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The Mobile Money Revolution that Has Not Come (Final Report)

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<https://escholarship.org/uc/item/5c43344x>

### **Author**

Balen, Maria Elisa

### **Publication Date**

2016-07-26

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# The mobile money revolution that has not come

Maria Elisa Balen<sup>1</sup>

Mobile money has been a vehicle for various visions. For banks, the expansion of digital payment systems based on already existing and widespread mobile phone usage is a step towards slashing cash – whose distribution can require expensive logistics, particularly with regards to distance transportation and security concerns. Mobile money in comparison is seen as sleek, more easily manageable and malleable electronic digits on screens. For governments, particularly those that have embraced money transfers to vulnerable populations as part of their social policy agenda (and these are many, spanning a wide political spectrum: see Fitzbein et.al. 2009), mobile money carries at least two promises. On the one hand, it offers the possibility of lowering costs of distribution for such money transfers. On the other hand, given the irresistible penchant to magnify the impact of government interventions in favor of the poor, vulnerable, disenfranchised, disempowered or whatever label is preferred, the digital traces left behind by mobile money circulation can be a stepping stone to design appropriate financial products and conjure the many advantages ascribed to financial inclusion (Ontiveros et.al. 2009, Cull et.al. 2014, AFI 2016). For critics of current financial systems and regimes of accumulation, the expansion of these digital payment systems both geographically and demographically is tied with the visions of indebtedness, instability and deepening of inequality ascribed to financialization (Rodríguez et.al. 2005, Epstein 2015). For citizens of the global north, the expansion of mobile payments conjures the menace of automation doing away with jobs and the expectation of expanded self-monitoring and behavior regulation considering the possible implications of big data -from insurance premiums to eruptions into private affairs justified by the fight against terrorism (Garret, 2016). And for citizens of the global south... well, that is partly what this research is about.

The label ‘citizens of the global south’, similarly to the labels in the previous paragraph, can envelop a diverse array of people. Some of these citizens work in government, banks, international cooperation agencies and/or academia, and participate in several of the visions mentioned. In this report we will engage with two main discourses. On the one hand the discourse of disenfranchisement, summed up in the idea that money and its handling for different purposes (receiving, storage, transfer, investment, loan, payment) costs more for the unbanked, and that access to formal financial systems for these populations should be an economic right, or at least something to be promoted through strategies of financial inclusion. On the other hand is the discourse of exploitation, summed up in the idea that financial inclusion is instrumental to powerful financial actors seeking new frontiers of accumulation, and that inclusion of the unbanked will further enmesh them in the dynamics of indebtedness and instability wrought by financial systems upon their governments as well as other businesses and citizens in their countries. These stylized, contending discourses inform and provide the context for our discussion. Yet our aim is to contribute

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<sup>1</sup> I would like to acknowledge the work done by Sonia Laguna and Rosa Guerrero as co-researchers in the research this report is based on, as well as Andrea Beltrán, Germán Chaparro and other members of the *Grupo de Protección Social* of the Universidad Nacional de Colombia, Sibel Kusimba and other members of the IMTFI network I have discussed this research with. This research was carried out with funding from IMTFI and from the Fondo Bejarano of the Universidad Nacional de Colombia.

to this discussion through helping to gauge the actual contours of the apparently expanding, ‘mobile money ecosystem’. Our focus, then, has been on mobile money uptake and its role in people’s everyday affairs.

‘Everyday affairs’ can cover a wide range of practices, and our particular approach in this research comes from our interest in social protection systems. Bruno Theret proposes analyzing social protection systems as systems of mediation between three orders of social practice: economic, political and domestic (Rodriguez et.al 2005). The ‘social’ in social protection, thus, includes not only state and market but family dynamics. People have access to goods and services such as lodging, food and health care through webs of interrelations that vary in different contexts both between and within the spaces demarcated as nation-states. Another way of saying this is that persons access the goods and services of social protection not as separated individuals but through their inscription in different kinds of networks. These networks are not clear cut – support can also come from neighbors or friends that are ‘as close as family’, for example. In what follows, though, we use the term family networks of social protection to distinguish our focus from the more usual one of identifying social protection with the state. Going back to Theret’s conceptualization, and given the importance – in contexts like the ones we are studying- of the protection procured through work in the domestic sphere, we focused on family networks.

