

Mobile Phones in Migrant Contexts: Commercial Discourses and Migrants' Appropriations of ICT in Spain¹

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Abstract

As part of the digital technological environment in which contemporary migrations occur, mobile phones constitute a paramount resource for maintaining bonds with geographically scattered family members, as well as for building networks in the original, destination and in-between spaces of migrants' trajectories. In this context, enterprises have quickly identified a business opportunity in migrants' cross-border belongings, adapting their business models to transnational family communication (TFC) needs. Focused on Spain, this paper proposes a qualitative approach to migrants' use of mobile phones from a double perspective: Ecuadorian and Moroccan *users'* accounts, and those of telecom *providers'* marketing spokespersons. Preliminary results suggest that spokespersons acknowledge migrants' needs to communicate both abroad and within Spain, although advertising stresses only mobile phone use for TFC. In turn, migrants interviewed face emotional and socio-economic factors that condition their communicative practices in accordance with different intersectional variables, leading them to build complex strategies for the appropriation of mobile phones and other ICT, such as owning multiple SIM cards and visiting cybercafés. This paper argues for a deeper understanding of TFC by partially bringing to the fore the inherent tensions between the discourses of telecom suppliers and the resourceful ICT practices of low-income migrant users.

Keywords: mobile phones, appropriation, transnational families, commercial discourses, Spain

Introduction

Contemporary migration occurs in highly mediatised contexts. Digital technologies provide people on the move with plenty of resources for accessing, sharing and exchanging information in real time between physically distant places. This digital environment is composed of a complex web of devices, platforms and practices through which individuals construct customised media repertoires, articulating mass media and personal communication technologies.

Despite their secondary place in the literature - often more concerned with the Internet - mobile phones have the highest penetration rates among low-income users (Ling & Horst, 2011, p. 364), including many economic migrants from diverse backgrounds. They constitute a paramount resource for maintaining bonds with geographically scattered family members and for building networks in the original, destination and in-between spaces of migratory trajectories. International calls are a basic need for migrants and constitute

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one kind of cross-border practice or, as Vertovec called it, "transnationalism via telecommunication" (Vertovec, 2009, p. 56). Without ignoring the multiple media at play in migrants' "communicative connectivity" (Hepp, Bozdog & Suna, 2012, p. 173), this paper focuses on mobile phones in migratory contexts. Moreover, it argues that it is worth analysing this from a double perspective: that of low-income migrants and of mobile network providers, since actors in both these groups are part of global interconnection, although at different levels and driven by contrasting rationales, interests and purposes. Contemporary trends in the movement of labour and capital (e.g. flexibilisation and delocalisation of production) have resulted in both people and corporations "seeking comparative advantage by crossing national borders" (Bryceson & Vuorela, 2002, p. 3). This has impacted on most spheres of life, including the family, whose traditional arrangements have been reconfigured. Indeed, it has become more common to move in search of better opportunities and to build a family life across national borders and geographical distances. In this scenario, digital technologies have become a cherished resource for transnational family communication (henceforth TFC), a basic need for both migrants and non-migrants to provide care at a distance, together with other resources such as visiting and financial support (Baldassar, 2007; Merla, 2010).

The flip side of this kind of "transnationalism from below" (Guarnizo & Smith, 1998), is composed of the configuration of corporations and states as powerful nodes which define who, how and at what cost it is possible to be part of the global circulation of material and symbolic resources. In particular, the telecommunication sector has become an essential cog in the wheel of contemporary globalisation as the infrastructure of the "space of flows", where interaction and exchange no longer depends on "geographical contiguity" (Castells, 1996, p.453). However, not much research has included first-hand data on the way in which telecom service providers conceptualise TFC and target migrant customers, or on how low-income migrants have managed to appropriate telecom services despite economic and cultural difficulties.

The relevance of this approach echoes two longstanding concerns within the social sciences and the humanities. Firstly, it relates to the tensions between *agency* - or the individual capacity to adapt to diverse contextual situations according to personal interests and possibilities - and *structure*, the diverse contextual situations shaped by institutional arrangements that frame social organisations. Secondly, and in close relationship to this, it addresses the underlying but evident contradictions of a neoliberal system that since the 1980s has dismantled welfare states, transferring the provision of basic services to market entities and the responsibility for well-being to individuals (Harvey, 2005), conceived of as rationale actors with full agency and unaffected by structural inequalities.

Migrants' quick adoption of mobile phones has attracted the attention of enterprises which have created new business models around the specificities of ethnic minorities consumers, setting the costs and benefits

of connectivity practices. They have also visualised these through advertising in aestheticised versions of what Diminescu (2008) has called "the connected migrant". These commercial discourses 'speak' *to* and *about* migrants and transnational families in very particular ways and constitute rich sites for analysing a new imagery of "transmigrants" (Schiller, Basch & Blanc, 1995) in multicultural Europe.

