The value of mobile banking, models, and methods: can you hear me now?

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What is the value of mobile banking, and how is that value determined? Viewed as an onramp to economic security and entrepreneurial gain, mobile banking – the harnessing of existing mobile telecommunications systems to provide money saving and transfer functions – has captivated the imagination of corporate actors, NGOs, and philanthropic organizations. At the same time, it calls up old questions about the nature of money and value. What, precisely, is the value-added of mobile banking? Is it "access?" If so, for whom is there value in access to banking and financial services? Is this an old story of extraction, funneling the resources of the global South to the North? Or does mobile banking have value because it might allow a "peer-to-peer" money, one sustained by social networks troubling that North/South distinction and even standing to one side of state and market moneys? If so, however, why does anyone think there is value in P2P networks? Is the P2P vision an old story of the "social" pushing back against the "economic," a la Polanyi? If so, is there (still) value in that move, now that it is becoming commonsense in a world marked by "economic" crisis? We approach these questions from our own relatively unique collaboration between academia and industry, a collaboration in which we have each learned to hear each other's theories and methods differently – finding another sort of value, perhaps. We reflect on the value of this hearing – from mobiles to methods, both of which can be transported, adapted and put into play in new contexts.

In this talk, we place two questions next to each other and reflect on the homology between them. First: what is the value of mobile money? And second, what is the value of industry/academia collaborations like ours? We argue that in each case, the value proposition is not entirely clear, but that such a lack of clarity allows for some surprises along the way, troubling anthropological and other understandings of what value is or can be, where it comes from, and how and by whom it gets consumed.

First, mobile money. Two weeks ago, *PC World* declared that mobile phone enabled money transfer services will be the top application for mobile devices by 2012.[1] Industry analysts frame mobile money services as "a way for users who don't have a bank account to get access to financial services" (Sandy Shen, Gartner), immediately situating such services in a specific kind of value enhancement: "banking the unbanked," both abroad in the developing world, where mobile money services are taking off, and at home, where increasing numbers of Americans find their own bank accounts falling below the threshold beneath which it no longer makes sense (or is affordable) to maintain them.

[1]http://www.pcworld.com/article/182599/money_transfers_to_become_hottest_mobile_app_says_gartner.html

"Thanks for the interview, Bill," said Mark as he was leaving the Hilton and Towers Hotel in San Francisco, conference-going anthropologists milling around him. "It'll be so helpful to me in my research. I'll send you a copy of what I write up before I distribute it. I want to make sure you think my representation does justice to you!" A footsoldier in the vast army of a multinational corporation that manages an extensive retail electronic payment system, Mark had contacted me during last year's American Anthropological Association meetings. We had been sitting in one of the common areas of the hotel, my colleagues whizzing past while his digital recorder sat between us and he scribbled notes in a black hide-bound notebook. Mark was specifically interested in my thoughts on the potential reimportation of innovations in payment technologies taking place in sub-Saharan Africa and elsewhere in the developing world. With the economic downturn in the United States, he wondered, could such innovations take place here? He was also interested in slotting this potential emergence of new payments systems in the US into a predetermined evolutionary narrative important to his company: from coin, to cash, to plastic card and beyond, his company imagined itself as making payments simple, more efficient, faster, more secure, and even more fun. Were mobile phones the "next step in the evolution of money?"

In Mark's enthusiasm for mobile payment services we see two intertwined understandings of their potential value. One is the value of a payment technology for bringing "development" to the United States in a time of economic crisis. The other is the value of mobile phones for a narrative of onward "progress" in the dematerialization of money itself. The object of value is simultaneously a service to be sold to the world's poor – including, now, poor Americans – and the medium of exchange and potentially store of value itself. This last point – mobile phones creating the conditions of possibility for a transformation in the store of value – has become a flash point for industry and regulatory conversations about mobile money in the past two years.