In Colombia, peasant families – many of them forcibly displaced on account of the longstanding armed conflict- face the challenge of preserving their practices of social support due to the dispersal and separation of family members and increased monetization of life they encounter (GMH 2009:50). These families have been exposed to mobile banking as recipients of government money transfers, and our aim was to gauge both their views on mobile banking and what this technology has allowed them to do. Our study, then, is not about the mobile money ecosystem from the perspective of those excluded from it. In the first section of this report, we introduce the two sites we focused on and what our research entailed. In the second section, we analyze how the mobile money ecosystem has been deployed in these two areas, focusing on the necessary infrastructural and organizational underpinnings of digital networks. In the population we studied we found, as our title suggests, that our initial question about the role of mobile money can –until now- be answered in negative terms: so far mobile banking uptake is low to nonexistent (see also Stuart 2016). Given these findings, we reworked our project to address the question: If not through mobile banking, how does money travel in these family networks? Subsequent sections focus on these alternative or parallel paths and their rationales as conveyed by research participants. The third section focuses on alterative paths to send money through space, and the fourth section on alternative paths in order to secure money across time.

## Our Research

The image of a forcibly displaced peasant standing in a city corner, accompanied by his family or by a sign that asks for help for that family, could well become one of the most enduring representations associated with the history of Colombia at the turn of the 21<sup>st</sup> century. The National Center for Historic Memory has characterized Colombia as a *displaced nation* on account of the more than 6 million Colombians who have suffered forced displacement in the last decades due to the longstanding armed conflict. And one could add that it is a nation of displaced peasants given that 87% of those forcibly displaced come from rural areas (CNMH 2015:17, 38). Facing increased money needs in urban areas and forced to relocate in different areas such that they are separated from

other family members, the challenges and difficulties faced by these families are substantial (see Mertens 2000, Lopez 2005, Gomez 2007, Ibáñez and Moya 2016).

Most of the forcibly displaced, though, don't end up in the largest cities where higher education and the more specialized levels of healthcare provision are concentrated. More than 50% of them end up in smaller municipalities – like the ones in this research – where the local government's institutional and fiscal capacities are 'low or almost null' according to the classification of the national planning department (CNMH 2015:39). This research focuses on social protection networks in two municipalities - El Carmen de Bolívar in the northern region of Montes de María and Mocoa in the southern region of Putumayo – where those registered as forcibly displaced account for more than half of the population<sup>2</sup>. These two municipalities have differences, but also important similarities. In the political order, the action of the State in both Montes de María and Putumayo in the last decades has been marked by military intervention accompanied by assistance programs including food, plans for housing and job provision but which mostly have tended to acquire the form of periodical money transfers. These money transfers are particularly relevant in economic contexts marked by the decline of tobacco trade in Montes de María and the difficulties of the illegal coca trade in Putumayo. The war has affected not only the capacity of displaced peasants in these regions to grow food but severed their links to wider circuits of commerce through these cash crops. The conditions presented here briefly are shared by many, and varied, families of peasant extraction.

Taking into consideration the challenges faced by these families who have been displaced from their homes and separated from each other, we prioritized a methodology that allowed for possibilities of longer and sustained conversations (Gudeman y Rivera 1990) with selected families rather than shorter ones with many. Various studies highlight how forced displacement produces changes in family structures and the role of their members. Studies have also show how the impact is differentiated along gender lines and new situations are particularly demanding for women who assume the maintenance of their families (Meertens 2001, Mogollón y Vásquez 2006, Millán 2014). This research, thus, was carried out mainly with mothers and one single father who, having heard our presentation in a gathering of one of the government's money transfer programs, wanted to participate. Aware of the importance –in areas heavily affected by armed conflict- to arrive through references and known contacts, we practiced snowballing. Knowing also the limitations of this practice in the sense of ending up with a sample from a restricted group of individuals, we sought to diversify our points of contact. Even if we were not seeking for representativeness with our small sample, we tried to balance the advantages of building on established trust – particularly when discussing personal issues such as family practices- with the relative randomness obtained through diversifying contact strategies: in some cases we contacted people we knew from previous experiences of working with peasant families in these areas, others we contacted through government functionaries or in the meetings of government money transfer programs, and others we approached in the payment queues of these programs.