But how do migrants really use and appropriate mobile phones in relation to other media? Do their daily practices of TFC fit with the roles promoted by the telecom market? What factors promote or inhibit their user behaviours?

This paper aims to answer, at least partially, these complex research questions, following a structure composed of five sections. The first offers a brief overview of the interdisciplinary literature on migrants and mobile phones that has informed the current research, including the contributions of TFC Studies, Cultural Studies and ICT for Development (ICT4D). The second section focuses on the methodological approach, describing the sampling process and content of the qualitative interviews conducted with the spokespersons of five mobile network operators and with 28 migrants of Ecuadorian or Moroccan origin in Spain. The third and fourth sections of the paper present the main issues that emerged from the qualitative analysis of both commercial and migrants' perspectives. The final section summarises the main findings and hopes to offer some insights for future research.

Theoretical Approaches to the Study of Migrants and Mobile Phones

In 2006, Australian media scholar Gerard Goggin proposed some clues to the need to develop a line of research on mobile phone use that took culture (in its broad sense) seriously. The Cultural Studies approach to mobile phones would contribute to understanding different users' practices and profiles in accordance with their location within broader power structures organised across the lines of intersectional variables such as age, income, gender and ethnicity, to name but a few. One focus might consider how mobile phones are used differently "in and across cultures" (Goggin, 2008, p. 356), including national cultures, and "mobiles' role in connecting diasporic communities" (Goggin, 2008, p. 357).

Some research conducted by sociologists and anthropologists, as well as media scholars, has focused on the role that mobile phones have played in very different migratory experiences, such as those of rural Jamaicans (Horst, 2006; Horst & Miller, 2006), overseas Filipinos (Paragas, 2009; Uy-Tioco, 2007) and regional migrants within China (Chu & Yang, 2006; Law & Peng, 2008; Qiu, 2009; Cartier, Castells & Qiu, 2005; Wallis, 2011), to mention but a few. On the one hand, this literature is extremely useful for understanding migrants' and non-migrants' distinctive appropriations of mobile phones as low-income users whose practices are heavily dependent on restricted budgets, but also deeply shaped by emotional

priorities of communicating at a distance. On the other hand, part of this research has tended to isolate mobile phones from wider media environments and their relation with other communication devices, a drawback that the current work aims to overcome by including information on wider media use.

A more holistic approach to the multiple resources that people use to communicate across borders has been offered by some research focusing on transnational families (Baldassar, 2007; Madianou & Miller, 2012; Mahler, 2001; Panagakos & Horst, 2006; Wilding, 2006; Parreñas, 2005 and elsewhere). These pieces of work are based on rich qualitative analysis of the complexities involved in the management of family relationships at a distance, offering nuanced accounts of how ICT has facilitated the maintenance of emotional ties and at the same time created new difficulties and asymmetries between those family members who have the skills and resources to be actively engaged in transnational communication practices and those who do not. In this sense, paradoxical feelings arise within people's experience of communication at a distance, for instance when a sense of closeness achieved through regular contact reveals itself as a fiction.

A transversal issue in the burgeoning literature on mobile phone use is *appropriation*: a process in which people play active roles in shaping technologies, since it "involves evaluation by users as they encounter, adopt and adapt, then integrate a technology into their everyday practices" (Carroll, Howard, Peck & Murphy, 2007, p. 39). For the purposes of the current paper, it is worth mentioning two different but complementary uptakes of appropriation theories: one related to meaning-making and meta-communication; the other related to low-cost practices of communication. The former is embedded in Cultural Studies and involves different levels of communication concerning mobile phones, namely an interpersonal level, where peers talk about their mobile devices, and a mass-mediated level, where the industry plays an important role through "direct publicity or more subtle measures such as product placement or the sponsoring of role models who may influence users" (Wirth, Von Pape & Karnowski, 2008, p. 604).

The latter level has been theorised in contexts where economic constraints have strongly influenced the way people access and use new technologies. Recent fieldwork with regional migrants in China, for example, has inspired conceptualisations such as "the information have-less" (Cartier, Castells & Qiu, 2005) and "the working-class network society" (Qiu, 2009), which have taken class stratification in combination with the migratory variable as an explanatory framing of users' practices of connectivity. Thus low-end ICT, such as cybercafés, prepaid services and cheap devices like Little Smart, were found to be very popular among Chinese regional migrants (Cartier, Castells & Qiu, 2005) as well as among other low-income ICT users in various regions of the world differently connected to the so called "network society" (Castells, 1996).

Research framed by ICT4D has shown innovative ways of combining and re-assembling different devices, platforms and points of access. In Ghana, Sey (2009) has shown how people have created "low-cost modes of communication around voice calls, missed calls, late night calls, scratch cards, electronic airtime transfers, and payphones" (2009, p. 143). In Latin America, people have also developed their own strategies, as shown by Bar, Pisani and Weber (2007) and Galperin and Molinari (2007). Although these cases are not migrant-focused, they refer to similar appropriation processes developed among different profiles of low-income users which proved helpful in reading the outcomes of the interviews presented in Section 4 of this paper.

