina (Ribeiro 2009); but also how borders and smuggling activities impacts the identity-building process (Flynn 1997). The suitcase trade between non-neighbouring countries has also been described, for example, in Istanbul, a trading hub supplying Russian, North and Sub-Saharan African countries with the overproduction of the fast-fashion garment industry (Piart 2012). The involvement of airlines in suitcase trading has also been documented. For example, Congolese flight attendants carried foodstuff to migrants in Paris and brought fashion goods back to Kinshasa and Brazzaville (MacGaffey 2000).

These studies point at the diversity of the suitcase trade, for example, in the level of professionalism (occasional smugglers vs full time professionals) or in the organisation (traders hiring transporters, or smugglers selling their goods). Yet, despite this diversity of situations, analyses are often articulated around the legal-illegal and formal-informal questions, describing the custom collusion/corruption and more generally the relationship with the state.

On different aspects, *Gold & Platinum* simply joins the world wide web of suitcase trade: they cross borders, exploit tourist allowances, avoid tax, and professionalise their activities. Yet, by flying in and out the Pearl River Delta region, *Gold & Platinum* offer a few insights with possibly innovative aspects.

First, I can't help but appreciate the positive connotation of their naming. Unlike the camels, ants, shuffles, baggers or ferrywomen found in the literature using emic categorisation, Nigerians named themselves *Gold & Platinum* (or simply passengers), borrowing the airline language for the ranking of passengers. Emic terminology depends on who is naming who, with ethnicity, class and, to a lesser extent, gender questions at stake. It is very likely that if the Chinese traders call the Russian transporters camels, these latter have other terms for themselves. And possibly scholars, by selecting some terms over others, participate in reinforcing the perception of these practices in a way as to recall their marginal, in the shadows, underground features. *Gold & Platinum*, even just through the name, challenges the marginal and peripheral position assigned to their 'from below' global activity. With their name, they put themselves right on the top. Second, they have not just given themselves a name for the elite, they do receive privileges usually reserved for members of the higher classes. They travel first class, drink champagne, eat plane food with silver cutlery, and book up to 50 pieces of luggage. And they do it as a job. They sit in the VIP lounge for a living. By putting themselves right

where the elite is, they have created a job that offers an efficient and effective service to the regions generally penalised by large distribution companies: China-Lagos Express Service, for example, delivers from one continent to another the next day.

Third, the literature on African traders in China often refers to the suitcase trade as a side gig, describing how traders travelling back may *sell* their second piece of luggage to carry somebody else's goods and make some extra money. But *Gold & Platinum* are not simply selling out unused luggage; they are professional carriers. By traveling and building up miles, they *create* available luggage allowance—and do so by exploiting a system that pampers the rich.

Finally, a few comments from Mega Rich and Patrick helped me to consider the role of the airlines in this transport system. The combination of creativity and custom collusion has been described and addressed in different border-crossing contexts as well as in studies on the transport system between China and Africa. But when Mega Rich described the system, he pointed out airline employees' central role:

"Every plane has place for the cargo. Sometimes some flyers don't use their place [...] That space, that 32 kg, if you don't use it, the airline sells it. [In the same way] if they have space [because] they don't have enough passengers, [the] people who are working there they will tell you, 'Hey I think today, if you have more goods there is space, look for goods'. They have access to the manifest showing flyers for the day. If there is a place that is not filled up, they will bring out the information." (Mega Rich, Guangzhou, July 2015)

Basically, airlines fill up the plane either by selling luggage space to their flyers, and if the flyers do not show up, they can sell the luggage space again at the last minute. Therefore, as Patrick explained, it is so important to have personal contacts within each airline (which takes a large part of the money). Besides creating luggage, they fill up unused space with the participation of airline staff. Even though I do not have more elements here to detail the dynamics of this transport by air system—particularly on possible cargo and passenger overlapping—it seems safe to say that formal and informal airline policies have an impact (and are impacted) by this global trade.

In conclusion, *Gold & Platinum* are a chance to see the beauty of the complexity of this global system; their activity is a specialisation of the logistics business. As such, combined with *groupage*, they provide an insight into the complexity and diversity of the transport business, a crucial part of import-export trading activity, highlighting the different jobs, activities and specialisations that characterise

the circuits of this global trade. This is an intricate structure recalls the complexity of the outsourcing and subcontracting arrangements within the global capitalism discussed by Tsing (2009).

Trade agents

Agent. Middleman. *Nzema*. Hustler. Besides the cargo business, the main point about the introduction was to be introduced to an agent, a trade agent. Mutual economic interest. Agents know their way around. They know the Guangdong area, they have contacts. They escort travelling traders, visiting markets and factories, assisting the negotiation, and helping to seal deals. Once the fellow trader has flown back home, the agent follows up with the factories and suppliers, collecting, controlling, and shipping the orders. In exchange, they get a commission.

Since Bodomo's first description, literature on Africans in China have offered detailed descriptions of these practices, from home-hosting to negotiation assistance, via follow-ups with factories and suppliers to shipping and translation. A few aspects emerged. First, while every African nationality has agents settled in Guangzhou, there are nationality-based differences. The first difference is about the cost. Nigerian agents charge a commission of 3% to the traders and of 3% or 5 % to the Chinese party, others can ask up to 10% or 5% plus USD100 per containers (Mathews 2015; Mathews, Lin, and Yang 2017). The second difference is the kind of services: home-hosting or translation, escorting. Some differences are details, others may be interesting for the understanding of different structures at work. For example, the case of a Somali-Kenyan middleman, who had an invoice for 13 000 USD from somebody he didn't know (Mathews, Lin, and Yang 2017, 148). Such a thing could never happen among Nigerians, for whom an introduction is absolutely necessary. These nationality-based differences are exposed for the sake of ethnographic details. In my opinion, they support my argument for the diversity of the global economy that I am discussing in this work.

Scholars agree on the essentiality of the middleman for the success of global trade, they bridge Africa and China on a practical, relational, and emotional level; they are labelled the cultural broker (Mathews, Lin, and Yang 2017; Haugen 2019b)¹²⁰.

¹²⁰ It would be interesting to investigate the role Nigerians in China may play in their relations with governments, both Nigerian and Chinese. For example, on more than one occasion, Mega Rich told me about the time he became a self-appointed spokesman, addressing Dr. Ngozi Okonjo Iweala, the then Finance Minister of Nigeria, during her visit to Guangyuanxi. (As of 2021, Dr. Iweala is the General Director of the World Trade Organisation, becoming the first woman and the first African to hold this office.) Mega Rich is a member of what he calls "The Good, the Bad and the Ugly", an association of Nigerians, whose premises are in the back of a kiosk run by Chinese. This association is informal, but deals with the Chinese police, regularly acting with respect to Nigerians who may create disturbances and generally

Despite this essential role, trust issues have attracted a great deal of attention. The tension between the stayers and the travellers has been described with number of ethnographic details focusing on protection strategies mobilised by the different parties. The first trying to hide information about the Chinese market (business contacts, factories, and addresses of suppliers) to avoid being cut off (Haugen 2019; Mathews, Ribeiro, and Vega 2012; Mathews, Lin, and Yang 2017). The second guarding their information about designers, models, and other *hotcakes* in the African markets (Sylvanus 2016).

The tension between stayers and travellers gained such a central place in the analyses that it has been suggested as a central element behind some structural changes that marked the evolution of the African diaspora in the last twenty years. For example, the fading out of the home-hosting practice has mainly been explained by the fact that travellers seek privacy to avoid leaks of information about designs (Haugen 2019b). In the same way, the exponential growth of the Chinese African diaspora—also mobilised to explain some structural changes—is most of the time understood by stressing cut-throat competition, conveying a flavour of fighting for survival, which resonates with coping surviving narratives.

Obviously, I have been told stories about competition and low blows. However, here, I discuss two points—specific to the IT trade or to the Nigerian diaspora—that seemed important, once again, to how performant, instead of bloody, this economic system is.

As a market searcher

The first point I want to make is that besides escorting, assisting, translating, packing¹²¹ and shipping for travelling traders, middlemen also act for non-travelling traders. Tonia explained that she has been linking Mega Rich with people in Computer Village. As she spelled it out for me, “[He] will check the market *over there*, call the person, tell the prices. The person will now check the prices on the market [in Lagos/Nigeria]. If it’s okay., the person will send the money, and he will send the stuff. [...] It’s easier and cheaper than travelling yourself”.

Second, Tonia explained the role she played linking Computer Village traders with her brother stressing her role as a guarantee for Mega Rich of the trustworthy of the trader in Computer Village, mainly assuring that he will pay up. On the other hand, for the person in Computer Village, getting a contact in China was important to build trust. The question of trust in (informal long distance) trade

participating in maintaining order. Finally, it would be interesting to explore how members of The Good, the Bad and the Ugly interact with the official Association of the Nigerian Community in Guangzhou.

¹²¹ This seems a basic act, but just as for filling cars to send to Lagos, there are packing strategies that aim to protect the goods along the different stages of transport (ports, customs, etc).

tends to focus on money issues. Yet, the offer in the Pearl River Delta is characterised, among other things, by the wildly wide range of quality levels, from factory originals to the worst knock offs falling apart at first shake. And the fact that PRD is a fast-moving economic environment, it demands constant exploration to keep up to date with what comes out on the market. Finding somebody who really knows his/her way around South-East China's markets is a precious asset.

On the escalator of Dashatou, on the way to look at phones for the first time, Mega Rich put it simply, "This is what we do, we enter market". *Enta market*, here can be exactly as discussed in Computer Village: finding the stuff in the market, go and get it. But in Guangzhou, *enta market* can also be understood in terms of market survey, as in exploring and finding out what the market has to offer.

The role of *enta market* as market survey is particularly important when it comes to IT, more specifically UEEE goods. Unlike other consumption goods traded in the PRD, the UEEE are/is about recycling. This means that: one, the offer of used IT for African markets is profoundly linked to what happens in the first-hand market, which in turn exists and evolves with little to no interest for said markets. Second, between the first-hand market and the IT market in Nigeria, Chinese traders and engineers come to play, refurbishing used electronics from all over the world for all over the world. As a consequence, certain accessories aside, African traders dealing in IT do not have access to the factories. As, for example, Mr. Screen explained when telling me his screens were coming from Taiwan, "Nigerians want to buy there, stressing that they don't have the money or the market to access factories"¹²².

The complexity of the used IT circuits also reflects on the shops in Guangyuanxi and Xiaobei. Clothes, jewellery, hair extension shops were not just common, they occupied two whole neighbourhoods of the city. Whereas there were only a few computer and IT shops, and they were not run by Africans (besides a few exceptions, such a mixed couple selling laptops in the Tong Tong Plaza)¹²³. As mentioned before, the UEEE shops are in Dashatou and Tianhe, and those are exclusively run by Chinese.

In such a context, *enta market* as a survey is a crucial step for being constantly up to date about what the Chinese market has to offer. When it comes to IT, this is key for both the personal success of each trader—in a competitive approach—but also as a guarantee of offering the best conditions for the IT

¹²²Marfaing and Thiel (2015) discuss the joint venture between Africans and Chinese, in which Africans would be the owners of factories.

¹²³I am referring here to used electronics; accessories such as cables, phone covers and power banks, which are usually substandard and/or knock offs can be found around Guangyuanxi.

market in Nigeria. Much like what I described in Computer Village, what benefits each trader and what benefits them all comes down to the same thing, once again showing that the economic practices of Igbo in China are the same as the economic system in Computer Village.

As a side gig

Established Nigerian middleman as well as newcomers all have the same investment strategy. The money made in China stays in China. Income from cargo and/or agent activities mainly covers the costs of everyday life in China. While working as middlemen, they all have their own businesses. They buy and send stuff to Nigeria to be sold. The income from this activity stays partly in Nigeria (for family, house building). Obviously, the two channels are not sealed off: part of the money made in Nigeria is re-imported in China to be reinvested into the business, along with possible extras made from *hustling* in China. The idea is to reinvest until the breakthrough, until the deal that will make money flow, raising them to the top of the shiny wave of success.

The biographies of Mega Rich and Oga Rainbow convey my point: they both, although benefiting from different levels of stability, worked as middlemen alongside running their personal businesses. Mega Rich started by sending phones and accessories to his wife to supply their shop in Computer Village. He then moved into shoes and bags. And he finally made it home surfing a wave made of rubber: after years of negotiations, he closed a deal with a Chinese tire producer that guaranteed him exclusivity to the Nigerian market. Oga Rainbow, during his years in China, kept sending phones and accessories to his wife, who was supplying guys in Computer Village. He ended up investing the anonymous donations he received from church members in office-furniture. After a small shipment that sold fast and well in Computer Village (without the complications of the super competitive phones and accessories business) he made a few more shipments. Among this furniture shipment, there was a plastic, foldable stool, which turned out the top best seller that allowed him to move back home and to comfortably sit down.

Finally, Nelson may help one understand how important personal business is. He had come to China a few years before, and he was making a living mainly thanks to the support of the Church he attended. But he was also working as a lowkey middleman, escorting people here and there to make some money. The money he would manage to save would be used to send samples to Nigeria. "I use my money to buy samples: construction material, clothes, everything actually," he explained to me while showing me pictures of door handles on his phone. "By the time 4 or 5 of them [future clients in Nigeria] start to buy from me, I will start to make money, then I will start my own business." (Guangzhou, 26 July 2015, Nelson).