In addition to 16 interviews with government functionaries and banking agents at the local and national level in order to get to know the mobile banking ecosystem, we selected 22 people for interviews about the social protection practices of their families in the past. These families included

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<sup>2</sup> The official registry speaks of 57.477 forcibly displaced persons received in El Carmen and 34.533 in Mocoa. See Registro Único de Víctimas, available at: <http://rni.unidadvictimas.gov.co/RUV> (accessed on 06/10/2016).

a range from those living in the outskirts of the municipal centers to those living in dispersed *veredas*, passing through intermediate *corregimientos* that vary but usually take the form of clusters of houses, one or two shops and an institution such as a school. Of these 22 interviewees, procuring to keep a diversity in terms of life experiences and taking into account their disposition to carry on the conversation, we continued with 12 (six in each place) whom we asked to draw family maps in order to elucidate present practices of social protection and then did an activity of imagining future scenarios through storytelling.<sup>3</sup> The products of all these activities, separated by spaces of a month or at least a couple of weeks in order to give participants the opportunity to think and reflect between the different exercises, would be used as inputs with which to carry on collective conversations in each of the two sites that included not only the presentation and discussion of preliminary research results but a debate exercise.

Of the 12 participants on whose lives and perspectives this conversation has turned, there are 11 women and 1 man; all have children (between 2 and 13); 4 of them identify themselves as indigenous -2 of which married with people outside of their ethnic group- and the rest have mixed backgrounds; all come from families that worked in agriculture and they themselves have tilled the land at some point in their lives or continue to do so. An important bias in this sample, apart from gender –which was intended- is related to the age of participants: three have between 20 and 39 years of age, eight between 40 and 59, and one is over 60. This is partly on account of younger women declining to participate or having more difficulties in taking the time to do so. It implied, in any case, that when they projected themselves 20 years into the future, the perspectives of life in old age became important. In all cases, their perspectives of social protection are being forged through the experience of often dramatic changes.

When a functionary in Mocoa announced the –for her- astonishing news that some of the indigenous groups eligible for differentiated treatment on account of their ethnicity had opted for receiving their transfers through bank accounts rather than cash, I was not that surprised. By then, having seen the extreme queues for government money transfers in Montes de María and discussed them with those forced to endure them (Balen 2014), my instinctive inclination towards what I have referred to as the exploitative discourse had been loosened somewhat. Many indigenous people living at considerable distances from urban centers in Putumayo had to spend more in transport than the money they would be receiving, and had thus ended up excluded from these programs. Handling a debit card or some other financial innovation was definitely a challenge, but one worth taking given the alternatives.

#### The deployment of mobile banking

In Colombia, the government has been actively involved in the development of mobile banking. Up until 2015, the main association of telecommunication operators worldwide (the GSMA) kept identifying Colombia with the red ink reserved to countries where regulation was not fully enabling for mobile financial services, despite being one of the few countries in Latin America where three or more mobile money services were in operation (Almazán and Frydrych 2015:6, 21). This is partly explained by the rivalry between the telecom and banking industries: the three mobile money services launched in Colombia in 2011, 2012 and 2013<sup>4</sup> were owned by Colombia's largest private

<sup>3</sup> For a presentation and discussion of the method of family maps in our research see  
<http://blog.imtfi.uci.edu/2016/07/can-i-try-again-working-with-research.html>

<sup>4</sup> The record also includes a smaller venture, DDDedo, that started operations in 2009 and paired with one of the large bank networks shortly afterwards (see Almazán and Frydrych 2015).

banks or bank conglomerates. Telecom operators were interested in developing mobile banking as a line of business (Ontiveros et.al. 2009, MWC 2015), Millicom had already deployed its mobile money service (Tigo Money) in Paraguay in 2010 followed by Salvador, Guatemala and Honduras in 2011, and the largest telecom operator in Colombia had established commercial working groups with banks since 2012 yet, by 2014, government regulators were called to mediate. In theory wary of intervening with market dynamics, in practice regulators ended up –instigated by the private banks association- setting an inter-industry price for the text messages used in mobile banking and forcing the telecom operators to work under those conditions. The comments to that resolution from the *Comisión de Regulación de Comunicaciones* (Resolución 4458 de 2014 de la CRC) can still be found on the commission's website at the time of writing, and the varied approaches displayed by telecom operators trying to cajole, plead, and reason against the resolution along the victorious comments from the banking association in support of an intervention they would likely criticize if applied to them, make fascinating reading.