Methodological approach

As shown in the previous section, the current paper is basically interdisciplinary and takes a socio-constructivist epistemological stance (Schwandt, 2000; Denzin & Lincoln, 2000). This considers social reality as both embedded and embodied, that is, located in specific historical contexts and produced or constructed by particular actors who make sense of their practices according to the different locations they occupy in a given society (Berger & Luckmann, 1967). In this sense, considering diverse perspectives may enrich our understanding through the acknowledgement of both convergent and divergent interpretations of reality.

The two main perspectives of this paper on migrants and mobile phones were collected through qualitative interviews held in 2011: the commercial discourses of telecom providers operating in Spain, and specific migrants' accounts as users of telecom services. The former are based on focused interviews with the spokespersons of five telecom corporations which sought to obtain first-hand data from the local representatives of global corporations, exploring issues related to the particularities of immigrants as customers of telecom services and the commercial strategies best suited to knowing and attracting these customers. The latter were collected through 28 semi-structured interviews² with people of Ecuadorian and Moroccan origin living in Catalonia,³ Spain. These are currently the two most numerous groups of non-European national origin in Spain and Catalonia (INE, 2011a).

Migrants' profiles in Spain differ greatly from those in Northern Europe and share the trends identified in other Southern European countries: they "come from a much greater variety of countries, are highly mobile geographically and are often undocumented and employed in the informal sector" (Zontini, 2010, p.3).

² The interviews were part of two research projects carried out within the Migration and Network Society Program, IN3-UOC: *Immigrant women in the Catalan network society*, supported by L'Institut Català de les Dones (Catalan Institute for Women), and *E-administration and immigration in Catalonia*, supported by Generalitat de Catalunya (the Catalan Government)

³ Catalonia is located in the north-east of the Iberian Peninsula and is one of the 17 autonomous communities that constitute the Spanish territory. These are the first-level divisions of political power and depend on the central government based in Madrid.

Such characteristics are typical of so-called migrant workers, people of non-European origin whose main motivation to migrate has been to improve their living conditions, be this as part of an individual or a family project.

The sample of migrant interviewees was composed of 15 Ecuadorians (nine women and six men) and 13 Moroccans (six men and seven women), aged between 18 and 50, with different educational levels, ranging from primary education to university studies. They were contacted in the two Catalan cities with the highest density of population of each national origin: Moroccans in Reus and Ecuadorians in L'Hospitalet.

I first contacted people through migrant associations and training centres, and followed this by snowball sampling. All the interviewees had arrived in Catalonia between 1996 and 2011, and this had been their first and only destination, mainly due to family reunification or job search. Most of the interviewees were working in low-skilled jobs such as domestic workers or in the construction sector, or unemployed, except from two young girls who had started university studies. All interviewees had at least one close relative abroad with whom they communicated regularly through various personal media.

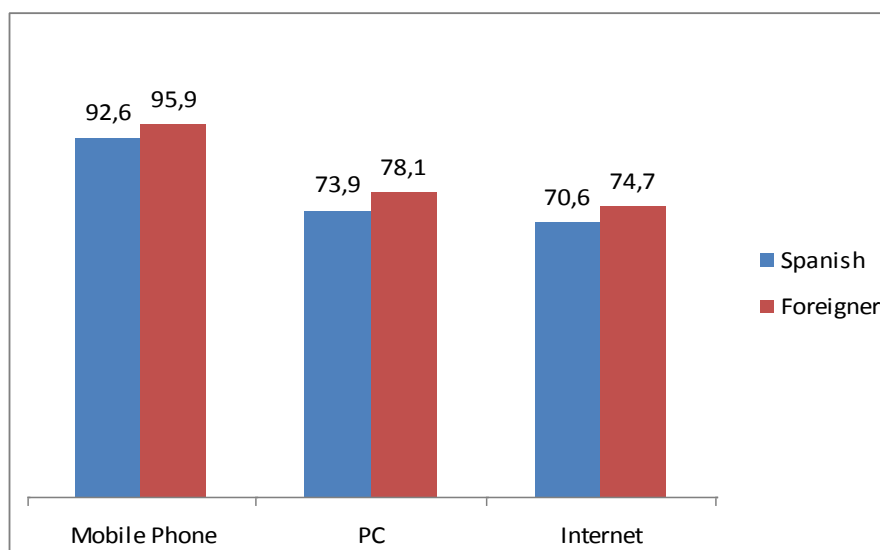
The interviews covered issues related to ICT access, uses and appropriation strategies, including specific questions on the economic and emotional implications of both national and international communication.

The Spanish context provides an interesting setting for research on ICT and migration, since two important processes converged at the turn of the last century: first, the introduction and expansion of ICT; second, the increase in and consolidation of international immigrant flows that have settled in the country, radically changing the demographic landscape of Spanish society (Fundación Orange, 2010). Moreover, during this same period, the Spanish mobile networks market was officially opened to private operators, resulting in a competitive sector that soon started offering low-cost services to migrant populations.

