

E-migrant Women in Catalonia: Mobile Phone Use and Maintenance of Family Relationships

Gender, Technology
and Development
17(2) 179–203
© 2013 Asian Institute
of Technology
SAGE Publications
Los Angeles, London,
New Delhi, Singapore,
Washington DC
DOI: 10.1177/0971852413488715
<http://gtd.sagepub.com>



Mihaela Vancea
Nihil Olivera

Abstract

The rapid dissemination of information and communication technologies (ICTs) in contemporary societies has given rise to a new technological, geographical, and social (TGS) space that defines the e-migrant. This analytical perspective allows us to address the relationship between mobile phone use and the maintenance of family relationships from a distance. In this article, we focus on the transnational communication practices of three distinct groups of migrant women in Catalonia: Ecuadorian, Moroccan, and Romanian. The results show that the three groups of women tend to use mobile phone mainly for (transnational) family communications. Mobile phone use allows migrant women to move into a new TGS space where family relationships are significantly redefined in technological and geographical terms, but far less in social terms. Their self or socially perceived traditional family roles perpetuate, but in a different way, as distance transforms familial patterns of interaction.

Mihaela Vancea, Universitat Pompeu Fabra, Edifici Jaume I, Ramon Trias Fargas 25-27, 08005–Barcelona, Spain. E-mail: mihaela.vancea@upf.edu
Nihil Olivera, Universitat Autònoma de Barcelona, Sombrerers 27, 2-2, 08003–Barcelona, Spain. E-mail: nihil.olivera@uab.es

Keywords

Migrant women, transnational communication, maintenance of family relationships, mobile phone

Introduction

In recent years, women have been migrating in greater numbers, particularly with a view to improving their economic situation and employment opportunities. Such has been the increase in the ratio of migrant women to men in the world's total foreign-born population that many authors have begun to talk of the feminization of contemporary migration (Castles & Miller, 2003). According to United Nations statistics (2006), the percentage of female migrants worldwide rose from 46.7 percent in 1960 to 49.6 percent in 2005. Due to the rapid penetration of new information and communication technologies (ICTs) in contemporary societies, migrant populations are increasingly connected to networks and engage in a range of activities (social, economic, political, and cultural) that transcend conventional nation-state borders.

Contemporary societies can now be envisaged through the metaphor of the network society—a global social structure based on social networks activated by the use of digital information and communication technologies (ICTs) (Castells, 2009). Within the consolidation of global markets, terms such as “different” and “unequal” have been replaced by “included” and “excluded” (García Canclini, 2004). Accordingly, exclusion from information and communication networks represents a new form of social exclusion (Castells, 2004; van Dijk, 2012; Warschauer, 2004).

Various studies have shown that while the gender gap in ICT equipment is decreasing, gender still has a significant effect on digital skills and ICT usage (Hafkin & Huyer, 2006; van Dijk & Hacker, 2003). The inclusion of migrant women in destination network societies is crucial as this collective tends to experience various forms of discrimination on grounds of social class, gender, and ethnicity. Employment segregation on grounds of ethnicity tends to compound more traditional forms of gender discrimination, which explains why it is so common in service industries that are strongly feminized and socially less valued, such as,

people care, especially for the elderly or sick; and domestic work, such as, house-cleaning and ironing (Parella, 2003; Torns, 1997, 1999). Exclusion of migrant women from the digital networks of ICTs will only add to the multiple forms of discrimination they already experience in most destination societies.

Contemporary international migrants question state borders and national sovereignty through their multiple forms of belongings, cosmopolitan self-identification, or transnational practices and activities (Beck & Grande, 2010; Beck & Sznaider, 2006; Georgiou, 2010; Maharaj, 2010; Portes, 2003). The transnational shift in the study of international migration offers social researchers a new theoretical lens for examining the social, cultural, economic, and political practices and ties that many immigrants maintain with their counterparts in their societies of origin (Parella & Cavalcanti, 2008; Portes, 2003).