In Kenya today, over 6 million people subscribe to a service called M-PESA to send money to their friends and relatives cheaply and securely over their mobile phones. In the Philippines, people can remit money to family members on remote islands through a similar service called Globe GCASH, now used by 2 million people. And in India, a company called Eko is trying to use people's existing familiarity with instant messaging to provide funds transfer and financial services to the "unbanked," in a nation where mobile phone subscriptions are increasing at a rate of 10 million per month. Meanwhile, major international industry consortia like the GSM Association (GSMA), representing the world's mobile telecommunications network operators, and giants in the world of poverty alleviation like the Consultative Group to Assist the Poor (CGAP), the World Bank's International Finance Corporation (IFC), the UK Department for International Development (DFID), and the Bill and Melinda Gates Foundation have joined forces to harness "mobile money" as a means of financial access and inclusion for the world's poorest people. Launching a "Mobile Money for the Unbanked" grants competition in 2009, these organizations are collaborating with the goal of "banking" 20 million new people by 2012. Their aim is poverty alleviation through financial security for those living on less than US$2 per day.

Although industry analysts had used the name “mobile money” in the past, it was not until the first “Mobile Money Summit” in 2008 that the term was widely applied to a variety of technological systems newly harnessed to serve as channels for financial services. Hosted by the GSMA, but sponsored by the IFC and DFID, the Summit brought together businesses developing money transfer systems using handheld devices like mobile phones, branchless banking via networks of agents in retail stores or other venues, and various silicon chip-enabled systems for making payments and transferring funds from one account to another.[2]

It might be obvious why the large donor organizations are interested in mobile money: it seems like a way to provide “access” – access to financial services, access to banking and funds transfer, potentially more cheaply than existing services like Western Union and more safely than informal arrangements like couriers or informal money transfer agents. Yet at the same time, it is peculiar that mobile money has so quickly captivated their imagination. A lot of the hype is propelled by industry actors like the GSMA, as well as, significantly, small startups which have found the rhetoric of financial inclusion generates for them another kind of value: access to grant money and professional networks, and more broadly entre or advancement beyond “corporate social responsibility” into the heady realms of “sustainable capitalism” and “social enterprise”.

This is a cynical read on the rapid increase in interest in mobile money, perhaps, and it is incomplete. For why should the GSMA be interested in money-transfer services in the first place? After all, it is an industry group for telecommunications companies like T-Mobile and Alltel, which on the surface have little to do with things like person-to-person funds transfer. The latter has generally been the domain of wire services like Western Union.

First, advances in mobile technology and the worldwide spread of the mobile phone, especially in the developing world, have encouraged industry participants to add functionality to mobile devices to increase average revenue per unit (ARPU), thus placing new demands on network operators. Mobile payments or funds transfer from one phone to another is one such functionality.[3] Here, however, the GSMA not just adding functions to existing services or devices. It is also harnessing a set of existing informal practices to generate value. In developing world, after all, even non-subscribers have access to a mobile phone through informal sharing practices as well as informal agent-based loans of mobiles. Industry actors have essentially calculated that extremely high volume, low value transactions – propelled by the billions of “unbanked” people in the world – can become a significant revenue stream. Mobile phones could be turned into a cheaper, more efficient – and highly profitable – replacement for Western Union and other wire transfer services. The addition of money transfer service to the mobile phone could encourage people to use their phones more heavily and have more loyalty to their

[2] Founded in 1995 as a network of interest groups and formalized with a board in 2003, the GSMA is named after the Global System for Mobile communications (GSM), the most prevalent worldwide standard for mobile telephones and other mobile devices

[3] These payments or transfers can be from person to person, from person to business or government (for goods or bill pay) or from government to person (for social benefits payments, e.g.).

network provider. The phenomenal success stories of two or three early entrants into the mobile funds transfer market – particularly M-PESA in Kenya, a service of Vodafone's local subsidiary Safaricom, and GCASH in the Philippines, a service of Globe Telecom – sparked heightened industry interest. It also caught the attention of NGOs and philanthropic organizations concerned with access to financial services for poor people around the world.

In fact, development NGOs, international poverty alleviation organizations, and some prominent philanthropic foundations have exhorted mobile network operators to go farther than simply providing funds transfer and payment, and to design mobile phones that can act like piggy banks or full-fledged savings accounts. As Bob Christian, Director of the Financial Services for the Poor program at the Bill and Melinda Gates Foundation, stated to the attendees of the second Mobile Money Summit in 2009, "it's time to meet the savings challenge," to mobilize tiny transactions facilitated over phones into a mechanism of savings for the world's poor and unbanked, rather than simply offering a way to send remittances or make bill payments. "Banking the unbanked" – heretofore a concern mainly of microfinance institutions and poverty alleviation programs – has become a GSMA rallying cry.