As Mathew and Lan (2017) pointed out, most of the cargo agents are also trade agents, implying that this is their main activity. The number of descriptions of African trading agents shows the importance scholars have attributed to this activity, probably due to the simple fact it is very visible. However, from my understanding and the discussions with the traders, their main activity is their personal business. Entrepreneurship is their main job, not in terms of time or even turnover, but in terms of sense, in terms of why they are in China. As written before, in Oga Rainbow's words, "There is no work in China" meaning there is no job that pays wages (unlike other migration destinations). Nobody comes to China looking for work. They come for business, with the idea of building up their own business. In this sense, this is the main activity. Which is pursued until success: via phones, door handles, wigs, solar panels, tires or foldable plastic stools.

Understanding agent practice and cargo practice as side-jobs that allow African entrepreneurs to live in China, while building up a personal business, brings some interesting inputs to the migration trade nexus. By settling the cargo and middleman practice, they create a trading-related job for themselves in an economic environment that does not offer any. Moreover, they create a job that is also the infrastructure they need to attain their main goal: business. Finally, by creating the infrastructure they need for themselves, they participate in the development of global trade. As for frequent flyers and market searchers, agents' activity can be understood as creating jobs that are driven by the personal search for success, while developing global trade, putting together the personal and the global.

To conclude, I want to point out, again, that putting business at the centre of the picture helps to clarify a few points. First, it is part of the movement of putting the tree back into the forest, in that China-Africa relations should be understood within the global economy, and not as a particularity. In this case, understanding the cargo and the middleman, despite being highly visible in the Guangzhou, as a side gig, reflects the fact that, at the end of the day, Nigerians (as well as other Africans) are in China for the same reason most of the businesspeople from the whole world are: China produces the overwhelming majority of what we consume everywhere. So, Nigerians go to China to buy; as do thousands of traders who, twice a year, attend the Guangzhou Trade Fair.

Second, these considerations should be understood within the migration-trade nexus, which explores the impact of migration on the economy. Haugen (2019) stresses how the migration-trade nexus modifies the routes of global trade. She builds her analyses on the positive impact migrants can have on the local economy by bringing information on what to export to countries of origin and/or increasing importations in host countries with goods from *home*. She argues that "the emergence of African *business* communities in South China must be understood in the context of global *migration* regimes" (Haugen 2019, 295, my emphasis) reading the rise of China as a migratory destination as the

consequence of the hardening of the USA and Europe migration policies, where “some of these migrants *reinvented* themselves as entrepreneurs providing trade-related services in China” (idem, and again my emphasis). In fact, the biographies of Mega Rich and Oga Rainbow show that they were entrepreneurs before being migrants. As traders, they follow the trade, even though they have to face obstacles specific to the fact that they are African. In my opinion, this shows a bias: Why is it that when traders from all over the world travel to China to do business, Africans are thought to go there because they cannot migrate anywhere else? Forcing the analysis of African business communities into a migration studies perspective, stressing their migrant status over their entrepreneurial activities, may say more about the scholars in the social sciences than about the traders they study.

More business oriented, Bodomo (2019) explained the presence of Africans in China as the consequence of their will to bypass the Chinese middleman, to access cheap consumer goods that Chinese enterprises in Africa brought to the market. Bodomo suggests this with a common expression among the African diaspora in China: “We are here because they are there [in Africa]!” But the history of Computer Village seems to suggest the opposite movement. African traders moved to mainland China as a follow-up of the transnational trade Nigerians have been carrying on since the 1980s to access spare parts from Hong Kong, along with cheaper consumption of goods from Taiwan, or car spare parts from Japan. With the changes in the South-East, they moved into mainland China to buy everything. The summarising sentence should then probably be something like: “We are here because they produce everything.” They moved to China to get closer to the production site, again like any other businessman, but not to skip the Chinese middleman in Africa.

The evolution of Computer Village points in a similar direction. Chinese traders’ presence in the market has risen drastically since in 2010—as it did in the rest of the city. Nigerian traders explained how the Chinese moved into the market, skipping the African middleman in China or building partnerships with them, after learning about the market from the latter. And benefiting from what Mega Rich called “an unfair advantage” of better personal relations in China. A situation similar to the dynamics Sylvanus (2013) described in the changes of the West Africa textile trade. The Chinese manufacturers’ knowledge of the African textile market was acquired through the first women who travelled to Hong Kong in the 1990s looking for better prices and who came with patterns to print,

introducing the beginning of the *Made in China designed in Africa*¹²⁴, and ending up losing power when Chinese traders moved to West Africa.

And while Bodomo's arguments distance themselves from the idea of Africans in China reinventing themselves, they are not bypassing the middleman, they are simply doing business in China, as the rest of the world does. And to do it, they build an infrastructure. They did it partly under the pressure of specific challenges due to their disadvantaged position (limited access to capital and reduced freedom of mobility). If it is important to recognise the specific difficulties that they face, it is equally important not to reduce them to these difficulties.

A mobile export fair

As I closed the description of Computer Village with the circulation of information, I want to explore here how information circulates between China and Lagos. Sitting on plastic chairs, with a jollof rice and a few beers on the loading-offloading platform of Canaan Plaza, I started discussing Computer Village's goods and prices with some guys. We ended up badmouthing the resellers in Lagos: they never tell the truth; it is impossible to know what sells at what price. And so, thanks to the common enemy, on that platform in Canaan market, I had that feeling of solidarity (making up for that feeling of a cartel). I finally realised I was a supplier, and that between suppliers and resellers there is a certain tension. And besides the slowness of my understanding and my feeling of connection, I also realised I had information. I had travelled to Guangzhou directly from Lagos. Mega Rich was disappointed I came empty handed and he reproached me my lack of *savoir vivre*. Yet, while I might not have had *egusi*, I did have fresh information. And I later realised, this information circulates, despite all the stories of cheating and distrust.

The capital value of information in trade is obvious. As mentioned before, scholars working on African traders in China mainly address the question of information via strategies of protection of said information. The secrecy and the constant risk of information being stolen (designs, business ideas, factory contacts and other central pieces of the business puzzle) are widely described and probably over-represented. The circulation of information is understood in a narrative of wild competition, the cut-throat competition, overstressing the jungle-like surviving fight in which African traders apparently evolve.

¹²⁴ The main difference is that contrary to the division of labour that Mama Benz had with former European producers, such as Vlisco, IT companies have not taken the African markets seriously. This will be further discussed/ in the following section about Chinese objects in Africa.

This is perfectly in line with the discussions on the platform in Canaan market. However, when I was shouting numbers (prices, inches and models) over the phone and had my ethnographic climax, I was doing what everybody else does: circulating information¹²⁵. Nigerians in Guangzhou are constantly connected, and I discuss how information actually moves around, via phones and samples, instead of strategies of protection.

Phones numbers not serial numbers

One of the things that stroked after calling Chuks to confirm the shopping list in Guangyuanxi is that people are constantly on the phone. Indeed, phones are the central tools in enabling transnational communication. This became clear during my second stay in Guangzhou.

I had arrived with, among other things, the Samsung phone belonging to a friend of Frank's, a Nigerian man living in Switzerland who had moved to Spain. His girlfriend sat on his Samsung, breaking the screen. I flew to Guangzhou with his broken phone, and Mega Rich showed me the way to a place in Dashatou to fix it. When we entered the repair shop, Mega Rich suggested I call Frank, who would call the guy in Spain to confirm if the price was okay. The price was OK. From Spain to Guangzhou, via Switzerland, the screen was changed at the best price.

While we were waiting for the phone to be repaired, in less than an hour, Mega Rich had called Nigeria at least four or five times, and received as many calls. Details, details, details: how many Hz, what size, which pin size, how many gigabytes. He was not looking for anything specific, he was *enta market* as in checking the offer in Guangzhou and the demand in Computer Village. The market research had to go on, and information had to be circulated.

The situation points to the traders' hyper-connected life. It speaks to the ability to mobilise resources and take advantage of the global economic space. It speaks about the level of global connection that makes it possible for an illegal migrant in Europe to have his Samsung repaired at the best price on the other side of the world.

I realised those calls were central to transcontinental trade: communication travels mainly through phones. There are no barcodes, no excel spreadsheets, no serial numbers, nor is there any other number-based identification system. Information about product specifications circulates through phone calls and messages: WhatsApp, Messengers, Skype (thanks to WebFreer), WeChat, Viber, and

¹²⁵ Among other things, I also realized I had developed an almost physical ability to be able to focus on one sound. A fundamental skill to handle transcontinental phone calls in such noisy places and through such unsteady lines. A skill quite important in Lagos, where the soundscape tends to be saturated.

QQ are always open. The key numbers for communication in *this* globalisation are phone numbers. This constant flow of information fits the fragmented nature of this trade, and thanks to VPN, accessible phones and data plans, information was constantly crossing over the great firewall. The hyper-connected way in which Mega Rich runs his business was closer to the stereotypical image of the businessman glued to his phone, shouting numbers, closing deals, creating new opportunities, than to that of the marginalised migrant fighting for survival. The strength of the connections between Guangzhou and Lagos also shows in what could be understood as a detail: the activity in Guangyuanxi picked up around noon and intensified in the afternoon and evening. Guangyuanxi lived on GTM+1 to fit Lagos time.

Business aside, this hyper-connected life is also about maintaining strong and close personal and family ties. Despite the great firewall, Mega Rich's Facebook page was constantly open in his office, to chat, laugh, get fed some gossip or to engage in discussions about Biafrans in Nigeria or to follow his daughter's day-to-day life. As is the case in Computer Village, business and personal information flow along the same channels: entangled.

Samples as a mobile export fair

Messages and phone calls aside, information moves around through samples. Nelson actively waits for his breakthrough by sending sample after sample to Nigeria. Despite his precarious position, he participates in the constant flow of information moving around. He explores the Chinese market, looking for products that may be useful, fashionable, and possibly fast-selling in Nigeria. His samples travel in bags, carried by *Gold & Platinum*. The multiplication of samples sent by thousands of people in situations similar (or steadier) than Nelson's reaches the critical number of samples needed to offer a preview of what the PRD area has to offer the Nigerian market. Drop by drop¹²⁶, a constant flow of goods enters Nigeria and offer quite a comprehensive overview of what there is to buy. One could understand the number of samples in circulation as the mobile equivalent of an import-export fair to which a number of African traders do not have access to due to immigration issues and/or capital access limitation. Samples are not used only to investigate new possible businesses; they also play a central role in ongoing businesses. As Obinna mentioned when discussing cargo activity, before shipping clothes, he usually sends a sample to Nigeria, to get the green light from the market.

¹²⁶ The drop-by-drop mobility approach was explained to me by a Nigerian migrant who sold cocaine for a while in Switzerland, when discussing the importation of cocaine from West Africa to Europe. Unlike large cargos of drugs, it is a drop-by-drop approach, a constant flow of small quantities. Like a leaking tap, it is neither open nor closed, but it drips constantly. In every single plane there are a few mules carrying a few bags. Every single day with every single plane, the people fill up the sink and nostrils of Europe.

Samples travel the other way around too: they are given to the Chinese's factories to ensure correct production. In the same way that there is no standardised production defined by bar codes, samples establish the exact shape, colours, and quality level.

As for phone calls and messages, there is a constant and steady flow of samples moving from China to Nigeria, and constant feedback from Nigeria to China. What is good, what is not, what is useful, what people like, what they don't: what the colours, prices, quality are selling (or not) on the home market. This feedback modifies what Nigerians import, as well as what Chinese factories produce, depending on the product.

In conclusion, it is obvious that this information about prices, details, samples, and feedbacks can be mixed up within misleading information. But I suggest that misleading information should not only be understood in terms of the cut-throat stories and narratives often implied by scholars, but rather as investigated within the process of gaining access to valid information. As I described belonging in Computer Village, it takes times to become part of the group—a process that needs to start with a proper introduction. It takes times to access the information, time to learn about the market, and time to become part of the cooperation that balances the competition. In fact, information does circulate, in both directions and in pretty efficient ways. When Mega Rich called Nigeria, he asked precise questions; he received detailed answers. He knew who he was calling, he had built his way up to the stage where information was shared honestly for mutual interest. He was an insider (which doesn't mean he will not try to get the best out of the deal). He was @the core.

So what?

China-Lagos Express focuses on the links between China and Lagos in three ways: by exploring the massive logistics system that links the PRD to Lagos, by detailing the economic activities of middlemen and, finally, by discussing the circulation of information between the two markets. Each element is discussed considering the insights presented in Part 1 about the socioeconomic dynamics of Computer Village. I point to how this specific economic model also works on a global scale, arguing for the diversity of globalisations but also for an understanding of the practices of African traders in China as the manifestation of *economic* practices and not mere survival strategies, as frequently presented in 'globalisation from below' literature.

I address the logistics machine by presenting a general picture of how different goods move along different channels, taking into consideration variables as different as weight, value, national regulations and the Nigerian market demand. I illustrate the complexity with a presentation of the

practice of *groupage* and through the case of *Gold & Platinum*. By discussing *groupage* as the manifestation of an economic system of a multitude of micro enterprises evolving in a horizontal structure, I argue that the global economy itself is embedded in different social and cultural structures. My presentation of the complexity of this system is fleshed out by the description of the suitcase trade carried out by *Gold & Platinum*, professional flyers who use the privilege airlines usually offer to the elite to guarantee one-day deliveries between Guangzhou and Lagos. By discussing how they create a service that performs as well as large logistics companies, putting themselves right where the elite is, I complexify and challenge the centre vs periphery understanding of 'globalisation from above' and 'from below'.