Families in the age of globalization are based on new types of family relationships maintained by the art of “living together with and beyond boundaries” through the use of new technologies (Beck & Beck-Gernsheim, 2012). The use of transnational lens for analyzing transnational migrant families reveals their changing nature as a strategic socioeconomic unit in such a way that family ties, both economic as well as those having to do with social reproduction, are re-elaborated and re-accommodated over time and space (Levitt & Glick Schiller, 2008).

ICTs allow news about family members abroad to be received and money to be transferred almost instantaneously to nearly all places in the world. As such, many social studies have focused on the use of new technologies by migrant women to communicate with and maintain their families across state borders. They have highlighted the need for transnational communication and the remote family care provided through ICTs to different groups of migrant women (Madianou & Miller, 2011; Parella, 2007; Parreñas, 2005).

Some studies have acknowledged family separation as one of the social costs of migration affecting many emigration countries. Maintenance of relationships within such transnational families depends heavily on long-distance communication (Madianou & Miller, 2011). With phone services becoming increasingly accessible worldwide, more and more women migrants can get involved in day-to-day decisions from a distance (Parreñas, 2005, p. 318). Other studies have employed the notion of virtual co-presence or connected presence to theorize the feeling of togetherness

that ICTs bring about to overcome family distance (Baldassar, 2007, 2008; Horst, 2006; Kang, 2012; Wilding, 2006).

In the next section, we define some key concepts, such as, the technological, geographical, and social (TGS) space and its consequent e-migrant configuration. We will then present empirical evidence of an e-migrant configuration within this new TGS space, based on the results of our study of Ecuadorian, Moroccan, and Romanian women in Catalonia and their communication practices with their families abroad. Subsequently, we employ the TGS dimensions of the new space created through the use of ICT as analytical categories to explore the e-migrant women in transnational family contexts.

E-migrant: A New TGS Space Configuration

The global flows of communication and information have changed our notions of space and time. We experience a time–space compression that gives rise to new TGS spaces wherein the e-migrant, as a connected migrant, overcomes space and time boundaries through the use of new technologies (Olivera, 2012).

Contemporary societies are configured as new TGS spaces where people from multiple geographic and cultural backgrounds coexist. The rapid growth of digital technology in the last decade has undoubtedly changed individual forms of consumption (online shopping, downloading of movies, music, books, etc.), working and learning, social interactions, and political participation. ICTs have enabled the emergence of new social practices and activities, shaping new social relationships and identities that transcend space and time boundaries.

Mobile phones, for example, allow connectivity among individuals around the globe through satellite communications. In today's network societies, the use of mobile phones can be regarded as both a consequence and cause of migration and globalization (Madianou & Miller, 2011). Many migrants can be pictured as modern nomads connected to an intelligent technological device by which they access information and communicate throughout the globe. This smart device allows them to harmoniously combine their global/cosmopolitan/transnational forms of communication and interaction with their families.

ICTs have given rise to a new techno-sociability process that affects and includes migrants in a privileged way, allowing them to develop new forms of social interaction, communication, and participation practices that transcend state borders (Escobar, 2000; Gómez Cruz, 2003; Graham & Marvin, 2001; Nedelcu, 2009; Olivera, 2012). The term “e-migrant” proposed in this article permits us to dialectically articulate the relationship between the present migration processes and the multiple technological, spatial, and social dimensions of contemporary network societies.

The use of the term e-migrant, as a connected migrant, is also reinforced by the difficulty to independently analyze immigrant and emigrant experiences. Morphologically, the prefix “im-” to the term migrant provides a semantic change of incorporation or inclusion in a destination society. In turn, the prefix “e-” to the term migrant adds the meaning of leaving the country of origin. Thanks to the use of ICTs, today’s migrants, though they cannot always traverse migration laws and nation-state boundaries, might benefit from the multiple technological, spatial, and social dimensions of the global network society.