The government, in particular the Treasure Ministry's Financial Regulation Unit, would eventually lend an ear to these calls for 'changing the paradigm' and stop seeing banks as the main and privileged partners in the endeavor to deploy mobile money as part of the efforts to bring about financial inclusion (Balen 2016). After fraught discussion, a financial inclusion law (No. 1735) was passed in October 2014 and the decree regulating it was passed the year afterwards. This means 2016 could be a turning point for mobile banking in Colombia as other players start applying for licenses enabling them –not just banks- to operate Societies Specialized in Electronic Deposits and Payments (SEDPES). For now, though, mobile money in Colombia is the story of a bank-led business model. Some of the main banks are currently focusing, for their mobile banking strategy, in promoting savings and transactions that are not based on government transfers: business to people, people to people and bill payments. They do so in their areas of influence, which tend to be central, relatively well-connected areas of the country. There is some affinity here with the government's current views on the matter: disappointed with the non-materialization of the mobile money ecosystem (mobile money works rather as a pipe to get money to people who turn it into cash), the government's current strategy for promoting mobile banking includes allowing for actors with other business models but also widening the scope and targeting not only recipients of government transfers but small shop keepers and other entrepreneurs in the informal economy. In the particular sites of this study, though, what we saw fits into the already mentioned 'pipe' model: mobile banking relying heavily on government transfers which recipients turn into cash as soon as they can. Before getting into the particularities of these sites, though, it is worth noting how these cases fit into the larger, national story of financial inclusion attempts in the last decade.

In 2006, the government set up a fund called the Bank of Opportunities with the task of promoting financial inclusion. One part of the fund's mandate has consisted in working for and obtaining an easing of financial regulation: the simplification of the requirements to open bank accounts and the creation of the figure of banking correspondents that, operating in existing local businesses (i.e. a shop or a post office) are cheaper to run than fully-fledged bank offices. The fund has also given monetary incentives for banks to open banking correspondents in different parts of the country, and different government entities have both provided money flows for these products (using the simplified bank accounts to distribute money transfers to the beneficiaries of social programs) and paid the costs charged by the banks operating these services. Even then, getting the private banks to interest themselves in the 'unbanked' has not been easy. Here, applying the discourse of exploitation requires some contortions: what one finds is government agencies trying to lull the would-be exploiters into reaching out. In the tender processes carried out at the national level,

which have tried to ‘bundle’ profitable and not-so-profitable areas together, the refusal of other banks to even participate has led to using *Banco Agrario* as the main provider of government to people money transfers (Balen, 2014). A private bank that inherited from its past existence as a public bank the widest network of offices throughout the country, *Banco Agrario* has often provided a poor customer service. Functionaries I talked with say the bank is in the midst of rolling out, as part of its process of modernization, both cash machines and a mobile money service. In the meantime, the distribution of different government cash transfers in sites like these throughout the country has shifted between Banco Agrario and Daviplata (the mobile money service of the bank Davivienda), to the tune of national tender processes that can change each year.

If mobile banking uptake –in the sense of its being used for something other than cashing out government transfers- has not taken off (which was confirmed by both local and national bank functionaries), it is for different reasons in each locale. In Mocoa there are, on the one hand, difficulties related to knowledge of the technology –from both functionaries and recipients- in a context of constantly changing procedures and, on the other hand, an infrastructure that is poorly equipped to handle the mass disbursements of government transfers. By knowledge-related difficulties I don’t mean financial literacy or technological competence, even if these may have a part. What I mean is that in Mocoa mobile banking is a difficult thing to learn about. For transfer recipients, it is hard to understand which is the institution they are dealing with -let alone that they have a bank account with that institution- when cashing out money in the locales of third parties that work as banking correspondents. Banking correspondents, which often don’t have the infrastructure to attend large quantities of people or to secure the money –with one of them recently being robbed- tend to resign which means banks have to look for other correspondents. Both old and new correspondents keep being swarmed by people asking whether that is the place to extract their payments from this or that government program. Not only the place but the procedures can change depending on whether the transfers are made through money orders or through mobile banking, and this varies between programs and from one year to another. Government functionaries we interviewed, moreover, had little understanding of what mobile banking implied and so could not be a potential source of enlightenment either. It is difficult to say, then, that mobile banking is a visible presence in Mocoan’s horizon of experience.

In the case of El Carmen, the situation is somewhat different. The main government transfer program has been using mobile banking for three years and functionaries of other government programs requiring periodic payments are also quite conversant with the technology, clear about the main issues faced by transfer recipients and the steps they are required to take when a problem arises. Davivienda opened a bank office in town and moves government payments through a cash machine a block away from the office. Government transfers are also cashed out through two banking correspondents that have been quite stable, and it is likely that with the mediation of these agents’ beneficiaries have found ways to make the system work for them even if they do not have full command of it (Stuart 2016:22). Local leaders have received training in financial literacy in general and mobile banking in particular, and been in charge of replicating that information to others. Yet here again, apart from some businesses in town that pay salaries through mobile banking, the local bank manager is having trouble reaching his targets in terms of product adoption: transfers are received and immediately taken out of the ‘ecosystem’.