I then discuss the activities of middlemen. Based on my findings from Computer Village, I stress how important *enta market* is when it comes to IT products (unlike for clothes, bags, shoes, furniture, textiles and other goods). In fact, the fast-moving PRD economic environment, in conjunction with the particular conditions of UEEE trade, makes the presence of the local agent exploring the market a smart and efficient strategy for keeping up to date with Chinese supply, thus guaranteeing the best deals for the Nigerian market. As in Computer Village, mobilising 'traditional' economic practices allows Nigerians gracefully handle some of the challenges specific to the IT trade.

Finally, I describe how for Nigerians in China these agent and logistics activities are a side gig, stressing that owning and running one's own business is the main motivation behind Nigerian traders' activities. This argument reinforces the approach that consists of putting the tree back into the forest, analysing China-Africa relations not as an exception but as part of a global system of trade. China produces everything and, like the rest of the world, Africans come to China to buy. Through their cargo and middleman activities, these businessmen create bridges, facilitating trade between the two continents; they create jobs for themselves that allow them to make a living in China while building the infrastructure they need to supply their local markets. Simply put, as businessmen, and not as migrants, they participate in shaping the routes of global trade. To do this, they must overcome obstacles specific to their situation, the results of the various structural exclusions that discriminate against Africa and its traders on a global level. And what I want to stress here is, how *despite* these difficulties, they succeed in gaining access to the world's factory. They are not in China because they don't want to die crossing the Mediterranean, an interpretation implicit in much of the literature on 'globalisation from below' that strips Nigerians of their agency, portraying them as reacting instead of acting. Without denying the specific difficulties that Nigerian (and African) traders face—some indeed are migration-related—I want to stress that there is no need to reduce their entrepreneurial activities to the obstacles they face.

In the same vein, I close this chapter discussing the transnational circulation of information, first and foremost by stressing the fact that information does indeed circulate. In so doing, my account contradicts analyses that stresses the secrecy and hiding strategies that are thought to characterise relations between African traders who stay and those who travel. As for the migrant vs traders, I believe that stressing cut-throat competition rather than flows of communication is yet another sign of the bias many scholars show towards African traders in China. Based on my experience in Computer Village, I suggest that, in this global context as well, there is an inner group among whose members information circulates freely.

Finally, by showing how phone numbers replace serial numbers and bar codes and explaining how the constant back-and-forth of samples become a kind of mobile exports fair, I discuss how communication is guaranteed in this fragmented, non-standardised market. Again, African traders in China have been able to establish this infrastructure and system based on cooperation is not to deny the challenges posed by structural inequality. But that should not become the only lens through which to read traders' activities and motivations.

12. Standard, substandard and refurbished

After examining Nigerian traders and their activities in China, I turn my gaze towards objects, and specifically Chinese IT objects. This chapter is articulated around two examples. The first concerns pimped HP Compaq 6220 laptops. These are the *fairly-used* laptops Tonia was selling in Computer Village to take part in the internal circulation of goods. I use these to introduce *China refurbished* as an object category and to discuss the 'wobble room' Nigerian traders have in the IT business. This allows me to discuss the more general idea of *refurbished in China, designed in Africa*, which, I suggest, is the IT version of the *made in China, designed in Africa* phenomenon theorised for other goods, notably fabric and cloths.

The second example is the 15.6 inches glossy, module-less screen for laptops that Chuks advised me to buy in Guangzhou. This example casts light on the question of access to spare parts. As a follow up to the issue of access to *downstream* spare parts discussed in Computer Village, this examination of *upstream* sourcing of spare parts adds another layer to the general understanding of the repairable / non-repairable dialectic. More importantly still, the issue of access to spare parts in Guangzhou indicates one of the ways in which the production of electronics and the circulation of UEEE are entangled.

Finally, both examples raise the question of the quality of the goods. In fact, the Pearl River Delta (PRD) production processes are characterized by a large diversity of quality level. This adds an extra layer of complexity to the categorisation of IT objects, which is central to the understanding of the entanglement of the networks of production and networks of destruction, and, in turn, to the entanglement of globalisations.

Pimp my laptop

As I mentioned while discussing the internal circulation of goods in Computer Village, Tonia first told me about Mega Rich while pointing at the four laptops displayed on the top of her showcase: "They all come from Rich; he is the one sending them." In Computer Village, these computers are called *China refurbished*: they are *fairly-used* computers that have been repaired in China. These specific ones were not just repaired, they were also pimped. Originally without built-in Bluetooth and webcam, the

HP Compaq Business Notebooks nc6220¹²⁷ were being sold by Tonia with those features, thank you to new and substandard cameras and Bluetooth. The low quality of the new parts was particularly visible in the camera, but the features were good enough to turn these old machines into marketable stuff in Lagos. Not quite *hotcakes*, but sellable.

The pimped HP 6220 arrived in Tonia's shop ready for the Nigerian market. Mega Rich bought them from a Chinese reseller in Dashatou already modified—that is, already refurbished to match the needs of the Nigerian market. Basically, these were original used laptops, recovered from the USA, Europe, South Korea or another grade-A country¹²⁸ and imported to mainland China, probably via Hong Kong. They may have been perfectly functional or partially broken. Whatever their past, once in Guangzhou Chinese engineers have them refurbished, and, in this case, upgraded. This they do to satisfy the Nigerian market.

From Nigerian market actors' point of view, the HP Compaq 6220 is the best compromise between high quality and performances and cheap price. Originally meant for grade-A markets and thus expensive, these computers meet the highest quality standards. Yet, as they are old and lacking certain features, they are affordable. By building *substandard* elements into grade-A machines, their value increases while they remain affordable. This is a telling example of the complexity of recycling pathways, a theme I will examine through an exploration of two related points: African traders' wiggle room in the UEEE business, and the mutual impact of these informal markets. Both these factors can be understood through what I call *refurbished in China, designed in Africa*.

Refurbished in China, designed in Africa

As mentioned, I argue that refurbishing is the UEEE declination of the phenomenon that has come to be known as *made in China, designed in Africa*. This phenomenon is particularly associated with the example of African waxes, but clothing, furniture and other consumer goods amply demonstrate how China produces for Africa—as for the rest of the world. When it comes to computers, except for accessories such as batteries and phones case, African traders have no access to factories where they could directly pass orders. This is because the used computer trade depends on first-hand trade, but

¹²⁷ The HP Compaq Business Notebooks nc6220 were already old in 2013, but may sound even older today. However, the dynamics haven't changed. It is even possible that old models are still around, due to the anti-refurbishing design techniques that are more and more commonly used with new models.

¹²⁸ It is difficult to trace the origins of items after refurbishing. However, note that, for example, when it comes to refurbished phones, such as the 7-day or 14-day phones, metadata indicates which market and which region the item was originally meant for. It is interesting to stress how this information has an impact on the price of the refurbished phones. I think the price/original market relation would merit further investigation, as it probably reflects a hierarchy of market power.

it also reflects the structural exclusion of the African continent by the major IT players. The interesting point here is that even when dealing in a market that is structured by exclusion, African entrepreneurs manage to find wiggle room within the system: refurbishing should be understood as the equivalent of production for computers made in China to fit the African market. This agency is limited by the fact that Chinese market actors never export *fairly-used* but only refurbished computers. However, via the network of communication that runs from Computer Village, via the African traders in China, to Lagos, Chinese adapt their practices to the needs of markets they export to.

Alongside refurbished and *fairly-used* computers produced for the Nigerian market, access to the Chinese market also offers the possibility of selecting commodities more adapted to local situations. For example, Chuks insisted that I should privilege buying Intel® processors instead of ADM®, an information confirmed by Hellen Chen. In fact, despite ADM® processors being cheaper, they are less resistant to Nigerian weather. The dust, the humidity and, of course, the heat in West Africa are rarely considered on the West African standards by computers' designers (indeed African markets are not really the first interest for IT corporations). The diversity of the Chinese market also offers the possibility of responding to specific demand related to human-made situations, such as the notorious instability of the Nigerian electrical infrastructure. In fact, the unsteady electricity supply and its frequent switches to generator power leads to the overuse of powerpacks, which makes spare powerpacks *hotcakes*. Electricity challenge in Nigeria also explains how, along with stabilisers and generators, power banks were very popular in Nigeria before becoming a thing in Europe. These example once again illustrate how images of the 'Global South' as a simple e-waste dump are limited and incorrect; by highlighting the wiggle that access to Chinese markets offers Nigerian entrepreneurs, I emphasize the agency, strategy and business acumen that shape this global flow of goods from China to Africa.

Finally, the mutual impact of Chinese and African markets is manifested in the fact that, with time, the *substandard* webcams built into the HP 6220 also became available in Lagos. Imported as spare parts, they were used by local engineers who would build them into *fairly-used* computers imported from the US and Europe. This opens the possibility of thinking of these market entanglements also in terms of technology and transfer of skills. Inspired by *China-refurbished* laptops, Computer Village engineers learnt how to upgrade *fairly-used* laptops and, via the African traders in China, they gained access to the spare parts needed to do so, creating the *Nigerian-refurbished* laptop. It should be said that in Computer Village, there are frequent remarks about local engineers and the quality and reliability of their work, implying a hierarchy of skills according to which Chinese do it better. Nevertheless, this should not blind us to the fact that IT skills as well as the parts needed to repair used

electronics were regularly transferred from China to Lagos. In this process, African traders in China operated as a bridge by *enta market*.

Underlying the phenomenon of *refurbished in China, designed in Africa* lie two main issues: access to spare parts and the quality continuum that characterizes Chinese production, both highlighted by my second example, the 15.6" screen.

15.6" screen (LCD)

The second example comes straight from Chuks' shopping list (see picture), and it brings back the question of access to spare parts. The list Chuks wrote for me consisted mainly of motherboards: HP Pavilion Dv 6000 (Intel and AMD), Dv2000 (Intel and AMD), Dv5 (Intel and AMD), Dv6 (Intel and AMD), Compaq CQ 60, CQ61, CQ61 (Intel and AMD). And screens: 15.4-inch gloss/normal (LCD), 15.6-inch module/module-less (LCD), 14.1 inch gloss/normal (LCD), ultra-slim paper screen for Sony 14.00 inch, 13.1 inch and 13.3 inch, and 10.1 inch for mini-laptops.

The technical details here are a bit heavy. However, I believe they are interesting ethnographic inputs conveying the level of professionalism involved in the global trade of second-hand computers, disrupting the simplistic narrative surrounding e-waste and the Global South. This is a point that needs to be made again and again.

When I called Chuks from Obinna's shop to confirm that the list was up to date, he insisted on the 15.6" screen. He explained it was particularly interesting because it fit many laptop models and he stressed that, at that moment, it was exceedingly rare in the market: "It's a hotcake, buy it!!" With these words in mind, Obinna and I went back to Mr. Screen. This time, he was alone in the shop, packing stuff. Obinna told him I wanted to buy; Mr. Screen handed me pen and paper. I was going for the 15.6" module-less, but I listed it among other screens to avoid overpricing: 15.6" module and module-less; DV3000 13.4"; 10.1" gloss; 15.4" gloss/normal; 14.1" gloss/normal.

I handed the paper to him. Without a word, he added a price next to each item. Prices ranged from 180 RMB for the 10.1" model, to 420 RMB for the hot 15.6". Now, according to Chuks, the 15.6" was selling in Lagos at 8,000 naira, meaning the buying price (before transport, clearance, and my possible profit) at 420 rmb (10,920 naira¹²⁹) would be higher than the potential selling price. I shook my head and Obinna started bargaining. But the bargaining was over before it began. Not only did Mr. Screen

¹²⁹ At that time, in the black market, currency rates at 420 RMB were 10'920 naira (1 dollar = 164 naira; 1 dollar = 6.35 RMB)

not budge, he indeed pointed to the 15.6", explaining that last week it was cheaper, but the price had risen from 400 to 420 RMB in just a few days, adding that it would probably be more expensive next week. Not only would he not reduce the price, but he would also not sell me more than five pieces. Take it or leave it. We left.

In the following days, I visited several other spare parts resellers. I was sure that somewhere in Guangzhou, the heart of globalisation, I would find the hotcake I was looking for. I was wrong. The 15.6" was nowhere to be seen. And every time I mentioned it, I got a similar reaction from the resellers: a sign of acknowledgment, combined with a mix of apologies and empathetic disappointment. It seemed everybody knew it was a *hotcake*, but nobody could get their hands on it. I considered going back to Mr. Screen but decided against it. Buying higher than selling is rarely wise. Again, it turned out I was wrong. I could have taken the risk. In the following months, prices in Lagos did adapt to the ones in Guangzhou: they kept rising, reaching 19,000 naira, which was more than twice the original price, both because of growing popularity and because of changes in the exchange rate.

Beyond an exposition of my limited entrepreneurial risk-taking skills, there are other aspects to unpack here.