The migratory boom of the mid 2000s, however, decreased after the severe economic recession that started in 2007 (Aja, Arango & Oliver, 2009, p.11). Apart from the increasing unemployment, abusive mortgages and indebtedness that have affected numerous individuals, most migrants have been especially vulnerable due to their precarious condition as workers, mainly in the service sectors and the informal economy.⁴ Despite facing multiple difficulties, migrants have looked for various strategies to budget for their expenses, including those related to national and transnational communication, continuing to make an intensive use of ICT which slightly exceeds that of Spaniards', as shown in Figure 1 below.

⁴In the *formal* economy in 2011, foreign people's unemployment rate was 35,76%, 13 points above Spanish people's (INE, 2012).

Figure 1. Percentages of ICT use in Spain. Source: Survey of Home Equipment and Use of ICT (INE 2011b)



Commercial Discourses: Telecom Company Spokespersons

The Spanish telecommunication sector has experienced deep changes in a relatively short period of time. The general Law for Telecommunications, passed in 1998, ended the historical monopoly of the national telecom provider and opened the market to private competitors which have rapidly grown in number and market share (Rodríguez Illera, 2009; Pérez Yuste, 2002). Telecom operators can be classified into two main groups: those that own a radio spectrum licence of their own, known as Mobile Network Operators (MNOs) or major carriers, and those that do not have their own licence but make commercial agreements to operate on an MNO radio spectrum, known as Mobile Virtual Network Operators (MVNOs) or small carriers. The former target the broad public, while the latter usually target specific segments of users of particular national origin and are often called "ethnic operators". At the time of writing this paper, there are four MNOs and at least seven MVNOs which offered special rates for calls to specific migrant countries of origin.

Of the five spokespersons with whom I conducted focused interviews, three were from MNOs and two from MVNOs.⁵ They all agreed that the Spanish market in mobile phone services is very dynamic, highly competitive and even aggressive, with a continuous struggle to attract new customers. This is also the case

⁵ I will refer to these as MNO 1, MNO 2 and MNO 3, and MVNO 1 and MVNO 2.

concerning customers of foreign origin, who were described as having particular consumer behaviours based on regular international phone calls to family, on their preference for prepaid services and on their prioritising of mobile phones over other telecom services such as landline telephones and internet connections. This made them especially interesting to mobile phone operators, whose informants defined the user profile of this group in accordance with two main variables: time of residence in Spain and national or ethnic origin:

Differences in behaviour between immigrants and the Spanish population tend to decrease as soon as they integrate more with the Spanish population, and they have lived here [in Spain] for longer, and all those things that would make them different - shared housing, ownership, temporality, precarious jobs - (...) have evolved (...) (MVO 1).

In the same line of thought, another spokesperson distinguished between what she called "two micro-segments" (MNO 3): one composed of "the immigrant who has just arrived in Spain [and] strongly needs to communicate with her family or the people left behind in her country", and the other of those persons who "start having friends within the country, or even family that comes once she settles, they reunify in Spain, so they start to need national phone calls" (MVO 1).

This awareness of different needs depending on the time lived in Spain has led both MNOs and MVNOs increasingly to improve their call rates, not only for calling abroad to specific migrant origin countries, but also for making national calls within Spain. Paradoxically, MNO and MVNO advertising, usually displayed in hot-spots of migrant presence - e.g. cybercafés, metro and bus stations - conveys written and visual messages almost exclusively focused on the transnational side of migrants' communicative experience, particularly with close family members. Some examples we can read next to photos of ethnic characters, national cues and different tariffs for calling abroad are: "The best gift is to talk more with the ones you love more", "Listen to 'how are you, darling?' any time you want", and the more direct "More economical international calls (...) 24 hours from your mobile phone!". These phrases take advantage of general ideas about mobile phone communication such as "perpetual contact" (Katz & Aakhus, 2002) or of the "rhetoric of 'everywhere and at any time', which is typical of the connectionist world" (Licoppe, 2004, p. 152), and apply these to particular imaginaries of transnational families (Gordano, 2011). According to Ros (2010): "Mobile telephone companies shape a new ideal world for immigrants, where communication becomes 'the closest thing to being together' (...)" (2010, p. 22).

With regard to national or ethnic origin, market research constitutes a "regime of knowledge" (Nava, 1997, p. 40) that, based mainly on focus groups and surveys, has produced some stereotypes about migrants' user profiles. One spokesperson distinguished between EU citizens who settle in Spain and Latin Americans:

Euro-residents use more products that allow them to call directly from their mobile phone line, for example with a post-paid module. They afford a higher cost in order to comfortably make international calls from their mobile phones. However, we see Latin Americans use products such as scratch cards (MNO 3).