In El Carmen, rather than issues of organization or knowledge, the main barrier seems to be trust in the system. The experience of mistreatment from other commercial banks in the recent past, as well as the participation of the latter in corrupt cliques that ransacked the money the town had for

investing in health and education services, would justify a deep distrust in the motives of banks that is not limited to unbanked populations in Colombia (Balen 2014:130, Maldonado et.al. 2011:22, 58-59). What participants pointed to, though, referred mostly to routine trust in the sense of the system actually working: the chance of someone stealing their pin numbers and committing fraud, the slowness in the SMS text messages going back and forth making them uneasy, and the distinct possibility of the money not being available if cash out points were closed or, even if they were open, if the system was down.

When things don't work, many hurdles that in another context may not be able to swerve an outcome end up adding up to significant effect. Here, difficulties for the expansion of a digital money ecosystem that in this case inherits its name from the expectation of mobile phones providing myriad points of entry, make for a fairly long list: infrastructure deficit including aspects discussed here such as banking offices and banking correspondents as well as others not discussed here such as antennas, mobile signals and electricity; organization problems in terms of a continuity of parameters and procedures people can get themselves acquainted with; regulation that may or may not be conducive for the robustness of the system; issues of trust both in the workings of the system and in the intentions of those behind it, etc. Some of these things may change with time: perhaps mobile banking takes even less time to be adopted than other financial technologies -such as cash machines which educated people who already had bank accounts took considerable time in adapting to when they first appeared forty years ago. In order to understand why mobile banking has not been adopted, though, it is also important to look at current alternatives.

### The alternatives

*The others are in the same condition as me, so there is no money.*

- Sandra

If in spite of increased money needs in these families, money does not circulate, an obvious reason is that one thing is the need of money, and another its availability. In fact, many of these families' needs remain unsatisfied. This, of course, is an important criticism leveled at policies of financial inclusion that don't simultaneously consider where is it that money is supposed to come from –be it the labor market or what is usually identified as the sphere of production, or other channels of distribution as recently highlighted by Ferguson (2015). This is the sort of gap, moreover, that sympathizers of the exploitation discourse are quick to highlight in terms of its potential to foster spirals of indebtedness. Even if dynamics of indebtedness can change with the expansion of a mobile money ecosystem, as things stand indebtedness can still take place, only through other, often more localized, intermediaries. What is worth pointing out here is that, despite its scarcity, money does circulate –through considerable distances- in these family networks. The –sometimes meagre, but significant- amounts of money gathered or collected (the local expression is *rebuscados*), most send them through known and trusted ways: a bus driver, or a money transfer company whose offices in different towns they already know. These are the sort of alternatives that may, in time, be replaced if mobile banking promoters manage to swerve considerations of relative cheapness and compared security concerns into the adoption of mobile banking channels. There are, though, two other alternatives worth taking into account: one that was evident during our fieldwork, another one that is at this point only a hypothesis, but worth pursuing.

The first one can be referred to as ‘accompanied money’. For policymakers, mobile money is, crucially, accompanied by an electronic trace: the harvest of such traces can be valuable for the design of financial products and in terms of governance (Balen 2016). For this research’s participants, though, such electronic traces were not an evident source of concern. Rather, what I mean by accompanied money is a way of amplifying the impact of money transfers through another channel, best suited for this than mobile phones.

As various participants mentioned, if a son in another city gets sick, they will try to go there in order to take care of him (this also applies to other relatives they can feel in charge of, but let’s keep it simple). These mothers collect money from other family members, and take it with them when they travel. This not only happens inside families: during our research, a woman’s daughter had a serious health problem that obliged both of them to move to a nearby city. Her neighbors did various collections, and every few days one of them would travel to the city to give her the collected money. As in the case of the mother and son, this implies paying for transport that can be more expensive than the fee of a money transfer. But what arrives is not only money but company, consolation and care. Also food. The small but necessary monetary resource is thus accompanied by other key resources, resources families and acquaintances can still provide, and which are not easy to mobilize through the distance. Moreover, there is also another advantage to accompanying the money rather than sending it, and it is a peculiar advantage worth considering.