The first aspect to explore may seem obvious, yet it deserves to be made explicit. The two markets are linked: the hotness in Lagos was a consequence of the scarcity in Guangzhou. Second, they are linked via spare parts. As Chuks' shopping list showed, much of the business with China was about spare parts, mainly screens, and motherboards. Again, this may seem obvious, but the fact that I had a hard time simply realising I was buying spare parts tells us something in and of itself, reflecting the invisibility of the entire question of access to spare parts in the literature on UEEE and e-waste. And then, a random comment from Mr. Screen triggered further thoughts on how thorough the interdependence between these two markets actually was. According to him, the 15.6" was rare because "factories keep it; they keep it for laptops". What he meant was that somewhere within the production networks, factories were anticipating large orders from brands, probably in view of a new model launch. To make sure they would be able to fulfil coming orders, they would retain the product, resulting in a temporary lack of availability. In so doing, they were creating scarcity in the parallel market in Guangzhou, and thus in Lagos. While there may have been other reasons, I was not aware of, this was enough to trigger follow-up thoughts on IT market dynamics between Guangzhou and Lagos.

Upstream spare parts and overproduction

The story of the 15.6" is a story about access to spare parts. As such, fieldwork in China allowed me to complete my understanding of the spare parts issue discussed in Computer Village in relation to repairing.

As a reminder, after discussing how repairing plays a central role in making the used-computer business worth the trouble, I pointed out how access to spare parts, though essential to repairing activities, is completely overlooked in the literature. Inspired by the Gregson et al. (2010) seminal work on end-of-life ships, I discussed *scrapping* in Computer Village as *downstream* spare parts sourcing. Here, inspired by Cook's papaya's journey from the British supermarkets to the Jamaican palm fields, I want to take the *upstream* ride, exploring access to spare parts in China.

Upstream and *downstream* serve as useful metaphors for structuring my argument, but the image of the stream is far too linear to describe the networks at work here. Indeed, much as *downstream* access to spare parts via scrapping challenged the repairable vs non repairable tension, blurring the categories of waste and commodities, *upstream* sourcing blurs the categories of 'new' and 'used' by linking up production and destruction networks, and thereby *de facto* mixing up *upstream* and *downstream*. This mixing happens through overproduction, and via market actors such as Mr. Screen and Hellen Chen.

As mentioned before, when it comes to electronics such as laptops, desktops and their spare parts, Nigerian traders do not buy from factories. They buy from middle-people, retailers for retailers, actors like Mr. Screen and Hellen Chen. These actors would deserve more attention than what I can give them¹³⁰, yet some basic information should suffice for the purposes of my argument. Mr. Screen buys and sells screens for laptops. I don't know who his suppliers are, and when I asked him, he mentioned Taiwan¹³¹ and he insisted that he buys from factories. His customers were mainly Nigerians and other African traders. Hellen Chen plays a similar role, but unlike Mr. Screen, she leads a team of about 20 engineers who repair new but defected motherboards and screens that factories have discarded. Like Mr. Screen, she sells to African traders and to other 'non-grade A' markets. The main

¹³⁰I have limited the perimeter of my work to the activities of Nigerian traders, both in China and in Lagos, which means I have investigated neither Chinese traders nor Nigerian clients. Fortunately, although always from one specific point of view, the Nigeria-China interface opened a window onto the Chinese side of the deal.

¹³¹ This doesn't mean things are actually coming from Taiwan; it could be a selling argument/embellished reality that mobilises the narrative of the supposed better quality of the Taiwanese electronics industry in comparison to the Chinese.

point here is that both of these middle-people deal in spare parts, and as such play a fundamental role in the global trade of used computers. And they both deal in overproduction.

I use overproduction here as a general term that includes both 'unsold' and 'defective' merchandise. The first term refers to goods produced by Chinese suppliers for major brands that end up not buying them. The second includes both goods that did not work and goods that simply did not pass the quality tests required to gain access to grade-A markets.

I argue that this overproduction has to be understood in the framework of a production environment that is heavily shaped by forty years of subcontracting. What Tsing has called "supply-chain capitalism" has touched virtually every consumption goods market in the world, and generated production networks so complex that brands themselves lose sight of who does what and where to produce their goods (Tsing 2009). Piart (2012), for example, has shown how outsourcing in the Turkish garment industry, accelerated by fast fashion, led not only to fragmentation but also chronic overproduction.

The IT industry is no exception. The subcontracting system was particularly suited to electronic equipment. A computer can easily be sliced and diced into standardised modules, components and micro components, and the IT industry has been marked by a massive rise of firms supplying manufacturing services (Lüthje et al. 2013). Contemporary IT assembly lines supply from a large number of producers, more or less established and more or less important, anything they need to assemble a computer, from components—processor, motherboard, hard drive, memory ram, cooler, case, screen, etc.—all the way down to micro-components, which include connectors, capacitors and resistors.

Businessmen and women like Mr. Screen and Hellen Chen are the interface through which this overproduction flows, from the complex and intricate brand-dominated production networks to *other* production networks. These are the networks for the buying and selling of used computers, which include both networks of destruction (via scrapping) and networks of refurbishing. In these *other* networks, the leftovers from production networks find their way into discarded computers. If the HP 6220 example demonstrated the complexity of networks of reuse and repairing, the example of the 15.6" screen shows how networks of production and destruction are entangled. This entanglement is materialised in Computer Village. For example, a *fairly-used* laptop discarded by a school in the USA can be repaired with a screen as good as the one in my MacBook Pro that, after being rejected by a factory, by way of an interface of actors such as Mr. Screen or Hellen Chen, is

shipped to Computer Village, in a bag included in a first-class airplane ticket purchased by *Gold & Platinum*.

Given the fragmentation and complexity of these IT production networks, along with the complexity of the computer itself as a commodity, it seems fair to think that such overflowing happened at each step and at every level of production. This obviously would need more investigation, and is not specific to China-Africa trade. It is on this assumption, however, that I use the term 'interface', instead of 'bridge' to refer to the connections between GPNs and GDNs: it seems more appropriate to the reality of these networks and allows for the questioning of the metaphor of linearity. One of the consequences of the race to outsourcing and subcontracting is that industrial production and its distribution have become so complex that the system cannot be captured by the intuitive 'manufacture-trade-consumption' model (Tsing 2009). This also helps to explain why the classical 'reuse step', discussed in the literature on UEEE trade based on this linear understanding, does not reflect the reality of the field. Finally, this further opens up the possibility of conceptualising the impact of production networks on the used/discarded electronics trade beyond the question of planned obsolescence which has attracted the lion's share of attention from critics¹³² (Pickren 2015).

A quality continuum linking up globalizations

The circulation of goods via this interface is directly linked to the question of the quality of said goods. From substandard cameras to surplus screens, in China, the main questions about goods and trade (and cheating) revolve around quality. As with previously examined dichotomies, a closer look at the categories used to express the qualities of goods and services suggests that these qualities are far less obvious than they might seem at first glance.

When it comes to e-stuff, what I call overproduction includes two kind of 'extra' objects: surplus and defective goods. Surplus goods are those that are qualified as 'grade-A', passing the tests that conventionally signal higher quality. To put it simply, these are goods whose quality meets the norms and regulations of the Global North. Grade-A is also referred to as 'standard'. Everything else is 'substandard'.

The quality of substandard goods can vary greatly. Discarded stuff may flow into workshops such as Hellen Chen's to be fixed before finding their way to repair and refurbish entrepreneurs. It is easy to imagine how the quality of these objects is subject to a number of factors that are more or less

¹³² Mentioned by Pickren (2015). For a full analysis of the political-economic origins of planned obsolescence, see Blumberg and Gottlieb 1989, MacBride 2011, Slade 2006.

important for the final result. Depending on the initial manufacturing defect, the quality of the parts used for the repairing—which are in turns surplus or substandard—or the skills of the engineers, stuff coming out of such workshops can be as good as grade-A or barely functional. As such, I suggest that *standard* and *substandard* should be understood as a continuum, and not as a dichotomy. This quality grading, incidentally, concerns commodities well beyond electronics, from clothes, to light bulbs, papayas, or flowers. There is grade-A, grade-B, grade-C, all the way down to the shoddiest thing, with prices adjusted accordingly. Goods are hierarchised.

To better grasp this quality continuum, one should think about the industrial environment of the PRD. When the PDR is called “the world’s factory”, this is not simply because it produces so *many* goods but also because it produces goods of so many different *qualities* for markets all around the world. Indeed, the best and the rest are produced at the same exact locations. This is the case for goods such as handbags, clothes or shoes, for which originals, counterfeits and knock-offs are often produced in the same factories, but at different times of the day or on different shifts (Mathews, Lin, and Yang 2017; Mathews, Ribeiro, and Vega 2012).

Concerning electronics, similar dynamics apply to accessories. In addition to the overproduction discussed above, flowing through the numerous workshops located in the PRD, the quality continuum also manifests itself via the massive number of accessories, which are not central stage, but which are absolutely fundamental for any computer market: batteries, chargers, adaptors, memory sticks, mouses, keyboards, etc. In Computer Village, these are systemically *substandard* or *knock-offs*. Thus, the laptop mentioned above, discarded by a school in the USA and repaired with a brand-new screen that left the PRD in the bags of *Gold & Platinum*, would be sold in Lagos with a *knock-off* power cable that may have been produced in the same factories as the grade-A one.

Almost by definition, it is difficult to paint a complete picture of complex production networks. Nonetheless, it is certain that factory surplus, substandard products, and knock-off copies, following different paths via the interfaces discussed above, arrive in Nigerian. And they all end up in the same market, even in the same machine, in Lagos. The boundaries between original, fake, defective, and substandard goods are thus blurred, and this blurring gives us a taste of the complexity of GPNs.

So what?

This mapping of *upstream* objects in China points to three interrelated aspects of the global trade in used computers: the reciprocal impacts of markets in Guangzhou and Lagos, African traders’ wiggle room and the dynamics of production quality within PRD’s factories. These aspects question the e-

waste narrative and, on a more general level, reveal the entanglement of networks of production and networks of destruction. As global production networks are generally associated with 'globalisation from above', and global destruction networks with 'globalisation from below', the entanglement of GPNs and GDNs contributes to the general argument against the above/below dichotomy altogether.

I articulated this discussion around two examples. The first is the pimped HP 6220, a *fairly-used* laptop upgraded with substandard parts. I introduced the idea of *refurbished in China, designed in Africa* to refer to used computers discarded from a grade-A country, imported into China to be refurbished and/or upgraded with substandard spare parts to match Nigerian standards. This also casts light on the wiggle room of Nigerian entrepreneurs, showing how even in a market based on their structural exclusion, they supply consumers in Lagos with the best compromise between quality and affordability.

Finally, the first example introduces the fact that skills and competences also move along the networks linking the PRD and Lagos, as some refurbishing activities that started in China have become available in Lagos. In sum, *refurbished in China, designed in Africa* speaks to the benefits of access to Chinese markets and the central role of middle-people who *enta market*, complexifying the manufacture-trade-consumption paradigm.

The second example, the 15.6" screen, illustrates the *upstream* sourcing of spare parts. This complements *downstream* access via *scrapping*. *Upstream* spare parts are produced through overproduction, made up of unsold and defective parts produced in fragmented global production networks. In showing how goods from GPNs find their way into *fairly-used* computers, I argue that GPNs and global destruction networks, are indeed entangled.

The entanglement of networks of production and e-waste/UEEE challenges the linearity of the biographies of objects, adding complexity to the already fragile boundary between waste and non-waste. As discussed for *downstream* spare parts trade, objects and practices in the field cannot be properly described by the etic categories of 'repairable' or 'in working-condition' commonly used by regulators. These categories appear to be even less useful for understanding the reality *upstream*, and its entanglement with *downstream* spare parts.

Finally, the 15.6-inch screen and the pimped HP 6220 brought to light question of quality in Chinese production, and introduced the category of *substandard*, which in Computer Village is often referred to simply as *China*. I discussed how Chinese goods, which are produced for the whole world, can be

as good as the best quality, grade-A, just as they can be the worst quality *knock-offs* on the market. I argue that due to the complexity of GPNs, the question of quality should be understood as a continuum, and not as two opposed poles of *standard-substandard*. All these different levels of quality, sometimes produced in the same factories, found their way to Lagos. While it is readily understandable that the informal sector absorbs the overproduction of the formal one, it may be less intuitively obvious that this can happen at each and every step of the production process, blurring the boundaries that supposedly keep them separate. Thus, I argue for abandoning the 'manufacture-trade-consumption' paradigm. Rather, we should view production, discarding, refurbishing and destruction as one constant flow of goods at different stages of their life, representing the whole quality continuum and circulating in suitcases or containers, all the way to markets such as Computer Village.

In sum, a single laptop in Computer Village can be *fairly-used*, upgraded with grade-A parts, repaired with a scrapped part, and sold with a knock-off charger. Put more abstractly, a single computer in Lagos can contain objects of different quality levels, that travelled different paths and that could be associated with globalization from above *and* from below. All in one. Entangled.

A single computer in Lagos is the materialisation of entangled globalisations.

13. China stuff, Western trash and African agency

For the concluding chapter of this section, I come back to Computer Village. This time with a focus on objects. I look at objects imported from the 'West' (*tokunbo*) and from the 'East' (*China and China refurbished*). I discuss them in their particularity and then stress their complementarity. In a sense, this last chapter of the second part mirrors the first chapter of the first part, and circles back to the history of Computer Village, through which I introduced the idea that the complementarity of goods from the 'West' and from the 'East' was central to the birth of this economic space.

After sharpening the categorisation of *Western* objects in Computer Village—partly for the pleasures of ethnography—I briefly discuss how Chinese objects in Africa have mainly been analysed with an eye to their cheapness/affordability, and as competition for, or as alternatives to, local production and other imported goods. I discuss how Computer Village and UEEE circulation are actually articulated around the *complementarity* of Chinese and 'Western' objects, thus bringing new insights to the study of Chinese objects in Africa. This complementarity once again argues for the entanglement of the networks of waste or used stuff with those of production. This entanglement can be considered as one more declination of the limits of the 'above/below' dichotomy that wrongly simplifies our understanding of globalisation's complexity.

