

11

The  
Pavlovian  
Machine

Henry Chavez and  
María Belén Albornoz

## The waiting

Noon. Blue sky... Well, a *smoggy* blue sky. Only someone who has been at this altitude and latitude will understand the feeling. That radioactive white light hitting you on the top of your head, crushing you, melting you... You, your clothes, your shoes, and the asphalt underneath.

A group of men with orange, yellow, and green, square backpacks and the logos of different third-party delivery apps on their motorbikes are parked next to a shop. They talk, they tease one another while checking their smartphones to see whether a new order has been dropped. Their voices, the way they speak, and their gestures are out of tune with the monotony that surrounds them. They reveal their foreign origins. This bothers some xenophobic landlords and shopkeepers who are very happy to make money off their backs but are not willing to offer even a parking space to wait for the next order or a bit of shade in this radioactive hell.

It's difficult to understand how they can wear those jackets and helmets under this heat.

Well, astronauts and aliens may experience something similar up there... Yeah, aliens' stuff... That's probably why...

The speakers out of the shop agree:

♪ *No tomo té, tomo café mi amor...*

They are five or seven. Some of them have been waiting for a while. No orders on their phones so far. Suddenly, another *motorizado*\* arrives out of nowhere, takes not one but three orders, and hits the road. Those who have been waiting for a long time check their phones once again. They don't understand. They think it's unfair. They want to complain, but they don't know who to complain to, or even if there is someone to complain to. The veterans comfort the newcomers by saying that it is like being in a toxic relationship:

*Sometimes, she treats you well; sometimes, she punishes you and gives you nothing. You never know when, how, or why—they say.*

♪ *otros en burro o en camión...*

\* Motorcycle delivery worker

## The plan

A few miles away, in the last gas station just before the airport entrance, a similar scene is taking place, but people there seem luckier than the other ones. At least, they have some shade and the AC of their cars is on. They are also watching their phones, but no motorbikes nor shops here, just cars, four gasoline pumps, and a couple of street food carts selling arepas, empanadas, fries, and burgers. Not to take away or to deliver but to feed the line of cars and people waiting there.

Wilmer, a young man in his 30s, is very active, always laughing, playing jokes with everybody while strolling among the cars. He loves the arepas and Yoseline, the girl who sells them.

He also seems to love smartphones, because he has at least ten.

Why would anyone need ten cell phones at a gas station?

He arrived about three months ago with a friend after a journey of about 2,000 km on buses, trucks, but mostly on his own feet. Like the other three million people from his home country that took the same southern route, he arrived with a small backpack, some clothes, and the contact number of a friend's friend already settled here. Lucky him (or maybe not), Leonel, the friend of his friend, put him to work the very next day after he contacted him.

How could he know at that moment that it would end this way?

Leonel and some of his colleagues working as drivers for the "app" had found a security breach and they had a plan to hack it, but they needed a guy, an outsider willing to make money fast and with nothing to lose.

Wilmer didn't think twice.

## Digital love and disillusion

♪ *Amor portátil, inalambrico y sonoro*  
*Termina siendo vitamina cualquier modo*  
*No existe el amor virtual*  
*por que todo lo que sientes es real*

Josiel, one of the young men next to the first shop, looks at his phone once again. Two p.m. and still zero orders. He has been waiting there for at least six hours and nothing. Most of the other motorizados parked there have gotten at least one order. Nothing for him.

He starts worrying about how he will pay the 40 dollars he owes to his neighbor Pedro, who is renting him the motorbike and the “app” account. It was not supposed to be so complicated.

*You just turn your phone on, park the motorbike next to the shopping mall and the “app” tells you what to do. This is an excellent account, my friend, it will drop you at least six orders per day, Pedro said.*

Pedro started with a motorbike, and now he’s driving a car.

Josiel dreams of driving a car, but he has no “papers” yet, nor a driver’s license.

One step at a time. First, he needs to save money to get a passport, a visa, only then... Maybe...

But the capricious entity on the other side of the screen does not seem to want to help.

He puts his headphones on:

♪ *Arithmetic arithmetock*  
*Turn the hands back on the clock*

The white light has stopped melting this part of the world, but the yellow, orange, and rose clouds in the West reflect the flames behind those mountains and probably far beyond in the sea.