Latin Americans are a juicy market for telecom providers in the USA and increasingly in Spain, as expressed by a spokesperson specialising in this consumer segment in both locations. In 2010, his company commissioned a report from a specialist ethnic consultant in order to increase its knowledge of the telecommunication habits of Latin American users living in Spain. Based on 503 interviews, it concluded that more than 60% of these customers used prepaid services on their mobile phones, that they used them mostly for national calls and preferred to call abroad from cybercafés (ORBITEL, 2009). He also said that, apart from focusing on Latin American consumers, they would like to reach Moroccan immigrants because of both their numerical importance and their assumed consumer behaviour: "the Moroccan does not use scratch cards; he talks directly through the mobile phone" (MNVO 1).

Some of the questions that arise from these statements might be: are these conclusions applicable to all individuals with Moroccan and Latin American origins? Are traditional market research tools comprehensive enough to reflect the complexities of immigrants' practices of TFC?

The interviews with spokespersons revealed that continuous efforts are needed in order to understand migrants' needs, aspirations and desires. One spokesperson said that she would sometimes visit neighbourhoods densely populated by migrants and cybercafés in Madrid in order to observe and talk with customers:

Apart from [marketing] studies, we need to be in direct contact with the customer, because in the end, you miss many things when you are in the office. You must go out, especially in order to understand such a great diversity as this (MNO 3).

MVNO 2, which defines itself on its website as "the leading European provider to 'ethnic' segments", centres its advertising strategy on emotive images of distant loved ones connected through mobile phonecalls. They have multicultural staff who get involved in the development of this commercial imagery in order to reach migrant consumers, as a spokesperson born in Colombia illustrated:

We come from other places, we know how it feels, and we have this sensitivity about the need for communication with our country, with our people, [the need to] keep that link, so this is always used in our advertising campaigns. We contribute with our own experience (MVNO 2).

Migrants' Accounts of Mobile Phone Use

As mentioned in the introduction to this paper, migrants' accounts of mobile phone use are considered in the context of other ICT and offer a complementary, but also a different perspective to the sales-oriented ones of the spokespersons. This section is subdivided to focus on three main issues: 1) migrants' technological equipment; 2) the value of voice communication in TFC; and 3) mobile phone appropriation practices.

Technological Equipment

While mobile phone uses might vary dramatically among different interviewees, all of them owned at least one device. This level of technological penetration is only comparable to TV ownership, another popular technology that all interviewees had at home.

Ecuadorian interviewees surpassed Moroccans in computer ownership, internet connection and landline subscriptions. Except for one adult man with low education and income, all Ecuadorian informants had at least one personal computer at home, with internet connection. This was the case for only half of the Moroccan informants, with one case of computer ownership without internet. These differences corresponded less to national origin than to intersectional variables such as digital literacy,⁶ employability of household members and their roles in budget allocation.

With regard to mobile phones, most interviewees had modern devices with touch-screens and the technical facility for mobile internet connection, although very few could actually afford this service. Only eight out of 28 had mobile internet (four of each nationality). Various Ecuadorian men who worked in the construction sector said they preferred basic handsets to modern ones because these stood up better to their working conditions.

The Ecuadorian women interviewed were more advanced mobile phone users than the Moroccan women. One indicator is the kind of subscriptions they had with carriers: in general, intensive mobile phone use is better covered by a post-paid subscription at a fixed monthly rate, which is slightly cheaper than those offered by prepaid services. Seven out of the eight Ecuadorian women had chosen the post-paid option, while only one Moroccan woman out of the seven interviewed had done so. This could be related to the employability of each ethnic group and their consequent economic independence, since most Ecuadorian women were working and could afford to cover their own technological expenses. By contrast, in the case of the Moroccan women, only one out of the seven had a job and most of them depended on their husbands' income. In any case, they expressed multiple reasons for preferring prepaid services. For

⁶ In the context of this paper, I limit the definition of digital literacy to the basic knowledge people need to use ICT (in particular computers) in an autonomous way for their own purposes. I am aware that this is a much more complex and multilayered concept that includes the ability "to evaluate and use information critically" (Buckingham, 2010, p. 267). However, this approach is beyond the aim and scope of the current research.

example, the only working Moroccan woman in the sample explained that this fitted her communication needs better because she did not like making telephone calls. A young Moroccan woman, who used three different mobile phone handsets each with a different prepaid service, argued: "Top-ups give me more freedom".

Many of the Moroccan men I interviewed were also unemployed, and this impacted on their possibilities as mobile phone users, causing them to prefer prepaid services as a way of controlling their expenses: a 37-year-old man said: "I used to have a [mobile phone] contract, but not now. I used to have a job". Another man, aged 32, explained: "I can't sign a contract because of the money... Not only because of that... because I don't always use the phone [sic], only sometimes".

There were also family strategies for managing the costs of communication, such as that described by this Moroccan woman, who lived with her husband, a daughter and two sons aged between 18 and 23:

I top-up the [SIM] card every six months, because my husband has a contract and all of us [in the family] take advantage of calling from his mobile phone. With one contract bill we have enough.