Adding the store of value function raises a host of significant concerns for a large number of regulatory and legal actors, from central banks to national treasuries to consumer protection agencies. Many countries have regulations for electronic money – money stored on a card, for example, to be treated exactly like cash or coin but not, technically, a form of savings. Many also have regulations in place for electronic payment services like wire transfers or internet banking. But these technologies can not be used to store value. Deposit-taking triggers national and international regulations, laws and guidelines because it has the potential to *create* money. How should mobile savings be defined? That is, at what point do funds held in a mobile phone subscriber's account become "savings:" as soon as they are there, or after a set period of time? What is the nature of the threshold between money intended to be transferred and money stored? Most banking regulators restrict deposit-taking to licensed and often insured banking institutions, and require protections, not to mention a rate of return. At the end of the day, a mobile network operator is not a bank. But when it gets in the business of savings accounts, should it be treated like one? If so, when the money stored in mobiles and held by a private, non-bank entity starts earning interest, has a private currency been created?

This money-creation potential has always been lying in the background for those looking at mobile money in industry and development circles. For some, this potential was brought home by reports from "the field" that poor people were using airtime minutes as a form of alternative currency. When people start using top-up phones not to talk but to transfer airtime, have they thereby converted "time" into "money" in a way unanticipated by Benjamin Franklin and centuries of puzzlement over money's temporal calculus or time's monetary conversions.

Indeed, with airtime minute transfers, money's temporal dimensions are being revealed, in terms of units of time and in terms of the temporal *phase* within which airtime minute transfers *become* money. People are making “money” out of “time,” but not the way that labor time creates surplus value. With airtime minute transfers, money is now a subset of time, or a state of time. For money is only time *sometimes*; money can be other things, too. And not all time is money – time is sometimes talk. This then is a denaturalized money (and a denationalized money – and many visionaries working on new payment systems seek rather explicitly to privatize currency, while many everyday pragmatists trading airtime minutes have in effect already done so, leading to some of the regulatory concern we alluded to earlier).

Money as airtime minutes is denaturalized, because it is removed from the classic buying-selling relationship that political economy from Smith to Marx to Zizek and Karatani has obsessed over.[4] Time is denaturalized as well. The kind of time that they are, in potentia, is also of a specific kind: it is not abstract, homogeneous, empty time of modernity (E.P. Thompson, Chakrabarty). It is the time of talk, of relationality, of sociability and quite possibly of obligation or duty. Again, not Time is Money (money here assuming the position of universal equivalent), but Money is Time, money subordinate to the time of relationality. This represents a potential socialization of money in the best sense of the term. This may be an enduring lesson from the payments space that, in our current time of crisis, may be a worthy import indeed.

This brings us to another space of relationality, that of our own collaboration, and its value added. For about three years now, Scott and I have been thinking together about money, sometimes just the two of us, often with other collaborators from People and Practices Research at Intel, and with academics and industry people from other companies. From an academic anthropological point of view, we always think we know the story when we collaborate with industry: consuming value in the context of an academia/industry collaboration means that we will be consumed by Value (read: Capital, capitalism, the Corporation, or some other bogeyman) in the service of extraction of value. We also tend to think, in academic anthropology, that it is our ethnographic knowledge or on-the-ground relationships with people in our fieldsites that is of value to industry. They want to get our relationships and contacts and deep understandings of how

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[4] [[From BoP paper: As Zizek summarizes, there is an “insurmountable persistence” of the gap between production and consumption entailed in money: the producer has to take a leap of faith (salto mortale), first, that the things he has produced will be bought by someone else, and second, that the thing he receives in exchange for his product – money – will be worth something to others. The selling relationship is predicated on credit (Karatani). As Zizek writes, “value is created in the production process … only potentially, since it is only actualized as value when the produced commodity is sold and the circle m-c-m is thus completed. The temporal gap between the production of value and its realization is crucial here; even if value is created in production, without the successful completion of the process of circulation, there stricto sensu is no value” (Zizek, “Parallax view,” my emphasis).

With airtime minutes, however, there is no need for this leap of faith.. Instead of a *salto mortale*, there may be a somersault: a leap over and around rather than a death leap, a leap that is nimble and gymnastic, a form of play but also exercise, one that gives a world-changing perspective, a parallax view. First, airtime minutes are indeterminate: they may become money, but they may also become talk. For the “producer” of airtime as currency – the person who purchases airtime minutes from a vendor, with the intention of transmitting them to another as a method of payment – there is no leap of faith because the airtime minutes can function as both exchange and use: they are potential currency, and they are potential time.

people actually live, and turn it into a mine for marketing or product design and placement.