Defeated, he returns home.

The next day, he wakes up at 6 a.m. Takes the motorbike and drives 10 km [six miles] east.

He was told that orders are easy to get next to shops far from the city center—the farther the better.

But nothing changes. Another six hours under the sun and his phone keeps showing the same message:

*“No orders.”*

He starts to think that he is doing something wrong or that the “app” doesn’t work on his phone.

Josiel asks another guy parked at the same spot:

*Excuse me, can you show me how this thing works?  
I’m not sure I’m doing it right.*

His coworker takes his phone, checks up the “app,” smiles and says:

*But my friend, you are green!!  
Even me as copper, I’m not getting any orders.*

Josiel stares at him as if he was talking about convolutional neural networks. He takes a moment to put his thoughts in order and asks the only logical question that comes to mind:

*What do you mean, I’m green? What are you talking about?  
It is how the “app” rates you. If you really want to get orders,  
you need to raise your account to diamond.  
And how do I do that?  
By completing a lot of good deliveries.  
How? I’m getting no orders!  
I know, I know... But the “app” is like this....  
You have to keep trying and “she” will give you an opportunity...  
Try other places, move around and at some point,  
she will give you something.*

He follows the advice and spends the rest of the day driving around the city, stopping next to shops and restaurants, waiting for the “app” to accept his flirtations and give him something.

After nine hours wasting fuel and time, he returns home tired and disappointed... Almost heartbroken.

He has high hopes for her, but she, the “app,” doesn’t seem to like him.

## Gas

Like every morning for the last two months, Leonel picks Wilmer up at his home and takes him to the gas station. Their plan is running smoothly. No one has discovered them yet, but they know they were probably attracting too much attention at that gas station. He is making almost 100 dollars per day and Wilmer about fifty just by being there, at the gas station, taking care of those phones, accepting as many rides as he can in the “app” while the drivers bring the clients in and out of the airport. Strength in unity: by sharing their phones, their routes and their customers, they manage to overcome the restrictions of the “app” and earn more than if they worked separately.

Leonel turns on the radio. They are worried about the government announcing the increase in gas prices and new restrictions for immigrants. They know this may affect their plan.

The radio warns that a general strike has been announced and several protests and rallies are planned for the next day.

Leonel asks Wilmer if he knows someone willing to rent his motorbike and his account in the delivery “app.” He used to do that before he became a driver for the ride hailing “app.” He said it is a good account and he is asking only 40 dollars per week.

Wilmer knows someone.

Leonel warns him:

*The new guys don't understand how it works. They need to understand how the “app” works so she can help them improve their ratings. The app likes them to be polite and text the clients, even if they don't answer back: “good morning,” “good afternoon,” “dear,” and deliver the orders on time. These are things that the “app” acknowledges, you know. It took me a long time to learn this and it was exhausting.*

They arrive at the gas station.

Wilmer takes the phones from the glove box, puts them in his backpack, and they go for a coffee with arepa... And, of course, to say hello to Yoseline.

## La tóxica

The alarm wakes him up at 6 a.m. again but this time Josiel decides to stay in the city center next to one of the most frequented shopping malls and tells himself that if this time he doesn't get at least one order, he will return the motorbike and the "app" and find another job.

He is really disappointed. Everybody has told him that it was going to be an easy job and that soon he will have enough money to buy a motorbike. He wants to get his papers, to bring his girlfriend and settle down here.

However, no matter what he tries, the scenes repeat in an endless loop. Powerless, with the text "no order" fixed on the screen, he has no option but to watch his coworkers take one, two, three orders...

Inside his alien suit, with his helmet on, the heat is starting to affect him...

He imagines that the "app" is jealous of his girlfriend; "she" probably knows that he is planning to bring her here, and that's why she doesn't drop him any orders.

Josiel starts talking to the "app," asking her why he can't get an order.

A robotic female voice answers:

*Sorry, I don't understand your question.*

He is about to quit but then a coworker asks him:

*How is it going?*

*Nothing so far. I've been waiting for hours.*

*It is my third day but nothing.*

*Apparently, it is because I'm green.*

*Let me see your phone.*

He opens the "app" and shows him that this account has only 55 points.