In another case, an Ecuadorian family shared a mobile device, but only for international calls: parents used their 19-year-old daughter's Smartphone to call a grandmother in Ecuador and aunts and cousins in Italy. They did not find this too expensive in relation to the comfort of calling from their home.

The Value of Voice Communication in TFC

Making and receiving phonecalls was the most extensive use of mobile phones among the migrant interviewees, especially within Spain, in order to talk with close family and friends, as well as actual and potential employers.

Texting or SMS (Short Message Service) was less popular for different reasons, such as "not being practical enough" (Moroccan woman, 40) or not offering instant communication, as in the case of the Ecuadorian woman, aged 38, who said that she rarely texted: "because I don't know if they read my message right away". The broad literature on mobile phone use has shown the popularity of SMS in specific cultural contexts, such as the Philippines (Perterra, 2002) and particular age groups, such as teenagers (Ling, 2000). In migrant contexts, however, this might acquire different connotations, depending on time of arrival and communicative needs.

A young Moroccan woman, who had recently arrived in Catalonia after marriage, said: "I don't use SMS because I don't know a lot of people here, so I just make calls, especially international calls [to my sister in France and my parents in Morocco]". In Spain, she only called her husband, using the same telecom provider, which only charged them the call set-up fee.

Before the widespread use of mobile phones and cheap prepaid SIM cards in the early 2000s, cybercafés were scarce, but the only way to call family abroad. Most interviewees remembered that, once arrived in Catalonia, they would first make phonecalls to family members in their societies of origin to tell them they had arrived safely. Cybercafés were a primary access point for the newcomers, serving multiple purposes: calling home, getting information on mobile phone service providers, accessing the internet, and even finding accommodation through a bulletin board. An Ecuadorian man recalled the difficulties of those first times:

When I came in 2000, there was only one cybercafé, it was always crowded and you had to queue for three hours. I lived here in L'Hospitalet and I had to go there [Barcelona] and of course, you had half an hour trip to go (...) And when it was your turn, maybe people [in Ecuador] didn't answer!

Cybercafés have multiplied in number, acquiring a strong presence in Spain, especially in urban areas of high migrant population. They have also diversified their services and, apart from telephone booths, most of them now include computers with internet access, money transfer services and telecom products such as mobile handsets, SIM cards and prepaid cards. International call rates have become cheaper in cybercafés through the increasing use of VoIP technology.⁷ Many interviewees said that they could have long conversations with their relatives abroad without worrying too much about the bill. They felt they could better control their expenses - a difficult task in TFC - through mobile phones. At least 23 of the 28 people interviewed spoke of going to cybercafés regularly to make international calls. However, many of them also said that these places did not provide enough privacy and that their opening times did not always coincide with their needs.

Interviewees' experiences of international voice communication could be roughly divided into two main trends: those who avoided the mobile phone and only relied on cybercafé telephone booths, and those who combined this service with mobile phone use and computer-mediated communication (CMC).

In the first group we found people who, apart from having economic constraints, faced obstacles related to illiteracy in general and digital illiteracy specifically. This was the case of a young Moroccan couple with three small children. At the moment of the interviews, they were both unemployed and receiving economic help from the local government to cover housing and basic expenses. They had not finished school and did not know how to use computers, so they relied 100% on voice communication. Their budget for mobile phone prepaid service was very limited and if they wanted to communicate with relatives in Morocco they would always go to a cybercafé. One Ecuadorian worker in the construction sector, aged 57, was also not familiar with computer use, so his communicative repertoire was based on voice communication. He had

⁷“Voice over Internet Protocol commonly refers to the communication protocols, technologies, methodologies and transmission techniques involved in the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet.” (VoIP, 2012)

previously called his mother in Ecuador from a mobile phone, but found this too expensive, so he now used prepaid cards.

In the second group of users, I locate those who combined international calls from the cybercafé with other practices, such as mobile phone and CMC, and other points of access, such as home, university and public libraries. Most interviewees were in this group, although they had heterogeneous patterns of use and appropriation. Digital literacy was also an influential factor in this group, although from a different perspective, based on the situation of members of the family of origin. A digitally literate Moroccan man with university studies had good reasons for preferring CMC to voice calls: "I always use Messenger and Facebook to chat with my friends from Morocco. It is a cheaper option". However, he could not do the same to communicate with everybody abroad: "In my family, there are people who have neither studied nor have the knowledge to connect [to the internet]. I talk by phone with them". Although he had neither computer nor internet connection at home, he accessed these through a migrant association where he worked as a volunteer, from the public library and from cybercafés.