In Computer Village, this complementarity manifests itself in two inverted hierarchies: one based on accessibility—with Chinese objects at the top—and the other on quality, with 'Western' objects at the top. These inverted hierarchies are considered by the traders to be the translation of different economic behaviours in the 'East' and the 'West'. Considering both hierarchies simultaneously allows me to discuss the position of Nigerian traders and their wiggle room by triangulating China, the West, and Nigeria.

By highlighting the complementarity of 'Western' and 'Eastern' objects within the same market—and even within the same objects—I shed light on African traders' agency, but also map out the three-way trade that links China, Africa, and the West. I argue that the role of Africa in the global economy and African traders' agency, cannot be understood in bilateral terms. Somehow, it takes three to tango.

Tokunbo, the world in the market

Importation of used goods from the 'West' has been a thing in Nigeria for quite a while. Abimbola (2011, 2012) and Forrest (1994) discuss the beginning of used clothes importation during and after

the Second World War, when traders in the South East used to import military surplus. *Tokunbo* cars, *okrika* clothes¹³³ and any others consumer goods have entered the country, despite bans and *de facto* protectionist regulations (Abimbola 2011, 2012; Rosenfeld 2018). Indeed, Computer Village was born with used computers imported along with other goods. After all, as discussed in the first pages of this work, both my observations (and practices) and the reports of ENGOs show that containers importing used stuff are containers of *mixed* used stuff: broken-down cars along with functioning cars, electronics, and a variety of other consumer goods¹³⁴. This shows how the flows of UEEE—wrongly conceived of as ‘e-waste’—are best understood as a continuation of practices of importation that have been central to the Nigerian economy for decades for other used consumer goods, and that have put Nigerian traders on the global map. Thus, while further investigation is needed here, it is important to point out that the commercial treatment of ‘e-waste’ is as much a function of older trading patterns as it is of new discarding practices.

One of the consequences of these practices, which circles back to the first impressions I had during my walks around the market, is that Computer Village is at once the stereotypical image of an African market—overcrowded and saturated with smells and noises—and a highly connected international hub. Computer Village is characterised by an overwhelming presence of the *rest of the world*. The rest of the world *exists* in Computer Village.

First, traders communicate daily with Europe, the USA and China, but also with Malaysia, South Korea, Japan and Brazil. Almost everybody in the market *has* somebody—a friend, a cousin, a brother, an aunt—living abroad, more or less directly implicated in trade and with whom, mainly via social media, they are constantly in contact. Transnational video calls, messages and texts are as common as roasted plantain in the middle of the rainy season. People here evolve within an international space, with or without *actual* mobility. Some traders travel in and out multiple times a year. Others have never been outside Nigeria. All of them are in a global hub, a place that is characterised, among other things, by the density of global connections and a constant flow of information, communication, and

¹³³ Tokunbo means from across the sea, or from oversea in Yoruba; it is generally used to address all used products imported mainly from the *West* (USA and UK) but is particularly used for second-hand cars. Used clothes are known as *okrika*, taking its name from the city of the first importers of military surplus. And when it comes to IT products, the most common designation is *fairly-used*.

¹³⁴ I would add here that there is also a practice of importation of new stuff from the Global North, particularly from the USA, such as diapers, toys, and other kids’ stuff, which are considered super-*hotcakes*. I am not aware of any academic work on this subject in anthropology.

mobility. This point is not directly related to the question of objects, but it reminds us that, as with Nigerians in China, people experience connected, cosmopolitan life in different ways.

Second, imported goods are all described by their country of origin: “This is UK, this is US, this is China”. Names of countries become adjectives. This focus on the place of origin does not only concern Computer Village. In Ladipo Market, where containers are offloaded, the origin was always the first information given. The importance of country of origin is explainable. The first explanation is manufacture-related and refers to the quality and characteristics required by the first-user market. As such, the US, the UK and Europe are all considered grade-A markets.

However, origin categories also contain other information: technical (e.g., electronic products from the UK and Europe may be prioritised over those from the US because of common voltage standards with Nigeria) and/or first-user practices. From experience (and rumours), countries are hierarchised according to the general state in which their *fairly-used* goods arrive in Nigeria. For example, it was explained to me that Germans overuse their stuff, almost like Nigerians, while American stuff was good because Americans change it as soon as the new model comes out. (Swiss people tend to behave like Germans.) Further discussions show that this information is related to different sensibilities and practices surrounding personal data. For example, it is common for European companies to drill (or take out) their hard disks when changing their computers, while “Americans they just send it like this”, as Ifeanyi explained to me while showing me a load of desktop computers that just came in and still contained information from the San Francisco Police Department¹³⁵.

I mention these examples, in part for the fun turning the tables: being observed and describe, instead of observing and describing. But there are other points I want to make. On the one hand, stuff that comes from the ‘West’ is used and there is a sense of picking up somebody’s else leftovers. On the other hand, even in such a position, agency and market skills are at work. Since *fairly-used* goods are always bought *untested*, the origins and their meaning are part of the tricks of the trade for running a successful business. Finally, I give these details, as general elements, because I believe it is important to understand that the value of goods in their used, reused, and discarded steps of life also depends on seemingly unrelated elements such as the sensitivity to private life protection or

¹³⁵ As already mentioned on note 77 the concerns about data theft, common among those who transfer used computers, does not seemed justified according to the practices in the market. Resetting the HDD is one of the first steps in the process of standardising and transforming a *fairly-used* computer into a sellable good. The gathering of information and other e-scams follow different paths and represent a very different story.

upgrading offers. This adds interesting insights to the biography of objects and the global value chain theories, which would deserve further investigation.

The Good, the bad and the cheap

Alongside *fairly-used* there is *China*, a label that, in Computer Village, refers to anything coming from China. Like Africans in China, Chinese products in Africa have attracted a fair amount of attention from scholars. The first aspect, on which there seems to be general agreement, is the fact that African markets have been flooded with cheap Chinese products manufactured in the PRD (Goldstein 2008): the China goods tsunami (Zhang 2008). On the one hand, the massive presence of Chinese objects in Africa has been discussed by denouncing their cheapness, implying a short life span with environmental consequences, or *unfair* competition with local products (Röschenthaler 2016). On the other hand, scholars also pointed to the social impact of their affordability in terms of agency (Mohammad and Kernen 2016), as well as their impact on the democratisation of consumption (Röschenthaler 2021), hinting at their potential as an alternative to the West (Marfaing 2019). In a certain sense, there are two opposite points of view articulated around positive and/or negative impact of Chinese objects on African markets and societies. These are not without resemblance to the more general arguments about the whole phenomenon of China's presence on the African continent, and to broad-brush macro approaches to the China-Africa relationship. Unfortunately, these discussions often reproduce the dichotomous view of *afro positive* versus *afro negative* perspectives, a dichotomy I hope to transcend¹³⁶.

My work definitely aligns with those stressing the agency brought by the presence of Chinese objects in Africa. However, while scholars often understood Chinese objects in opposition terms to 'Western' objects, I suggest that Chinese and Western objects should be understood in complementary dynamics. In fact, Computer Village shows, from its birth to today's dynamics, that objects from different origins are joint in the success of the markets. In Computer Village the Chinese products'

¹³⁶ Of course, resentment regarding the quality of Chinese products is not specific to Africa. My grandmother used to complain about the poor quality of Chinese goods in similar ways. The fact is that China has become a major player in the global economy and has brought major changes in "our" markets and consumer practices as well. It may be worth thinking about the possibility that observers (scholars as well as journalists) tend to exoticize discussions about Chinese objects in Africa. It is important to understand that "contemporary Africa-China engagement takes place within a larger context of global capitalist transformation from which it cannot be detached" (Monson and Rupp 2013, 24). In my opinion, this means considering the cohabitation of objects from the 'Global North' with imports from China, understanding that Western objects have flooded developing markets for decades, and finally, understanding that cheap, low quality Chinese objects have been a major change not only for Africa but for all markets. This does not mean that there are no differences in the impact Chinese products have on different parts of the world. However, the decontextualization of China-Africa relationships from the globalisation movement is not an innocent act; rather, it tends to reproduce the marginal role of Africa in the global economy and, once again, reinforces the divide between 'below' and 'above'.

narratives are marked by a double discourse, which I translate here into two hierarchies: one based on quality and the second on availability. Side by side, these illustrate the complementarity I argue here, as well as the ambiguity of Nigerian markets within global exchanges.

The discussion I had with Chuks about spare parts and their sourcing is a perfect illustration of the double narrative surrounding Chinese objects and trade with China. As mentioned above, Chuks finds the spare parts for his repairing activity via the internal circulation of goods characterising Computer Village, but he also buys directly from China. Yet, when buying from China he *only* buys from one particular businessman, a Chinese trader who used to work in Computer Village until homesickness called him back home. Talking about spare parts from China, Chuks insisted that this Chinese friend is the only person he can buy from, immediately adding a few comments on how dealing directly with China comes with a number of quality and logistic problems: “Last time the motherboards they sent were not good, and with only a one-month guarantee, you don’t have the time to send them back.” (Chuks, 25.08.2012). There are countless stories about quality issues with Chinese products. These are so common that in the market—and beyond¹³⁷—that the word *China* could be used as a synonym for bad quality and/or fake products. People complained about the fact that Chinese products didn’t last and were impossible to repair, as illustrated by the note that phone repairers would display in their shops: “Flashing and unlocking of Chinese phones at owner’s risk¹³⁸”. Or, as Ogu Livinus put it when talking with a customer whose computer was no longer charging, inquiring about the brand of the charger: “Because it’s China, it doesn’t allow us to know the truth!” He was referring to the fact that whatever the brand name or information printed on the charger, there was no guarantee of the quality nor characteristics of the product. (Incidentally, this is also an illustration of the standard-substandard continuum I discussed above.)

Still discussing spare parts, Chuks carried on explaining that he also bought from the USA—via internal circulation. He showed me a motherboard: “This one is new, brand-new from the US! It’s not China, it’s not *fairly-used*, it’s not refurbished. It’s brand-new US.” In telling me this, he was clarifying the good’s place within the market hierarchy, a quality hierarchy that, in emic terms, starts with *China*, before splitting into the subcategories of *China refurbished* and *substandard*, followed by *fairly-used*. This latter, as explain above, is also hierarchised, with US *fairly-used* and UK *fairly-used*, at the top.

¹³⁷Comments about Chinese products were common well beyond the market, often expressed as jokes or slang, for example at a certain point some people *China* was used as slang to address any body acting crazily (or suffering from mental illness) because “it doesn’t work”.

¹³⁸*Flashing* here means to reset the motherboard of the phone, deleting all the data and restoring factory settings; this is not to be confused with *to flash*: make a missed call on somebody’s phone in order to be called back and save phone credit.

Then there is *factory refurbished* which, unlike *Chinese refurbished*, are goods refurbished by official brands such as HP. These come in brown boxes, usually from the USA since European countries have different practices¹³⁹. At the very top, there is *brand-new USA* (and *brand-new UK*). *China* is to the very bottom, even though, as explained before, Chinese quality can vary greatly. Nonetheless, it is still common for traders to affirm that *untested fairly-used* from the USA has more of a chance to work properly than *China refurbished*. The main point is, in the market there is a quality-related hierarchy: Nigerians complain about Chinese products.

On the shoddiness of Chinese stuff, it is interesting to point out that the responsibility for this problem is sometimes attributed to Nigerian traders themselves and/or to the Nigerian government. The first are said to import bad quality for the sake of short-term profit. In this case, the complaint refers to the general greed of businessmen, who will take advantage of any situation, as was explained to me many times: "Because in China you can go and say, 'Make this but with just one screw'" (Moses). Despite this general mistrust directed towards Nigerian traders by Nigerians themselves¹⁴⁰, this phenomenon is not specific to Nigeria. Fioratta, discussing shoddiness in Guinea, also observed a discourse of shared responsibility "although they blame China, they did not exonerate Guinean businesspeople who imported goods for Chinese manufactures at the lowest possible prices and who, of course, sought to make profit." (Fioratta 2019, 86). As for the government, its responsibility for bad quality arises from the general and very common complaint about and against the government (Smith 2007; Maier 2000). The Standard Organisation of Nigeria (SON)—like the rest of the Nigerian government—is regularly accused, at best of not doing their work, at worst of being a hopelessly corrupted bunch of thieves. These criticisms addressed to the SON are also mobilised concerning the trash western countries regularly send to Africa. In sum, the traders consider that the Nigerian government protects its citizens neither from China substandard nor from western trash.

There is, however, another hierarchy in the market, not based on quality but on accessibility, and this hierarchy goes the other way around. Hence, if Nigerian traders are perfectly aware of the problem of low quality and may resent China for it, they also have words of praise for China.

¹³⁹ Note that this was also the case for phones: refurbishing was definitely happening in China, with 7 days, and 14 days, but also in the USA. Interestingly enough, finally even Switzerland "discovered" the interest of repairing phones, and in the last few years refurbished smartphones have been sold by the major distributors such as Migros and Coop.

¹⁴⁰ Indeed, Computer Village complaints about traders making money via substandard products come with a double narrative of admiration and criticism: admiration for those who make money and a simultaneous condemnation of the ways in which said money is made.