*It is not that bad, is it?*

*I mean, it is far from zero—He laughs.*

*Oh no, 55 is very low! You need a lot more points to reach diamond.*

Then he shows him that the account was blocked. That's why he is not getting any orders.

*What?!*

Josiel is very angry. He has been fooled like a teenager in love.

He goes back home to give everything back.

*You tried to scam me, but I won't pay you anything.  
You made me waste my time, driving like crazy from one extreme  
of the city to the other and for nothing.*

Pedro, the neighbor who rented the account to him, looks surprised:

*I don't know what you are talking about. The account was right.  
I used it myself until last year. It is probably because in December  
the "app" got crazy. One day I was diamond, and then I was red.  
People said that it was because the "app" was getting different updates.  
Once the "app" went off and when it came back, I had lost 10 points.  
Everyone's accounts were red. We tried to make a collective complaint  
with other colleagues but got no response. We don't even know  
if there is someone behind the screen. I haven't used it since then,  
but I guess something like this blocked the account. So don't worry,  
if you didn't get any orders, you don't have to pay me anything...*

## The deal

It has been an excellent day for Leonel, Wilmer, and their associates. They got almost 2,000 dollars in total. Their plan works.

At the end of the day, Leonel picks up Wilmer at the gas station and brings him back home.

When they arrive, they find Josiel.

*This is the guy that I told you could rent you a motorbike.  
Let me introduce you.*

Josiel is still angry with his neighbor and with himself. He tells them about how he has wasted the past three days going around like a fool for nothing.

Leonel tries to convince him to rent the motorbike and the account, but Josiel is cautious:

*Is your application diamond or green?  
You are not offering me a locked account, are you?*

Leonel replies:

*You will see, it is a good deal. But you have to be smart  
and play the game. I also started like you, with a rented motorbike,  
and now I'm driving a car, do you see?*

*At first, it was not easy. I didn't understand how this machine  
worked, but I learned to deal with her. You have to be patient and  
follow her rules.*

*After a couple of bad experiences, I started to search on  
the internet how it works. If you start in a hurry, you don't write to  
the client, the score starts to go down.*

*You notice it. If you don't do these things, she takes away your points.*

*The "app" keeps records of all the things you don't think are necessary.*

*The "app" doesn't tell you this, but if you fail, she takes away your points.  
That's very bad because a profile without points is useless.*

*There are also some hours when she pays you some bonus.  
That's why you have probably seen a lot of movement and people like  
everybody is in a hurry. But it can also happen that you arrive at  
a shop or a restaurant and they take a lot of time to give you the order.  
That waste of time is for you. The app doesn't rate the restaurant,  
she rates you and your delivery time, do you get it?*

*The “app” doesn’t care about you. If she asks you to deliver three and you do just one, she lowers your score. I mean, it may not be your fault but the restaurant’s. She also punishes the worker based on the clients’ ratings. An unhappy customer is three points less in the general score.*

Josiel smiles. If someone had explained all these things before...

He is hopeful again, but cautious. After all, he will receive the punishments and Leonel only the payments.

*OK, look, if I don’t get any orders by tomorrow during the day, I will give you the account back and we rather stay friends. Deal!*

Leonel says goodbye to Wilmer and Josiel. He expects Josiel will do just fine. Meanwhile, the radio goes on:

♪ *Las penas son de nosotros, las vaquitas son ajenas.*

## Chaos

That morning starts as usual. After giving his motorbike to Josiel, Wilmer and Leonel drive to the gas station next to the airport.

They turn on the radio and the news is all about the protests and rallies announced for that day. They believe that this will affect the business, but even before arriving at the gas station, the phones in the glove box start going crazy. They don’t even have the time for a coffee with arepa. At their arrival, their associates are a bit nervous. They give their phones to Wilmer, take the ones in the glove box, get in their cars, and head to the airport.

Meanwhile, Josiel parks his new motorbike next to a big shopping mall in an upper-class neighborhood. He is anxious and promises himself that this is the last try.

The images of the protests and rallies around the city are all over social media.