Moreover, if we analyze migration as a process of continuous mobility, connectivity, and ubiquity, the idea of “leaving” or “entering” a social space becomes contentious. In other words, migrants’ integration into destination societies seems to be, at present, more physical than economic, sociocultural, or political. Thus, the e-migrant would be an individual who physically leaves one country to enter another one, but remains connected to both of them, unlike migrants from earlier decades. While it is true that previous migrants could communicate with or inform themselves about their home countries through, for example, snail mail, landline, radio, or cable TV programs, the changes that have occurred after the digitization of all communication and information devices are irreversible and radical.

Methodology

This article uses data from 35 semi-structured interviews with migrant women in Catalonia to explore the use of mobile phones in the maintenance of family relationships. To fully understand how migrant women

use mobile phones to keep up their family relationships, we need to understand the social mechanisms that define the communication and information behaviors of migrant women, as well as the nature of their family relationships. The use of qualitative methodology was considered the most appropriate strategy for capturing the perceptions, motivations, and specific circumstances that influence the relationships between the variables (mobile phone use and maintenance of family relationships). Hence, the open answers obtained during the interviews with the migrant women formed the empirical evidence from which we captured the use of mobile phones by migrant women for upholding family relationships.

For this study, we conducted 35 semi-structured interviews with migrant women from three different ethnic backgrounds (Ecuadorian, Moroccan, and Romanian) living in four Catalan cities, all with high concentrations of these three population groups. Following the criteria of King, Keohane, and Verba (1994), the sample of migrant women participating in the study was selected by maximizing the variation in the factors considered by specialized literature to be key to understanding technological and communication behaviors in transnational family contexts. These factors include: (a) type of family (reunited/transnational); (b) cultural background; (c) educational level; (d) age; and (e) characteristics of the city of residence.

Transnational family was defined as a domestic group separated in space, and many times present in two or more continents (Camarero, 2010). In spite of geographical separation, a transnational family is characterized by the strength and continuity of emotional ties (Parella, 2007). In this study, we used the nuclear family (parents and children) as our main unit of analysis, but we have also incorporated grandparents, sisters, and brothers since they often play a key role in transnational families.

By transnational communication, we refer to the cross-border flow of texts and images, information, feelings, and emotions. The technological variables explored by this study included: type of mobile phone (simple or with advanced features); frequency and type of use of mobile phone; Internet connection to the mobile phone; and the use of Internet.

Cultural variation is considered to be a determining factor in the access to and use of ICTs. While groups from the EU27, North America, and Latin America are strongly integrated into the Catalan network society

(in the sense that they are users of several ICTs), the remaining groups seem to focus on the use of mobile phones. The population groups born in the Maghreb and sub-Saharan Africa are the most poorly equipped in technological terms (Ros & Boso, 2010). It was, therefore, decided to select participants from three different ethnic backgrounds. The three largest migrant groups in Catalonia were from Ecuador, Morocco, and Romania, which determined our choice of these three nationalities for our study. The sample was also segmented by educational level (differentiating between basic, intermediate, and higher categories) and by age (differentiating between “young” participants, aged between 18 and 35 years, and “adults” over the age of 35).

The four towns and cities chosen for the study had high concentrations of these three migrant populations and were of varying population sizes. It is well known that the size of a town or city can determine public and private investment in technology and that this can affect the relationship between the factors studied here (Salvador, Cortés, Sánchez & Ferrer, 2004). Thus, in the final selection of the towns and cities of residence, we chose three with more than 20,000 inhabitants (Reus, Lleida, and Hospitalet de Llobregat) and one with fewer than 20,000 inhabitants (Santa Margarida i els Monjos).¹

To recruit participants, we used a combination of judgment sampling and snowball sampling (Corbetta, 2003). Interviews were initially held with participants in the four cities. After these initial interviews, several visits were made to the four cities to complete the quotas required for judgment sampling using the snowball technique. The interviews were conducted at different locations, the majority of which were proposed by the participants in order to set a suitable ambience for data collection. The interviews were held in Spanish or Catalan, depending on the request of the participant. An audio recording was made of each interview, which was transcribed verbatim and analyzed.