Still holding the brand-new USA motherboard in his hand, Chuks explained that new spare parts could also come from the USA, while it was almost impossible to get them from the UK. "In Europe, you don't have engineers; you don't repair. What they do is to change your machine; they just keep your hard drive. Now the company, for example HP, can scrap these machines and give the parts to the engineers who can sell them... from UK you get more second-hand." (Chuks, 25.08.2012). In this reversed hierarchy, China's products are on the top, greatly more accessible than those from the US and the UK (as well as from other European countries).

Accessibility here includes availability—corresponding to quantity—and affordability—corresponding to price. But most important, they both translate into the fact that China's markets are open markets. Despite possible difficulties with the government and migration policies, Nigerians in Guangdong province, and African traders more generally, have access to plazas and markets such as Dashtou. By contrast, in the USA (and Europe), business for African entrepreneurs is mainly based on personal contacts.

So, if there is resentment toward Chinese objects on the basis of quality, this is counter-balanced by a business-based appreciation. Or as Chuks put it: "Thank God for China!". This appreciation implies, with no effort to hide it—quite the opposite actually—a resentment toward the 'West'.

It takes three to tango

Nigerian traders understand access to Chinese markets in terms of the Chinese being willing to work with them. Chinese not only produce and refurbish for Africa, as illustrated in the previous chapter, they also actively invest in building trading relationships with Africa, as shown for example with the description of targeted offers and presentations in Dashatou Plaza. This is understood in direct opposition to the *West*, which may provide better quality but has no respect and no will to build business relationships with them. The *West* is simply getting rid of its grade-A garbage and does not treat African traders as valuable and equal business partners. So, while China offers plazas where the salespeople speaks *pidgin* and computers run Wizkid clips, in Europe, African entrepreneurs collect used stuff via charity (Abimbola 2011) or auctions. Chuks illustrated these differences by explaining how, in the past years, Chinese traders have been coming around the market asking Nigerian businesspeople and engineers what they wanted. And he repeated: "Thank God for China!".

The attention Chinese businessmen paid to the needs of the local market is clearly illustrated by the phone business, above and beyond the trade in used goods. A registered phone retailer in Computer Village, who has been one of the top three Nokia resellers in Africa for years, explained to me how, for

years, he and other phones retailers from the market¹⁴¹ had been suggesting to Nokia to produce double SIM-card phones¹⁴². Without success. Meanwhile, Chinese brands started producing double SIM-card phones and offering other features that are interesting for the African market (e.g., lower camera quality and longer lasting batteries). As a consequence, phone resellers in Computer Village started selling Nokia phone below cost, with no margin or even at a loss, in order to sell them as fast as possible. The reason behind this was that, while Nokia supplied African retailers on credit, the Chinese factories always demanded a down payment—as high as a third or half of the total price—before starting production, and the balance at delivery. (Chinese don't sell on credit.) By fast-selling under-priced Nokia phones, African traders could gather the capital necessary for the down-payments and balances necessary to acquire Chinese phones. Nokia phones became a means to generate the liquidity needed to get the African-adapted phones that it refused to produce. So, today, Nokia phones are no longer popular in Nigeria while Tecno, a Chinese phone brand, has become a central player in the market. Not only are buildings in Otigba street painted with the blue and white colours of the brand, but, as Chuks put it, after Nokia (and its knock-offs, e.g., "Nokkia") "people are buying Tecno today as if they were buying Samsung or Nokia, and they are very happy with the product."

Phones are not at the centre of this dissertation. However, this example is relevant for my demonstration in different ways. First, phones cast light on the fact that the dynamics and discourses around Chinese and Western objects, and by extension economic practices, that I observed in the informal UEEE trade seem also to exist within formal markets. Second, it helps to understand how awareness of the cheapness (the result of structural disadvantages) and a sense of identity-based pride (resulting in various expressions of agency) can go hand-in-hand. This tension between constraint and agency is wonderfully illustrated the very popular knock-off *Versage* t-shirts. In their well-known art project, Gaestel and Kunzenon discuss the aesthetics of *Versage* as an original creation: "No one believes that they are buying Italian Versace [...T]hey are rather shopping for something made specifically for the low-class Nigerian consumer: fashionable, fine, and affordable [...], *Versage* is a distinctly Nigerian creation, and one that is made in ChinAfrika. It alludes to Western

¹⁴¹ For years the top three Nokia resellers on the African continent were all from Computer Village.

¹⁴² It was very common in Nigeria to have more than one sim card, thus more than one phone. This was explained by cost optimisation practices (calls and messages from and to the same operator are cheaper), but also by the fact that network problems were very common and relying on only one operator might not be advisable.

styles, American hip-hop or European designers. But the look is then tweaked to fit Nigerian taste: more bombastic, more patterned...just *more* »¹⁴³.

On a more general level, this example of *made in China, designed in Africa, involuntarily sponsored by the West* shows the multiplex entanglements of economic relations between these three collective actors. These entanglements cannot be thought of separately, nor as sets of bilateral relations, because they exist and can work only in a tripartite dialectic. As Computer Village was born and grew as an economic space because of this complementarity between three sets of actors, so the agency of African traders exists in a triangular dynamic.

To think of this economic exchange as triangular also allows us to overcome one of the tensions that run through this work. In fact, both exclusion and agency, afro-pessimism and afro-positive and, finally, below and above are present in this three-way tango. And all these aspects, along with Igbo norms, shape the practices and discourses of Nigerian entrepreneurs.

So what?

In this last chapter, I came back to Computer Village, this time with a focus on objects. First, I briefly discussed *tokunbo*—importations from the 'West'. Besides explicating the various subcategorization of 'Western' objects, this establishes the link between UEEE trade and older second-hands goods.

Then, I introduced Chinese products in Africa, on reporting an ambivalence often found in the scholarly literature, articulated around the tension between affordability and bad quality. Bad quality has mainly been targeted in environmental terms as the 'danger of the Chinese tsunami', while affordability has been discussed in terms of African traders and consumers' agency. Despite these differences, Chinese goods are most likely to be discussed in oppositional terms, as competition for or as alternatives to, 'Western' objects.

Computer Village shows how the presence of Chinese goods has to be understood in complementary interaction with the importation of used stuff from the 'West'. The birth and growth of Computer Village as an economic space were possible because of the *complementarity* between importations from the 'East' and those from the 'West'. This is the case even today: goods from China, with different quality levels and at different stages in their biographies, are essential to the success of the market, but only because they are mixed with 'Western' goods. Complementarity has become

¹⁴³Online publication of an artistic research project: *chinafrika.underconstruction.org* [last consulted, on the 17.01.2022: <https://www.chinafrika.org/material/working-group/versage-by-allyn-gaestel-and-benedicte-kurzen/>]

entanglement. However, despite this, traders in Computer Village themselves organise objects by way of two inverted hierarchies. The first one, based on availability, places Chinese goods at the top; the second, based on quality, sets 'Western' goods at the top.

Traders explain these hierarchies as the materialisation of different economic attitudes that the 'East' and the 'West' display towards Africa. In fact, the resentment against bad Chinese quality is balanced out by the acknowledgment that Chinese suppliers treat them as business partners, rather than as objects of charities or as victims, a script that often underwrites the arrival of UEEE from the 'West'. Thus, the accessibility and availability of Chinese goods are not only understood in term of prices, but also in terms of respect and equality. This attitude is directly opposed to the dismissive attitude of the 'West': China goods vs 'Western' trash.

I discussed this double narrative in terms of three-way relationships that could be sum up as *China made, designed in Africa, involuntarily supported by the 'West'*. By highlighting this tripartite functioning—illustrating that through the example of the portable phones market, which suggests that this logic also applies in more formalized contexts—I argue that the agency of African traders has to be understood in global networks extending both 'West' and 'East'. The agency of African traders cannot simply be understood in bilateral relationships. Rather, it takes three to tango.

Finally, I would add that the three-way tango also demonstrates the structural limits Nigerian traders' agency. Throughout this study, I have insisted on shedding light on the "agency that often lacked in the first generations of studies on China-Africa" (Jedlowski and Röschenhaler 2017a). However, the double narrative of complaints about and praise for China and the 'West' that I reported also opens the door to understanding the limits of this agency. The triangular agency I discuss clearly puts the tree back in the forest, by re-placing Africa, as well as China-Africa relations, within the context of global capitalist transformation (Sautman and Hairong 2008). This is key to showing the skills and agency with which African traders navigate the global economy, making them active actors whose choices and work bring digitalisation and economic growth to Nigeria and many other countries on the continent.

However, this triangulation also sheds a harsh light on their structural exclusion from the centres of decision-making within global production networks. In fact, when it comes to computers, *made* is actually *refurbished*, *new* is *substandard* and *grade-A* is waste. This complementarity is a choice by default. Nigerian traders' agency is embedded in structural exclusion.

Dell 626 → 25K 08033015209 *p 220
 Dell 630 → 25K 27K
 Laptop MOTHER BOARDS 28K
 All Pavilion
 Hp DV6000 m/b Intel & AMD. 17K
 DV5000 Intel & AMD
 DV4000 Intel/AMD
 DV6 Intel/AMD. 26K (selling)
 Compaq CQ60, CQ61 & CQ62 m/b Intel/AMD
 and
 Hp T6100, T6200 & T62 All Tablets
 Intel/AMD.
 Laptop SCREEN → Mother
 307 hp DV6000
 15.6/gloss 15.4" gloss/Normal (LCD)
 module → 15.6" moduleless/module (LCD) 289
 14.1" gloss/Normal (LCD)
 Ultra Slim Paper Screen for Sony 14.0", 13.1" and
 13.3" DV3000 13K
 10 p.
 For mini laptops → module: battery
 10.1" 7K - 269 → connector
 glass top. 4'6" longer with pin

Chuks' shopping list. Lagos-Guangzhou, 2012



Mega Rich posing in his shop. Tong Tong, Guangyuanxi. Guangzhou, 2013



Obinna (Left) and his assistant at his logistic company. Cannan Plaza, Guangyuanxi. Guangzhou, 2012



Dashatou Second-hand market main entrance. Guangzhou, 2015



Shops along Dashatou Second-hand market. Guangzhou, 2015



Phones and accessories resellers, 1st floor, Dashatou Second-hand market. Guangzhou, 2015



Refurbished laptop resellers, 2nd t floor, Dashatou Second-hand market. Guangzhou, 2015



Shopping at Shen Xian Dashatou Second-Hand Market. Guangzhou, 2015



Mega rich assisting his brother shopping in Dashatou area. Guangzhou, 2015



Refurbished laptop reseller, Dashatou Second-hand market. Guangzhou, 2015



China refurbished phones. Dashatou. Guangzhou, 2015



China refurbished laptops. Dashatou. Guangzhou, 2015



Mega Rich, cartons and tape, Tong Tong, Guangyuanxi. Guangzhou, 2013



Late evening, ready to fly to Lagos. Tong Tong, Guangyuanxi. Guangzhou, 2013

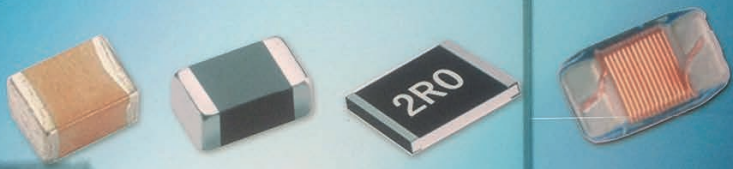


Micro-components. Shenzhen, 2015



Micro-components. Shenzhen, 2015

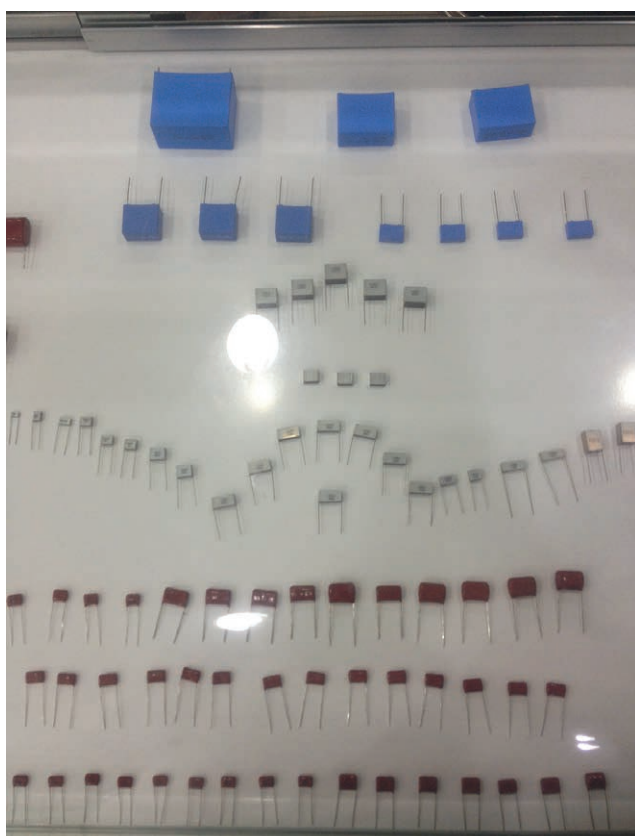
Shenzhen Fortune Technology Development Co., Ltd.
is the professional SMD passive electronic component
supplier, including chip inductor. Capacitor. Resistor.
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QQ: 1635876070
Http:// www.elecfortune.com