Josiel receives a message showing that at least 5,000 people are heading to the city center. As he reads something about foreigners and violence, he gets a message:

*“You have a new order.”*

He can't believe it. At last, the “app” has answered his pleas. He opens the message, carefully reads the instructions and heads to the shop to pick up the package. He tries to follow all of Leonel's advice.

After half an hour, 2 km [ about 1.25 miles] ride, three good mornings, and five thank yous—the first 80 cents appear on his screen. He is not sure if it's a good deal, but he is relieved and happy. About 15 minutes later he gets a new order. Same routine, 80 more cents; 45 minutes later, same story.

He feels in his brain the effect of those little drops of dopamine every time he hears the notification ring:

*“You have a new order”*

80 more cents...

♪ *Money get away...*

It is almost noon and he has delivered five orders already. If this continues, he could finish the day with at least 10 dollars in the account. He knows it's not his money yet, he has to first pay the rent to Leonel, but still, he feels kind of high. There is hope, he starts to believe.

Josiel gets a new order. But this one is different. He has to pick up not one but three orders in the same place. The only problem is that he has to pass near the city center and from the messages he got earlier, he knows there are some troubles over there.

Spirits are running high in the city center. He sees a huge crowd of people heading to the Presidential Palace, and it's going to take time to go around the protesters.

Wilmer and the other drivers at the gas station are also having a busy morning. They have driven lots of people in and out of the airport. They also see thousands of people marching toward the city center from different avenues. Their phones start to be overwhelmed by messages, pictures, and videos about the protests. They read the messages with suspicion. They know from experience that social protests are always a good excuse for the police to repress citizens, and to find scapegoats to divert attention. They know they have to be careful and stay low profile.

It is around 11 a.m. when they get the first message:

*“Foreign citizens infiltrated the demonstrations  
and promote violence and chaos.”*

It is followed by a video; they recognize the footage from a demonstration back home. Not here, and not now, as the message suggests.

Half an hour later. Wilmer gets a message from Leonel:

*“Abort the plan. We were caught.  
Hide the phones and get out of there.”*

Wilmer doesn't think twice. He tries to warn the others. It is too late. The police surround them, confiscate the cars, the phones, and arrest them all.

## 404 Not Found

Josiel arrives at the shop to pick up the orders. It is already noon. He meets a group of young men with orange, yellow, and green square backpacks with their motorbikes parked next to a shop. They are all waiting for orders, but this time it is Josiel who gets them all and hits the road.

He arrives at the delivery address, but he doesn't realize where he is until a police officer opens the door and asks him to enter the building to complete the delivery. Inside, as with any other local citizen, he is asked to pass a biometric ID check.

*“No data. Unidentified citizen”*

He can't turn back.

He tries to explain that he has lost his passport and is in the process of getting his papers back. But it makes no difference. They seize the three orders, the motorbike, and arrest him.

## All suspects

In the room, the officers eat the three pizzas delivered by Josiel while they watch a wall full of flat screens with the images recorded by the surveillance cameras of the city.

Their brand new Chinese facial recognition system has spotted a small group of unidentified individuals, very likely foreigners, disguised as “app” drivers.

They suspect them of transporting, and probably spying on, the government officials that arrived at the airport in the morning to control the protests.

The recordings from previous days show that they have been gathering together every day for about two months at a gas station near the airport. Probably planning an uprising, the kidnap of a government official, or even a coup.

Everything is confirmed later on when they arrest the other conspirators and find one of them with at least ten phones, all with cryptic messages talking about a plan, escaping routes, money laundering, and... arepas.

Henry Chavez is a postdoctoral researcher at the Université Paris Cité—IRD—Ceped and associated researcher at the CTS-Lab in FLACSO—Ecuador. He holds a PhD in Social Sciences from the Ecole des Hautes Etudes en Sciences Sociales in Paris, France and his works focus on big data, artificial intelligence and platform economy.

María Belén Albornoz is the principal investigator of the Fairwork Project in Ecuador. She is a professor and researcher at the Latin American Faculty of Social Sciences (FLACSO-Ecuador), coordinator of the PhD program on public policy, and coordinator of the Science, Technology and Society Laboratory (CTS-LAB).

### Acknowledgments

Thank you Rafael Grohmann, Julian Posada, Garance Burke, and Lindsey Cameron for listening to this story and providing thoughtful feedback and expertise.