Apart from educational level, digital literacy is also conditioned by age. All interviewees had some older family members - grandparents or parents - far away, and phonecalls were the main means of communication with these. One Ecuadorian woman aged 34 said she loved video-conferences so much she could spend from three to eight hours chatting and sharing daily-life activities with her parents. However, voice communication remained the basic means for keeping in touch with those living in a rural area in Ecuador. In this case, computer illiteracy, age and lack of technological infrastructure interacted to make the internet a preferred, but second option. It was only possible when her parents travelled to the home of her younger sister, who lives in the city, has a good internet connection and is computer literate:

Many times I´m cooking, I take the laptop to the dining room and while I´m doing things, I talk with my sister or my father (...) It is not the same to talk on the phone (...) to see each other through the webcam, you know? You can see, for instance, if there is an image of anguish or of calm. I talk on the phone a lot and I ask about my father [who is sick], but I depend on my sister´s comments.

Video-conferences were also preferred by other interviewees who described feeling closer when seeing each other's moving image, although phonecalls were the most practical and fastest means of instant communication. If her mother insisted a little, a young Moroccan man said that he would turn on the webcam, but most important for him was to speak with her every day. Aged 20, he had come to Spain in 2007 to join his father who had lived there for ten years. Most of his family is in Morocco, but also scattered in France and Italy. He had a Blackberry, which allowed him to connect to the internet as well as

to make and receive calls from abroad: "In our tradition, family is first. You can be anywhere, but you must keep in touch with the family", he said.

Many interviewees expressed contradictory feelings about instant communication, which offers a sense of closeness, but may also exacerbate the negative experiences of distance. An Ecuadorian woman aged 20, who lives with her parents and brother in Catalonia, still missed her extended family who had remained in Ecuador: grandparents, cousins, aunts and uncles. Her words reflect the pros and cons of routine communication:

It is not enough to catch up on each other's news! (...) you can know if they are ok, if they don't have health problems, if they need something (...) But you lose everyday life things (...) sharing moments [with them].

Similarly, a young Moroccan woman aged 21 who lives with her parents and six brothers and sisters in Catalonia, said she made regular phone calls to her grandmother from the cybercafé, but this was not enough:

You always feel far away. The more I talk on the phone, the further away I feel... because feelings emerge; you miss [your family of origin] even more.

Appropriation Strategies

Interviewees cherished mobile phones for TFC and sometimes preferred to pay higher call rates, but feel free to call any time they wanted to from the comfort of their home. In their accounts, I identified various strategies for the appropriation of low-end ICT, in particular mobile phones: blocking services that are technically available (international calls and/or internet connection), multiple SIM cards and/or handset ownership and prepaid cards.

A father who regularly talked with his 16 year-old son who lives in Ecuador with his mother, complained about the prices of international calls from the mobile phone, but would occasionally pay for these anyway:

Sometimes I don't have the time to go to the cybercafé; for example, you are at home and it is raining, or you feel in a bad mood, then you call directly from the mobile phone. But it is 'hello' and 'goodbye'.

High prices might ensure that conversations were very short, just enough for a greeting. He had decided to ask his mobile network provider to block international call services from his prepaid mobile phone, in order to avoid temptation and unaffordable bills.

A common appropriation strategy for making international calls from mobile phones consisted of having different SIM cards and/or handsets. Some people took advantage of the numerous discounts offered by competing service providers and often changed companies. At least five interviewees said that they had

two mobile phones, one with a post-paid subscriptions with one provider for making national calls within Spain and another with a prepaid service from another company for making international calls. A Moroccan woman aged 40 explained that with her second SIM card she could call her parents, sister and friends in Morocco from her mobile phone whenever she needed to, as "it is more comfortable, I can call whenever I want to and it is not necessary to go out in the street [to go to a cybercafé]".

Another interviewee with two mobile phones was an Ecuadorian man aged 34. He was one of the few to own a Smartphone and used it "for everything": voice calls, internet connection, reading the news, listening to music and watching videos. He always connected to the internet from his mobile device and made personal and work calls within Spain, using a major carrier that has free calls after 6pm. Apart from this modern handset, he had another, older one with a different SIM card from a small carrier that offered better prices for calls to Ecuador. This mobile phone was exclusively for calling people there, especially his 16-year-old son, with whom he talked once a week. For him, having two devices was very convenient and not necessarily an extravagance, as it was for one of his colleagues who owned four mobile phones with four different SIM card providers. Although these practices are defined by users' incomes, no matter their migratory origin, the literature has acknowledged that the booming business of prepaid telecom services has been closely developed in conjunction with migrant needs (Vertovec, 2004; Sabaté iDalmáu, 2010).

Having multiple telecom providers is not exclusive to international communication. At least two interviewees had three different handsets and companies for calling within Spain. A young Moroccan woman ended up with three terminals, with prepaid services, taking advantage of special offers from the different companies, but did not want to get rid of her first mobile phone number, where most people could reach her, especially friends and acquaintances from her immediate social environment. Another interviewee, , also had three different handsets with different carriers: one for personal use, another for work activities and a third for activism. Unlike the young woman, he had post-paid subscriptions with each of these and tried to take advantage of each company's special offers, such as cheap calls at specific times of day. In order to call his mother in Morocco, he used his landline telephone.