Fortune Techonology Devepement. Shenzhen, 2015

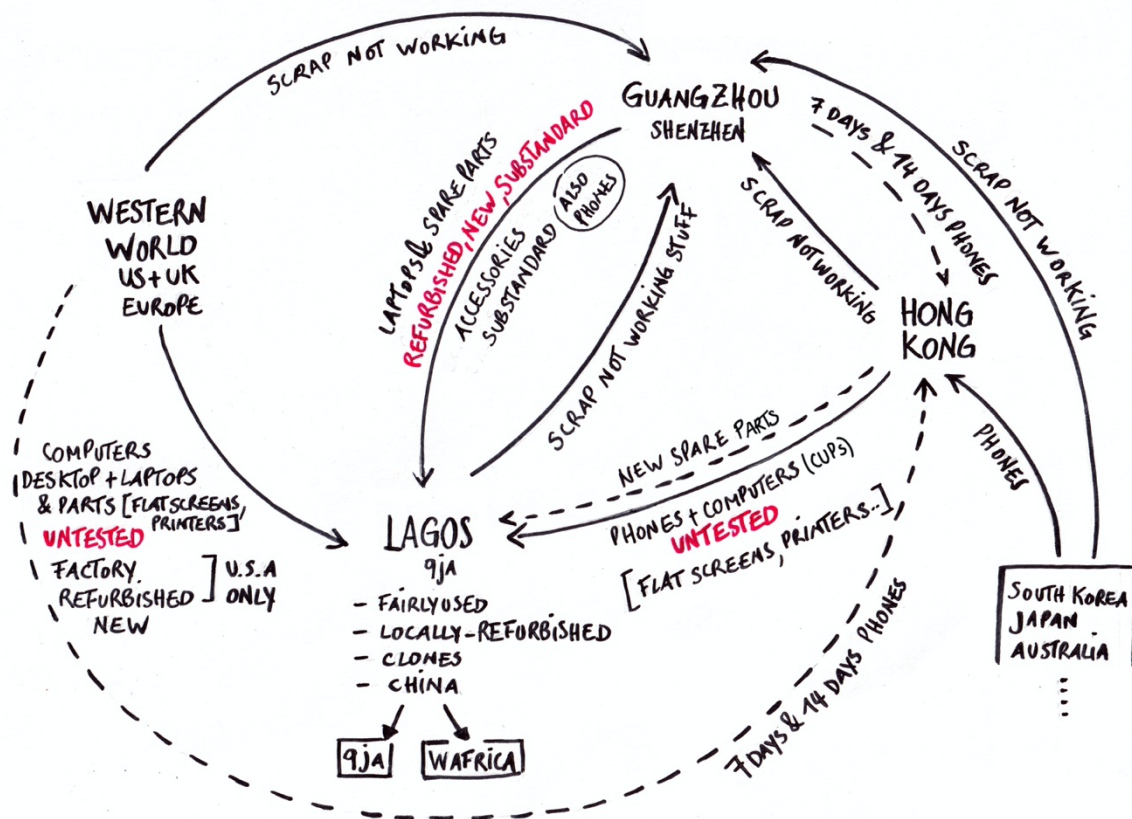


Micro-components for sale gracefully exposed. Shenzhen, 2015



Chinatown main entrance. Lagos, 2012

Conclusions | water don pass gari



Water don pass gari literally means 'there is more water than garri'. It is used to refer to situations that have become serious, in a bad way.

Garri is a major staple food, prepared with the flour of cassava. Among the swallows served with soup or stew, it is the cheapest and easiest to prepare: pour hot water in a bowl, add the flour, stir, enjoy your food.

I opened this dissertation with a reflexive discussion of my own emotional maelstrom in relation to e-waste. To close, I circle back to its first chapters, discussing the e-waste misunderstanding, and clarifying what I meant by “good vibes and dirty stuff”. I focus on reuse, drawing on the elements gathered along this journey through the UEEE circuit, I draw a Nigeria-centric map of the re-use step. At the same time, my detailed examination of processes of object categorisation and my overview of the different factors shaping the reuse markets demonstrate the global complexity of the trade in UEEE.

The light that this analysis casts on UEEE circulation seems to me to provide important insight for e-waste and UEEE studies, which, in turn, may be important for adjusting regulations to the realities of the field, thereby avoiding ill-directed sanctions. However, its main utility is to challenge accepted wisdom on larger issues: through my critique of the linearity trap by raising awareness of the complex biographies of objects and finally by promoting an understanding of entangled globalisations.

This map is also the opportunity to talk about some limits. I spent over 200 pages arguing for the agency of Nigerian traders in order to oppose the standard victimising e-waste narrative and critique the limits of the ‘globalisation from below’ paradigm. While I stand by this analysis, I cannot deny that there is another side to the coin. As suggested with the closing sentences of the previous chapter, Nigerian traders deal with leftovers, what other consumers and businessmen no longer want. Their economic system, their agency and their infrastructure are built around stuff that others have discarded; their choice of goods is (often) a choice by default.

In this conclusion, I will therefore address a last aspect of their entanglement within the global trading order, pointing at how Nigerian traders—and other economic actors in similar positions—participate in maintaining an economic order that largely excludes them by handling the discards and enduring the risks and disadvantages that go with them. Thus, while the dirty stuff may not be that dirty, the good vibes associated with it may actually be part of the problem.

And this, I worry, is where *water done pass gari* within the global economy.

14. Mapping the reuse step

Discussing the *e-waste misunderstanding*, I establish how my research and e-waste studies meet in what is commonly termed the reuse step. I claim to cast light on this acknowledged yet understudied step. Geographers have largely dismantled the simplistic idea of the 'Global North' shipping waste to the 'Global South', mainly by pointing at 'South to South' circuit and local production of e-waste (Lepawsky and McNabb 2010; Lepawsky and Mather 2011; Crang et al. 2013). Their conclusions were mainly based on observations of the trajectories and quantities of flows in e-stuff. My findings are in line with this general idea. However, by introducing new elements such the circulation of spares parts, and describing these flows with emic categories, I greatly complexify the question of what moves where.

Firstly, despite the Nigeria-centrism of my map, one cannot help noticing the role of China—here particularly Guangzhou—as a central *hub* in this trade. In fact, according to traders in the field, China imports from and exports to every other region in the world. This aligns with scholars' observations on China's leading position as an e-waste *importer* at the time of my fieldwork. However, they focus primarily on the question of metal recovery, and mobilise the principle that one's trash is somebody else's treasure, to understand these flows in terms of urban mining (Lepawsky and McNabb 2010).

From the Nigerian point of view, China's central role is as an *exporter*, an exporter of refurbished stuff. Thus, I shift the focus from urban mining to what I consider to be the central role of the reuse-repairing-refurbishing circuit. More specifically, China exports *only* refurbished stuff. As Mega Rich put it: "If it's 'China' it has to be refurbished." In fact, China imports from everywhere and re-exports e-stuff after adding value, after creating and capturing value. Chinese businesses can do this because of the massive presence of a trained workforce and the widespread availability of tools and spare parts that characterize the PRD areas—also very active in the informal refurbishing economy (Schulz 2016, 2018). In other words, the central role of China in the circulation of used stuff and their leading position in the import of e-waste was directly related to their leading position as global manufacturer of electronics—with the associated infrastructure and knowhow—supplying the world with products of all qualities, grade-A brands included. The leading role of China both in the brand-based trade in computers and in the circulation of used computers both stem from the same industrial environment. It is this fact that I seek to highlight with the concept of entangled globalisations, and it depends on China's willingness to deal with any and all economic actors who wish to do business with it. Not only can they refurbish, they are willing to adapt their refurbishing practices in order to supply different markets with different products.

Nigerians also import from different regions. Imports are done in a way that combines the best options for Nigerian markets, in terms of quality and price, including the possibility of creating and capturing value *in situ*. As discussed above, Nigerians' wiggle-room manifests itself via Chinese refurbished laptops that are adapted to local market demand. A similar logic applies to the import of spare parts and accessories, both situated along the continuum of *standard* and *substandard* goods. On the other side of the map, *fairly-used* grade-A stuff from the 'Global North' is only and always imported as *untested*, fostering local economic activities such as standardising, repairing and dismantling in order to source spare parts *downstream*, despite international regulations. In this context, it is interesting to note that Nigerians do not import desktops, external screens, printers as *refurbished*. The reason behind this is simply that Nigerians too, like Chinese traders, want to add value to their goods. Thus, they will not pay extra money to import goods that they can repair (or refurbish) themselves. As the history of the market shows, local engineers have the knowledge to clone and repair desktops. This was possible not only because desktops have been around longer than laptops, but also because the latter have been less hit by non-refurbishing friendly designs.

This implies that design evolution as determined by planned obsolescence made the role of China even more crucial in the UEEE trade. In this regard, the position of Hong Kong is quite interesting. Historically, Nigerians used to import full containers of *fairly-used* desktop and along with new spare parts. This was probably due to the hybrid position of Hong Kong, identify as the 'Global North' when it comes to *fairly-used*, but as 'the East' when it comes to access to new spare parts. When mainland China opened up as a destination for trade (and migration), Hong Kong lost part of its attractivity in *fairly-used*, but still held a central position in the cell phone markets, but as well as a 'door' between China and Nigeria.

Finally, Nigeria is also an exporter. Despite this not being part of my work, I would not want to overlook the fact that Computer Village—as well as Alaba International Market—export their goods to the whole of West Africa, establishing Lagos as a regional hub. Furthermore, exportations from Nigeria to China also exist. Within Computer Village, broken things were collected and then sold by the kilo to Chinese traders. In the market, there were also metal and plastic scrap businesses run mainly by Hausas, which may also have been part of the larger citywide scrap businesses also run by Hausas.

Mapping the reuse step allows me to return to different points I raised in my introduction. First, it shows how repairing *has* to be taken into account when it comes to the circulation of UEEE and e-waste, as it is at least as important as urban mining, if not more. Second, it shows that there are regional specialisations, and that the success of the UEEE trade is grounded in using and combining

these differences, just as with brand-based business. Finally, these elements lead to a more general consideration: the need to rethink value, production, chains and networks.

Trading waste presumes that trash has value, forcing us “to rethink fundamental theoretical assumptions in the GVCs and GPNs literature about the nature of value, particularly where and how it is captured and created.” (Lepawsky and Billah 2011, 122). Geographers have established that the creation and capture of value are present not only in the production process, but also in destruction. Things can acquire value by being torn apart, be this through urban mining or the dismantling of ships to yield furniture (a big hit among the Bangladeshi middle classes) or the *downstream* sourcing of spare parts via *scrapping* that I described for Computer Village. This led them to the concept of “global destruction networks” (GDNs). The very existence of GDNs challenges the concept of GVCs, which are, by definition, linear with a clear endpoint. To overcome this difficulty, Lepawsky suggests the notion of *ongoingness*, describing the value of things beyond their supposed end, and conceptualising value as related to the actions of people. This brings him (and others) to the analysis of the economy in terms of performativity: it is what people do that adds value to things (Lepawsky and Billah 2011; Lepawsky and Mather 2011). Herod, Pickren et al. (2013) agree with Lepawsky and others about the need to abandon the metaphor of linearity. They insisted that waste cannot be understood without thinking of its production within capitalism. They argue that ‘devaluation’ is *essential* to capitalism—creating the premature loss of commodity value—as opposed to ‘devalorisation’sSa process by which value ‘naturally’ wears off. “In this regard, waste’s *ongoingness* via its passage through GDNs is shaped more by the capitalist logic of production and adding of value capture, than by the ‘performance’ of recyclers bringing waste into being.” (Herod et al. 2013). Basically, they say, things are still used after their supposed end because that was not their natural end, but a premature one, brought on through planned obsolescence.

I cannot but agree with these statements and my work reinforces the challenge to linearity. However, I believe the example of trade in UEEE adds a further level of analysis. Questioning global chains of value is not only a matter of *ongoingness*¹⁴⁴, or the performative economy, in the sense that one man’s trash is another man’s treasure. In fact, the notion of *ongoingness* fails to take into account the diversity and complementarity of new, used, scrapped and discarded goods that I observed in

¹⁴⁴ Indeed, I wonder about the relevance of questioning where the beginning and end of a commodity are in the first place. Is this not a matter of focal distance? At the risk of sounding extreme (but for the pleasure of the exercise), could one not also argue that even a completely ‘used-up’ commodity (that was not prematurely devaluated for the need of economic growth), ending up in an incinerator and producing energy that is then pumped into a municipal heating system, keeps creating value?

Computer Village, and which demonstrated that value is not only created outside GPNs in GDNs, but rather in their *conjunction*, in the assembling of objects at very different steps of their biographies. Moreover, this conjunction of GPNs and GDNs mainly happens through overproduction. While this point is compatible with the argument that capitalist GPNs heavily impact GDNs via the massive presence of prematurely devaluated goods, thinking in terms of premature devaluation still implies that the object has been used, even if for a shorter period, as a commodity—as it was *intended to be*. My point, however, is slightly different: the massive overproduction linking GPNs and GDNs is made up of goods that capitalism's need for growth has killed in the cradle, before they have even served '*as intended*' in any GNP. These objects—substandard or 'defective' products—find their value for the first time in these *other* networks. In short, with capitalism, GPNs impact GDNs but through 'supply chain capitalism', these two networks have become completely and thoroughly entangled. The presence of this massive overproduction alone is proof that thinking in terms of the linearity of GVCs may be more about denying complexity than about economic theory.