Results

The results of the analysis of the transcripts are presented in the following together with an exploration of the use of mobile phones by migrant women for (transnational) family communication. The most relevant

questions we analyzed were: For what purposes and how do you use mobile phone? Does the mobile phone help you to maintain (transnational) family relationships? What are the positive and negative aspects of this type of (transnational) family communication?

In our analysis of the interview data, we explored how the new TGS space configures the e-migrant woman by focusing on three dimensions: technological (equipment and frequency of use); geographical (virtual vs. physical presence); and social (social roles, patterns of communication and interaction). Besides assessing factors widely recognized as being determinants of inclusion in the network society (such as age, level of education, or employment status), we also tried to examine the hypothesis of whether origin is a key differentiating factor.

The Technological Dimension of Migrant Women's (Transnational) Communication

According to the Survey on ICT Equipment and Use in Spanish households conducted by the Institute of National Statistics (INE, 2011), the percentage of Spanish users of Internet (67.3 percent) is about two percentage point below that of foreign-born users (69.8 percent). However, frequent Spanish Internet users (62.1 percent) exceed foreign-born Internet users (58.2 percent) by nearly four percentage points. Mobile phone use is about three percentage points higher in the foreign-born population (95.9 percent) than in the case of Spaniards (92.6 percent).

Households in the Spanish Autonomous Community of Madrid are the most technologically equipped in Spain, both in services and equipment, followed closely by the households in Catalonia. Regarding mobile phone use, all the Spanish Autonomous Communities are very close to the national medium value (92.8 percent) but Catalonia is slightly higher, with 94.5 percent of its people using mobile phones. Nevertheless, the percentage of mobile users accessing the Internet is lower in Catalonia (17.7 percent) than the national level (20.3 percent).²

These data illustrate that immigrant women in Spain present approximately the same level of ICT use, in particular mobile phone use, as native women, and that the digital divide by gender has substantially decreased (see Figure 1).

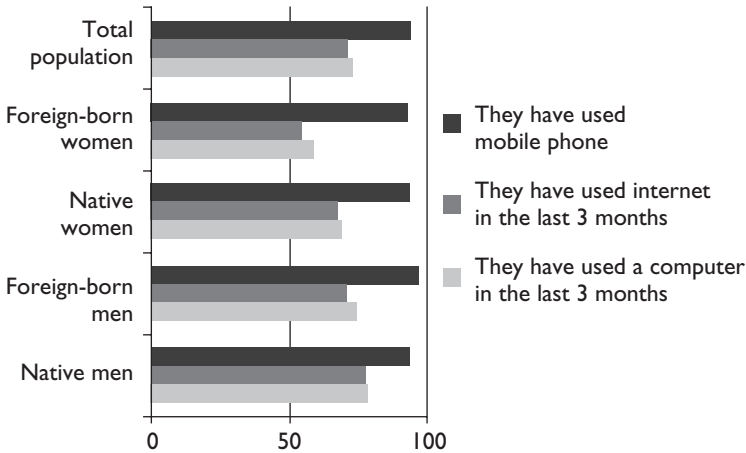


Figure 1. ICT Use by Origin and Gender (%) in Spain

Source: Personal elaboration based on data from the Survey on ICT Equipment and Use in Spanish households (INE, 2011).

Other quantitative data in Catalonia show that the foreign-born population demonstrates a higher percentage of ICT use than the native population. For example, the percentage of mobile phone users is higher in the foreign-born population than in the native population. Moreover, the percentage of foreigner mobile phone users, in particular immigrants from Romania and the Maghreb, exceeds the native mobile phone users (Ros & Boso, 2010).