Mobile phones have irrupted in the lives of these families (as in others) in powerful ways. They have the capacity of transforming space, for they ‘bring close those who are far away’ (Sandra) whilst also ‘distance those who are close’ (María). Those who grew up without them, resent how mobile phones also affect time, for these technologies –a bundle including internet- absorb all the time of the new generations who respond to their elders’ requests with the retort that they are ‘studying for school’. But mobile phones also affect adults. On the one hand, because they replace certain habits: you call instead of visiting. And on the other hand, because ‘the more mobile phone, the more liars we become’ (Ramiro). Why? Many worry that, when they call a family member and ask how she is, when the other replies she is ok she may be lying but they have no way of confirming it. They know others can be lying, because they have done it themselves: either to avoid worrying others, or out of pride, they too have replied they are ok when in fact they are not. With the mobile phone, then, you lose not only certain aspects of communication –‘you hear but you don’t feel the breathing, the beating of the heart’ (Ramiro) - but also the possibility of contrasting what is being said: of going and seeing whether it is true. When speaking of lack of trust in what pertains to these technologies, similarly to landlines and written letters before them, for many it is not only on account of a lack of knowledge or experience with them, but precisely due to the experience they have had and their meditations on the effect of these technologies on behavior.

If accompanying money is, for these reasons of amplification and confirmation, a worthwhile alternative to sending it, this is viable depending not only on family members’ availability and capacities but on the distance to be traversed. In the case of international remittances, which count for a significant part of the success stories of mobile money in Kenya and other African countries, there are two differences with our case. On the one hand, movement here does not imply crossing national borders and distances can be shorter –although this can vary, and resources can make distance a relative affair. On the other hand, because these forced displacements and relocations do not imply that those that migrate have access to an enhanced income stream they can then send home.

Transferring money is not the only use of mobile banking: other possibilities include saving, acquiring insurance and microloans. Here again, the non-use of these services in mobile banking does not mean the non-existence of these practices among the families we researched. From our conversations, the relatively limited monetary resources they handle are used to juggle a complex range of monetary needs, each with different rhythms. Some needs are sudden, like the payment for transport and medication if someone gets sick. Others are cyclical, as in the case of complicated diseases that require transport, food and lodging for each of the various times the sick person and sometimes an escort have to travel to the hospital, often located in a larger urban center. There are also needs that are constant, such as food provision or, in the case of chronic diseases, the maintenance of a permanent caregiver and/or the replacement of the source of income if the main provider is the one who is sick. Other than food and health – we will not even get into clothing, or utilities-, one of the main needs of these displaced families is housing. Getting a plot or improving their housing conditions can be a painstakingly slow process, but many do so by saving at the hardware store, or through small loans, in what are often waves of effort: one push until you pay for a zinc sheet for the roof, etc. In order to juggle all this, careful earmarking (Zelizer, 1989) has to take place and it is worth asking, as an audience member in one of our presentations pointed out, whether a single mobile wallet is suitable for these multiple uses. As it stands, probably not.

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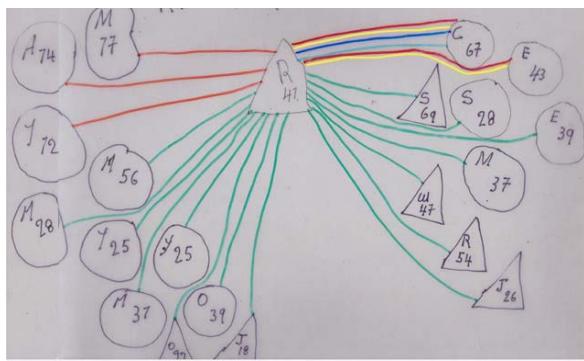
Prognosticating whether the demands of cash and the possibilities cash enables will in the longer term coexist, enable or discourage participation in a mobile money ecosystem is beyond the scope of this research. Sponsors of the exploitation discourse be warned: it may not be too long. Yes, there are hurdles but also an increased need to get to terms with these technologies, so trusting the ‘healthy skepticism’ of people in the informal economy may not be enough. Yet sponsors of the disenfranchisement discourse be warned too: it is not only that digital visions can crash over lacking, insufficient or perpetually crumbling infrastructural rails, but that continuity goes a long way in helping these systems to become more easily understandable. There are, on the one hand, more avenues to be pursued such as designing interfaces and products that respond to populations’ actual practices, such as the earmarking of money. Yet there are also considerable limits to running a system on fumes – lack of money, not only access to financial services continues to be a main issue – and even if large changes can start with very little, given the unequal distribution of jobs and services – in terms of territories and populations- small government transfers of money continue to be an insufficient way of working towards equity.