Landline telephone subscriptions have decreased considerably worldwide since the arrival of mobile phones (ITU 2011). In both these migrant groups, there were people who used to have one, but had now cancelled their subscriptions, either for economic reasons or because it was no longer perceived as something useful. As one young Moroccan woman said of her own family, composed of her parents and six brothers and sisters, "Now each of us has a mobile phone and nobody uses it [the landline telephone]".

Of those interviewees who still had fixed telephones at home, some said that they called abroad using prepaid international cards, also known as scratch cards. These provide limited purchased airtime through the dialing of a code on a landline telephone or from the website of the provider. They were positively

valued in terms of economic and time convenience. As a young Ecuadorian woman expressed it: "They are very convenient, especially when you wanna call during the night from home, when cybercafés are closed". However, a big drawback of scratch cards is the risk of fraud, since the market in prepaid international cards is hard to regulate, new brands appear as quickly as they disappear and usually draw on tricky advertisements that promise more call minutes than the actually provided. This had been experienced by several of the people interviewed for this research, causing dissatisfaction and distrust.

Conclusions

Mobile phones are very important for migrants' everyday lives, since they offer a relatively easy way of keeping in touch with their social networks in both origin and destination societies. While this assumption constituted one of the starting points of this paper, it soon emerged that the easiest way was not always the most appropriate: many migrants made *limited* use of mobile phones and this conditioned how transnational family relationships were nourished.

Economic costs acquire a special relevance in low-income migrants' contexts, in which telecom companies approach price-sensitive consumers with specific commercial strategies, as illustrated by the phrases taken from outdoor advertisements. The accounts of five spokespersons working in the marketing departments of both large and small carriers offered a first-hand approach to how companies conceive of migrants as mobile phone users. They know the importance of TFC in migrants' lives, how much they need international calls to keep in touch with their family of origin, and their preference for mobile phones over other telecom services; but they also realise that many migrants have a limited budget and prefer prepaid services to post-paid subscriptions. Informants also distinguished consumers' behaviour in terms of two important issues: time living in Spain and cultural differences. Unlike advertisement copy that mainly stresses the transnational aspect of communication through international phonecalls with the family of origin, telecom spokespersons acknowledged the increasing importance of cheap national calls between immediate family members once migrants have settled down in Spain.

The results of the interviews with Ecuadorian and Moroccan migrants suggest that their particular national origins do not necessarily account for differences in mobile phone use and appropriation. These are better explained in terms of the intersections of employability (and consequent budget allocation), age, digital literacy and availability of basic technological infrastructures among the people involved in the communicative events, in both origin and destination societies.

Many of the migrants interviewed had modern mobile handsets, but, in contexts of high unemployment and uncertainty, could not afford mobile internet connection or international calls on a regular basis. So they

used these to communicate regularly within Spain and only exceptionally to call abroad. Most interviewees agreed that calling abroad from a mobile phone was the more comfortable way to keep in touch in a personalised, continuous and intimate way. Moreover, its oral interface proved especially appropriate when digital illiteracy or lack of technological equipment and infrastructures inhibited CMC. However, high international call rates from mobile phones prevented long, comfortable conversations, resulting in frustrating experiences of TFC. Many of them communicated regularly with older members of their family of origin, such as parents and grandparents, who would speak fluently on the phone but who could not use CMC without another person's help. As voice communication was still crucial in these contexts, migrants relied on different low-cost alternatives, like using landline phones with 'scratch' cards and telephone booths in cybercafés. Some practices were promoted by telecom commercial strategies (e.g. cheap calls to a specific destination, at particular times). Others, however, engaged directly with their own interests, for example by owning multiple SIM card and mobile phone sharing, in an endless process of commercial disciplining and users' appropriation.

This paper has sought to show, at least partially, the meaning-making processes and the power relationships at play between demand and supply, users and providers of mobile phone services. It has highlighted the essential role that private interests and actors play through their politics of pricing and profit-driven provision of services, which in turn shape (and are shaped by) users' appropriation strategies. This affects the levels of individual and social well-being that people experience through communication, acquiring special relevance in contexts of mobility and management of family relationships at a distance. In this sense, I argue that this needs to be acknowledged in the literature of migrant connectivity and taken as a central issue in academic explanations of these phenomena.

Future research could navigate migrants' experiences with ICT, engaging with a systematic analysis of the role that telecom enterprises (and other providers of connectivity, like money transfer agencies) play in shaping migrants' TFC practices. It would be useful to look at this issue in various contexts and through different sources of information, which could include visual and written texts (e.g. advertising, online discourses). This could contribute to understanding how the economic interests of major global players approach migration, the ideologies at work behind their business models and rationales as these conflict, as well as converge, with public policies and other key processes that define the present and future of contemporary migration.

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