Yet our own collaboration has been more like the emergence of mobile money from airtime, full of unexpected turns. Again, the value proposition of the collaboration has not always been clear, and has certainly not been teleological or unidirectional. In the first place, Scott sought me out as an expert in the anthropology of money and informant on monetary innovation, having read my book *Mutual Life, Limited;* he wanted to hear "first hand" about Islamic Banking and Finance and Ithaca HOURS. He was headed with various colleagues and interns, over the course of the next few months, to Nairobi and Johannesburg to see deployments of mobile money, to Tokyo and Okinawa to see contactless smartcard-based e-cash, to Chengdu and Beijing to see virtual currencies like Q Coins and World of Warcraft gold. To align with the corporate metabolism of Intel, he could afford at most a couple weeks at most in each site – "drive-by ethnography," as his colleague Ken Anderson has termed it. Would I be interested in access to his (prospective) "data", and to be able to cite Intel as an interested research "consumer," in exchange for my expert advice and theory-laden, academic perspective? His (umbrella) project "Personal Digital Money" – a far-flung survey of sites where technology was being leveraged to create "future(s) of money" with the open-ended goal of "changing the conversation" at Intel about the human-not-just-mechanistic character of this future – was continually at risk of spiraling outwards into incoherency and in dire need of some grounding and glue.

From my own fear of being co-opted, I made Scott and other PaPR collaborators read Jane Guyer, Keith Hart, and J.K. Gibson-Graham. But listen to us talking together, after digesting some of this reading. We were discussing putting together a paper for the Ethnographic Praxis in Industry Conference (EPIC) with a third colleague and the following conversation ensued, as she identified the value in our collaboration:

> "What is the impact for Intel going to be [from our collaboration]? How can other people, working in industry, learn from the work that we're doing here? So there's a lot of emphasis on methodological innovation, which I don't think we can really say is something we've done here."
>
> "Yeah."
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> "There's this other thing about sort of theoretical innovation, maybe that's more… more plausible. But there's something about a kind of … you know the whole EPIC conference is, 'We're not in academia, we're in industry, and we're proud!'"
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> "*This* is our innovation."
>
> "This is what?"

"*Bill*. *And you* [Scott]. So what's kind of slightly interesting about this, is it's like you know, you have… normally you have industry-based or you have academic. And rarely the two meet. Except in people who embody the two […] And then we explicitly have Bill here: […] It's not like we're hiring you to do fieldwork, you know. We're hiring you to be theoretical. [And] that is actually a very interesting […] thing."

There is an argument to be made here with the performativity approach to the creation of market devices and economic experiments, but we abbreviate here for the sake of time. If Callon and Muniesa see markets emerging from sociotechnical arrangements of people, technologies, techniques and material objects, our case might be exemplary. What could be more a market device than a distributed, interconnected assemblage of all of the human and non-human actors involved in creating money out of talk time or placing money "in" mobile phones and "through" mobile networks? The GSMA, the Gates Foundation, our SIM cards, the USSD capability within all our mobile phones, the collaboration between me and Scott, all jointly, collectively, co-perform mobile money, all work together as "economists at large" to use Callon's phrase (Callon 207:335). And yet, the convergence or coordination within this assemblage is tentative and transitory, not least because we are sometimes flying blind. Again and again, a core question in the sites of production of mobile is money is: "What is the value proposition?" And yet it all continues.

Here is the homology, then, between mobile money and our collaboration. It is not always clear whether and how either will pan out. For mobile money, the assumption is that there will be value in offering money services via mobile phones to (the world's poor) (emerging markets) (the next billion) (Americans who fall through the cracks because of the crisis). That value comes from enhancing ARPU, or getting more phones in more hands, or banking the unbanked, or the ethical/virtuous value of helping the poor. For Scott and my collaboration, it has not always clear to us – to say nothing of our overlords! – what the value would be in it, and yet it has generated expanded horizons, new collaborations, and new spaces of freedom for both industry researchers, and for this academic at least. "The good news," Callon writes, "is that there is no overall logic" (p.349). And, "we no longer have to choose between interpreting the world and transforming it. Our work, together … is to multiply possible worlds through collective experimentations and performations" (p.352). Can you hear me now?