#### Linking the past with the future

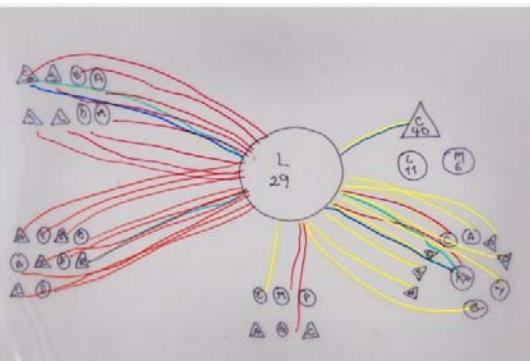
Drawing family maps was useful in order to capture dimensions we wanted to highlight from the outset, such as other goods and services circulating in these networks. These visualizations worked as triggers of conversation and helped explain phenomena like the “accompanied moneys” discussed in the previous section. Participants identified a wide range of goods and services circulating through their networks apart from money (including lodging, care, counsel and food) and some of these were carried through the distance when family members accompanied even small amounts of money whose impact they were thus able to magnify. Beyond this particular example, drawing these maps helped mark threads of continuity and discontinuity with past practices and future perspectives. In what follows, we close this report with two examples meant as an invitation to explore the potential of this method in terms of both consigning and triggering the discussion of changing practices and worldviews.

The first example consists in the maps of two indigenous participants from the group in Mocoa. In their interviews, they had told us how money was not present in their families when they were children. Most of what they ate was acquired through cultivation of their own plots, fishing, hunting and exchanging with other family members. On occasions the families sold some of their produce in order to procure specific items, such as salt or oil and eventually a piece of clothing. Their respective maps of present practices, though, evidence how this commonality has given place to already diverging trajectories (see maps below). In the map on the left, what circulates the most between family members keeps being food (in green) with money (in yellow) circulating only between the participant, his mother and one of his sisters. Contrastingly, in the map on the right the green signaling circulation of food is scarce whilst the yellow of money circulation dominates the links between the participant and her husband, mother and siblings.

R's map, year 2016



L's map, year 2016

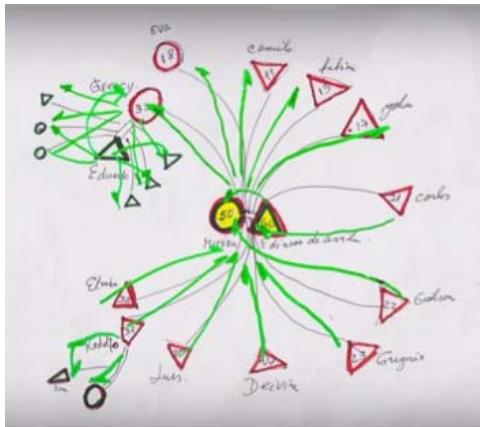


There are various factors that help explain this divergence. The participant to the left returned to his *resguardo* (common lands of an indigenous community) after having tried his luck in an urban center, and lives there next to his kin. In contrast, the second participant lives in a *corregimiento* where her grandmother raised her, whilst her mother moved with her other siblings to the municipal center. Whilst as researchers, for purposes of generalization, we tend to seek to establish certain categories or types, these maps highlighted for us how the particular trajectories of families and individuals at different points of their life cycle mark differences in the situations of ostensibly similar cases (in this example, both participants are indigenous heads of households with 2-3 school age children and living in predominantly rural areas).

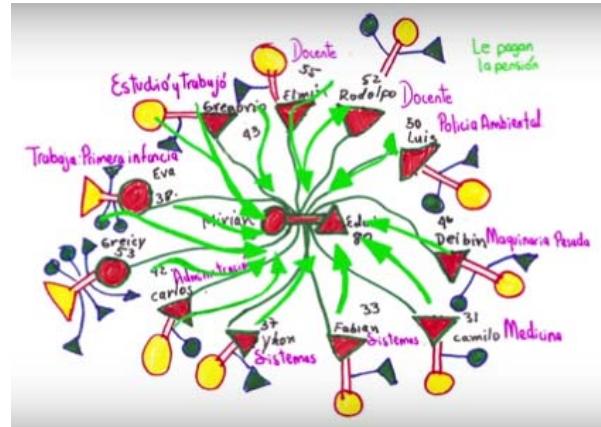
If that example highlights different links with respect to the past, the second example is geared towards the future. Like most in El Carmen, the two participants whose maps are included below have worked in the informal economy most of their lives and will not be entitled to a formal pension. This does not exclude the notion of pension, though, from being present in their plans for the future. The exercise we proposed to them was quite open: after having told us about the families' past practices of social protection and discussed present practices with the help of the family maps, we asked them to think about how it will be twenty years from now. Because thinking of the future is a challenging endeavor, we came up with a more concrete exercise and told them to imagine it was the year 2036 and they met one of the participants from Mocoa: how would they describe to them their lives at that point and how it was that they managed to get there? As part of this exercise, some of the participants from el Carmen ended up drawing family maps of the future. Thinking of future sources of money, it was they who included the idea of a pension: not one that would come from the government or a formal pension scheme, but from the sources they have available.