When fast-fashion electronics is combined with the hyper-fragmented production networks, the biographies of objects cease to be linear. The trade I have been learning to understand is all about overlapping and crossing, a constant movement of new stuff, old stuff and refurbished stuff pretending to be new. Moreover, this intertwining of the formal and the informal, of production and distribution, the refurbished and the scrapped can only take place thanks to an interface of economic actors with different competences and skills. An interface that deals with things at various stages of their biographies, constantly vacillating between the so-called formal and the so-called informal.

Indeed, the complexity of these flows, the size of the phenomenon and the importance of their role in the global economy are such that they probably deserve their own name. I suggest that the entanglement of GPN and GDN could be conceptualized as global reuse, repair and refurbish networks or "GRRR". GRRR networks challenge the very idea of 'working' and 'non-working' stuff that underwrites most legislation and regulation in this field, but also contributes to my critique of the 'globalization from above' and 'from below' dichotomy.

This focus on categories and the intricate paths through which stuff flows is illuminating not only when it comes to describing what is actually going on, but also because categories form the basis for regulations and norms, and thus for crimes and punishments. The paths for recycling UEEE are as complex and multiple as are the outsourced EEE production networks, simply because they are actually working as one. And this, thanks to the efficacy and grace of economic systems that feature ways to deal with fragmentation, and provide complex, fluid trade circuits, thereby exercising a remarkable degree of collective agency.

The agency to get by

Highlighting this agency is my response to the aim I set myself at the beginning of this work: overcoming the victim-centred understanding of the flow of UEEE. This led me to describe the economic practices that make such a fragmented business possible, arguing they should be understood as an economic system with norms and values, not coping or survival strategies, which moreover evolve on a global level, demonstrating both the diversity of globalisations and the need to stop thinking in terms of 'below' and 'above'. I fully stand by these statements. However, none can deny that this agency finds expression within a context defined by a number of structural limits.

First, much of this agency is used to trade in leftovers. Nigerian traders are not wondering: "Hmm, should I buy this new MacBook Pro? Nah, let me get this old HP 6220 with a crappy substandard camera." The very fact that I discussed agency, observing the complementarity of refurbished, substandard and *fairly-used*, clearly signals that these are choices by default. The mix of substandard goods with grade-A trash that provided access to IT goods at affordable prices was first and foremost caused by the fact that grade-A goods are not available to them, at least not to the extent they are in other countries. The quality of goods both symbolises and materialises the hierarchy of global markets. Once again, phones, despite their not being at the heart of this work, offer a good illustration. *Seven-days phones* and *fourteen-days phones* are probably the best example of this ranking. Their name indicates that these are phones from the US or other grade-A countries that have been used for only one or two weeks before being taken back to the seller in order to upgrade to a newer model. Thus, they are perfectly functioning and top quality. This narrative relies on the representation of abundance in wealthy countries (and economic practices caused by planned obsolescence). The fact that they were sold in Hong Kong is supposed to be an extra guarantee of their quality. In fact, Hong Kong, unlike mainland China, sits on the side of rich countries. As Diallo explained, with a beer in one hand and a joint in the other, staring at the Hong Kong skyline he participated in building: "[*7-days phones*, the *14-days phones*], they all come from mainland." They are refurbished in China and sold as *7 seven-days* in Hong Kong. The interest in disguising their original target market and their circulation resides in the fact that objects are ranked in terms of quality. And, of course, this quality hierarchy reflects an unspoken hierarchisation of the regions in the world, and, implicitly, of the people who inhabit them. Finally, this hierarchisation expresses itself through price. For example, on the used goods market, a phone that navigated through mainland China to be refurbished is cheaper than a phone that only travelled through grade-A countries. Similarly, with Chinese refurbished phones that are clearly labelled as having been refurbished with substandard parts, the primary country of origin can still be important. In fact, metadata showing the original market distribution are regularly publicised to the customer as proof of quality and impacts

the price: US and European phones are more expensive than, for example, South Korean ones. Grade-A countries are ranked too¹⁴⁵. Specific market standards have become a materialisation of the brutality of global hierarchies, and if the terms “First”, “Second” and “Third World” have been banned from global discourse, they are still present in the hierarchy of goods of their respective consumers.

Second, Nigerians’ agency is limited by lacking infrastructure. During my short trip to Shenzhen, two things were of particular interest to me: the number of advertisements for schools, trainings and workshops displayed everywhere and the fact the plazas were filled with connectors, resistors, chips, and other micro components. Nigerians, despite the great agency they mobilise to surf the flows of global UEEE, face major obstacles in terms of education and market infrastructure. This is why, in Computer Village, repairing activities are mainly handled at the level of spare parts, as the know-how, tools and machinery to work the micro-component level are simply not accessible. Similarly, even with repairing on the spare-parts level, the work of local engineers is generally considered of lower quality than that of their Chinese counterparts. This is not simply a reflection of internalised domination. Chinese engineers have definitely benefited from a better educational environment and have acquired significant knowhow that is not available to their Nigerian counterparts. In short, despite Shenzhen and Computer Village both being nicknamed “Silicon Valley”, their roles and status in the global trade in electronics are radically different.

Finally, on a more general level, during my years in the field in Computer Village, I was reminded numerous times that if *over there* things were better, this was because *my* government did something. It is undeniable that material infrastructure, education levels and, generally, economic environments are heavily impacted by historical and political factors that, partly correctly, also feed into the general victimising narratives on e-waste. The difficulties faced by the traders are apparent every day in Computer Village, in the general environment of the market. The density of people, noises, smells and heat that I described in the opening pages are nuisances that take a toll on everybody’s health. Most of the traders, no matter how well they *manage*, could use a bit more comfort in their everyday lives.

In sum, simultaneously taking into account traders’ agency and the structural difficulties they face is fundamental to avoid both an afro-positive and an afro-pessimist bias, neither of which provides the whole picture. The position of Nigerian traders here is similar to that which Pickren describes for recyclers: “to paraphrase Marx, recyclers admirably preform value into being from waste, but they do so not within conditions of their own choosing.” (Pickren 2015, 414). The point is, there is power at

¹⁴⁵ Apparently, sellers regularly modify such metadata in an attempt to disguise the original target market, which reinforces the argument of ranked markets.

stake. Some actors and markets, mainly in the 'Global North', clearly benefit more substantially from the global economy. As academics, we need to find a way to discuss these global inequalities not merely by emphasising the coping strategies of the victims, but also by challenging the privileges of the powerful.

It is a two-way street

I have discussed the entanglement of GPNs and the networks of reuse, repair and refurbishing (GRRR) by showing how these *other*¹⁴⁶ networks absorb the overproduction of global production networks. As such, the entanglement of GPNs and GRRRs could actually be understood as a complexified, nonlinear version of the "fall out of the truck" narrative, told again and again, implying the dependency of the latter on the former. Here, I want to open the discussion of the possibility that this dependency may be a two-way street. There might be mutual dependency, as fragmented GPNs may need the parallel networks of GRRR to handle their chronic overproduction.

Overproduction can be understood as both the cause and the consequence of supply chain capitalism. As the main goal of subcontracting is the externalisation risk, overproduction is one of those risks. By outsourcing, corporations have efficiently shrugged off important planning, coordinating and logistical costs, probably resulting in overproduction. In the complex outsourcing system, corporations only buy what they need when the need it: no need to dispose of nor to stock the possible surplus. Piart (2012) showed the precarity of subcontractors' situations in the garment industry in Turkey, which are heavily shaped by fast-fashion and outsourcing. In fact, brands' sudden cancelations and frequent changes in orders regularly force subcontractors—often family businesses—to sell their machines and other material investments in order to cover their losses. After years of a fierce race to outsource, the burden of risk that stems from overproductions is now on the shoulders of subcontractors, and subcontractors' subcontractors.

The overproduction created in these hyper-fragmented networks flows into parallel markets. This is not a completely new phenomenon, but probably an exacerbated version of the 'fall out of the truck' phenomenon. By exploring the link between suitcase trade and the garment industry, Piart suggests that the production strategies of the major brands, with their massive overproduction, may not have created the parallel trade but modified it. Today, this overproduction regularly finds a solution via suitcase trade, which explains why it is possible to buy a *real* new Zara dress in a street market in

¹⁴⁶ I used *other* instead of informal because, as discussed above, the entanglements of formal and informal are indeed multiple.

Moscow. She argues that suitcase trade provides an *unexpected* and *convenient* market outlet for this chronic overproduction. As such, it prevents the garment industry, shaped by subcontracting and fast-fashion regimes, from being suffocated by its own oversupply.

I agree with Piart's brilliant analysis. However, I suggest that parallel markets may be more than an *unexpected* and *convenient* opportunity for brand-dominated global capitalism; they may be its *sine qua non* condition. IT production is also shaped by fast fashion—planned obsolescence—and high fragmentation, subcontracting being particularly fitted to assembled commodities. It is fair to assume that subcontractors in the IT industry share features with those in the garment industry, since both industries are heavily impacted by fast fashion and subcontracting. As subcontractors are the ones investing in machinery, raw materials and salaries, it seems fair to imagine that outsourcing in IT production networks needs actors with resources, such as money and skills. And these, unlike unskilled labour—which seems to come from an inexhaustible source—may be limited. There may be a critical number of bankruptcies, a critical level of precarity, beyond which subcontractor turnover is no longer guaranteed. As the negative impacts of outsourcing on subcontractors may affect the whole system, there may be a breaking point after which even the most powerful brands would lose at the whole outsourcing game.

The hypothesis that the outsourcing model of supply-chain capitalism could reach a breaking point due to its own hyper-fragmented and risk-shifting nature is largely speculative¹⁴⁷; it would need more field work, and the situation is certainly tremendously complicated. However, it is clear that Nigerian traders, and, generally, the whole GDN system, are part of the same game. I suggest that the possibility of channelling the production that the brands do not buy into parallel markets is not a bonus rewarding risk, it is a vital element without which bankruptcies would be much more frequent. It also helps the whole outsourcing system avoid suffocation under the mass of its own prematurely dead stuff.

In sum, just as the Chinese women involved in global trade do not simply get a taste of cosmopolitan life but actively participate in making the global economy possible, Nigerian traders and *other* networks of reuse and refurbishing participate in making the outsourcing system behind such massive overproduction possible. One could even argue that by rendering subcontractors more resilient, the parallel markets might have helped the outsourcing to become even more firmly

¹⁴⁷ Quite apart from this speculation, both the COVID pandemic and the war in Ukraine have clearly demonstrated that global capitalism—with its deep dependency on the material infrastructures of supply chains—is far more fragile than the last forty years of unfettered outsourcing has led us to believe.

entrenched. Even if *sine qua non* may be a too strong a term, it can be argued that these entanglements should be understood as mutual dependency.

Regarding this co-dependency between different global economies, it is worth remembering what I mentioned in the theoretical chapter on 'globalisation from below' and 'above'. Nigerian entrepreneurs also participate in opening new venues for more 'official' players. Today, official actors are present in Computer Village, and, generally, Nigeria has become a place of investments for big foreign players: Google opened a headquarters in Lagos, the first iStore opened at Ikeja City Mall in Lagos (next to Tecno and Samsung) and Mark Zuckerberg came to visit the "thriving start up environment of Lagos" and he has since been providing Nigerian companies "with digital tools to drive customer growth."¹⁴⁸). That such players can enter the giant of Africa looking for new markets is also possible thanks to the work of thousands of micro-, even one-person enterprises that, against all the odds, created an IT environment that played an essential role in closing the digital gap. As such, the global economy of UEEE was, in its way, vital to the success of GAFA.

The bottom impacts the top, just as Flavour's and D'banj's music blasted through South Chinese plazas before Coachella celebrated Wizkid and Burna Boy, and before the Western world discovered Nigerian music. Igbos were importing *fairly-used* and spare parts to create a market well before Zuckerberg was proudly photographed jogging on the Lekki-Ikoyi bridge.

The work they have done for the last thirty years should get credit beyond the e-waste question and should not be ghettoised through the 'globalisation from below' paradigm. All these actors are entangled in the same economy; one has a scrapped motherboard, the other has the latest AI research project, but they all work within the same system. As Omar would say: "It's all in the game".

¹⁴⁸<https://techpoint.africa/2018/08/30/mark-zuckerberg-nigeria-initiatives/>

In sum, Nigerian traders, by digesting leftovers, have been participants to the system that discriminates against them. And they may even help it involuntarily. Also, they do not have the intention to “take the system down”, unlike myself, I should add, with my political roots in the no-global movement, my anger at the injustice, my perhaps-too-romantic vision of cooperation and my dream to take down capitalism.

This is partly confirmed by the last news from the market. According to traders in Computer Village, since my last visit the market has been growing, more people have been joining the business and phones have taken over a large part of the market. These, however, demand pretty large start-up capital, usually obtained via the banking system, which demands important collateral. This kind capital is generally out of reach for the traders in *fairly-used* I worked with. Today, most of them are still in the market. However, they all complained about the difficulties linked to the exchange rate, which today has reached above 700 Naira to 1 USD in the more accessible black market. This could be read as a formalisation of the market that is slowly cutting out those who created it.

And this is where *water don pass garri*.¹⁴⁹

¹⁴⁹ GRRR is also the sound of my anger, my anger at social injustice, the anger that motivated this work, the anger that this work helped to transform.



Containers by the beach. Tarkwa Bay, Lagos, 2014

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