For M (see maps<sup>5</sup> below) the pension will come via her twelve children. In the present, her older children are helping her finance the younger children's education. In M's map for the year 2016, the green arrows representing money flow from the older children (at the bottom of the map) to the parents. From the parents, other green arrows flow outwards towards the children on the top. These include a daughter with a numerous family and those of school age that are living in town and whose lodgings and transport to go back to their parent's farm on the weekends have to be paid for. Giving an education to all twelve children is a demanding effort, but twenty years from now things will be different. By then, they will have finished their studies (potential professions are shown in pink in M's map for the year 2036 and include medicine, teaching, systems engineering and driving heavy machinery). Thanks to the exercise of their professions, they will be able to pay their parents a pension (as written in green in the top right corner of the map). All green arrows, at that point, will be flowing from her offspring back to M (now in her seventies) and her husband.

M's map, year 2016



M's map, year 2036

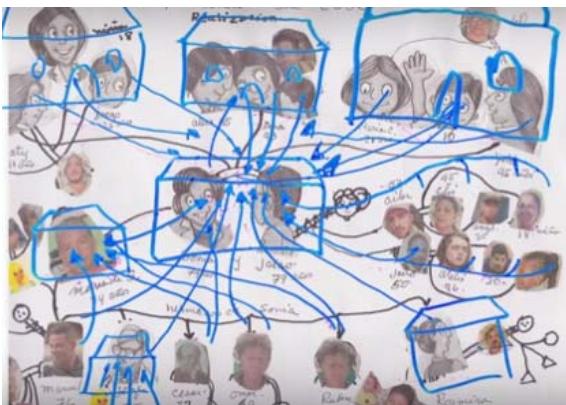


M's money, then, is not carried into the future through saving it in a bank or investing it in a business: the vehicle is her children's education.

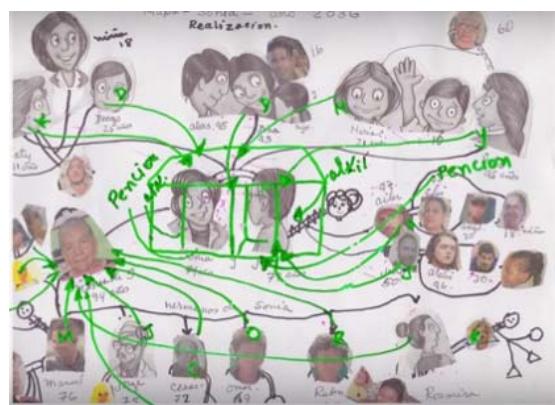
Another participant – S – also counts, as shown in the maps below, with her children as future sources of money. But it will not be only them carrying the possibilities of access to money into the future. As shown in the map to the left -in which blue symbolizes lodging- in twenty years her three daughters (at the top) will have not only families but houses of their own. Similarly to what happens with her own mother (in the middle left), having a house will enable them to provide lodgings for each other. The house itself, though, is a source of money in the future. Thus, as highlighted in the map to the right, "pension" money flows not only from grown offspring to parents (in her case at the center and in her mother's case at the middle-left of the diagram) but from renting rooms in the house. The possibility of money in the future, again, is not transmitted through a bank account but through her house. Consequently, she works hard in securing materials to expand her house using durable materials –rather than traditional, fresher materials such as *adobe* that need periodic changing.

<sup>5</sup> We animated these maps in videos accompanied with a commentary in Spanish: see <https://youtu.be/cjLqUI0GUhA> and <https://youtu.be/Y0yXacDlb8g>.

*S's map, year 2036- lodging*



*S's map, year 2036- money*



As shown in the maps above, it is not only the possibility of different colors but the actual traces of participants that end up being rich in meaning. Drawing these maps was an activity these research participants enjoyed, adopted and adapted to their resources and inclinations. The practice of making collages out of paper cuttings from magazines or family photographs, which many participants learnt in primary school decades ago, also had a chance to make a reappearance.

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