Overall, the use of mobile phones seems to be quite commonplace among the Spanish and Catalan populations. However, the immigrant population tends to use mobile phones to a slightly greater degree than the native population, while the differences in mobile phone use by gender have considerably decreased. Immigrants seem to be a segment of the population highly connected through new technologies that allow them to be actively engaged in everyday life back home in fundamentally different ways than in the past (Levitt, 2001; Portes, Escobar, & Walton Radford, 2007).

All migrant women studied had a mobile phone at the time of their interview. However, when asked about the type of mobile phone they

used, Ecuadorian women had more technologically advanced sets, with 88.9 percent stating they had mobile phones with advanced features, such as, touch screen and 3G, as compared to 52.9 percent of Moroccan women and 37.5 percent of Romanian women.

The migrant women who used the mobile phone most frequently were the Ecuadorians (all of them), followed by the Romanians (77.8 percent) and the Moroccans (52.9 percent). Only three Ecuadorian women said they were connected to the Internet from their mobile phones. Generally, young women under the age of 35 (regardless of their origin) used mobile phones most frequently. Also, women with a higher educational level made more frequent and more generalized use of their mobile phones, regardless of their origin.

Ecuadorian and Romanian women were also found to be more likely to be in full-time employment (55.6 percent and 44.4 percent, respectively) than the Moroccan women (17.6 percent). Most of the Ecuadorian (66.7 percent) and Romanian women (55.6 percent) interviewed worked in unskilled jobs, such as, hotel and catering services or domestic cleaning. The Moroccan women had higher levels of temporary employment (17.6 percent) and unemployment (64.7 percent). Those who did work, did so well below their educational level.

Most of the women interviewed used mainly transnational communication arguments to justify their interest in a mobile phone: the need to keep in touch with family members in home countries. Some of the Ecuadorian and Romanian women interviewed also used ICTs, particularly mobile phones, to find/maintain jobs or improve their employment status. Mobile phones are essential to them mainly for using their social networks to find work. But their use is also localized by present or potential employers.

Generally, all the women interviewed used a combination of different technologies, including mobile and landline phones, with prepaid cards for both or either, and the Internet, to maintain family relationships from a distance. Most used mobile phones just for beeping or giving missed calls, and for calling their family members in their country of origin in case of emergency.

The Ecuadorian women, regardless of their age and educational level, seemed to be permanently connected to their mobile phones. Most declared that the first thing they did when they arrived in Catalonia was

to visit a calling center, and call up their family members in Ecuador to tell them that they were fine. Then, after they had found a room to stay and saved some money, they bought a mobile phone. In order to cut costs, Ecuadorian women combined different technologies to communicate with family members abroad: mobile and landline phones, calling centers and prepaid cards for landline and mobile phones, Internet video calling and chats. As a 30-year-old Ecuadorian woman said: "I prefer a calling centre because...I can speak a lot and I can pay for it...I pay for everything. I can control how long I have spoken with my family...as I can see the minutes."

In the case of the Romanian women, landline phones seem to be the most used technology for transnational family communication, though they also tend to combine different technologies (landline and mobile phones, Internet chats, prepaid cards, or calling centers). A 33-year-old Romanian woman explained how she combined different technologies to communicate with her family members abroad, depending on the technological resources available in different parts of Romania, and also on her household's economy:

Depending on the available technological resources back in Romania, I use mobile phone, landline phone or Internet. For example, I use both mobile and landline phone to speak with my mother, as she does not have Internet and I believe she will never get used to it. I use "messenger" with my brothers since Internet is a free communication medium. Nevertheless, communication with my family in Romania always depends on the economy of our household.

The Moroccan women interviewed were less equipped technologically than the Ecuadorian or Romanian women. Most of their households did not have landline phones or Internet connections, and they also tended to make less use of mobile phones than the other two groups of migrant women. Moroccan women consider mobile phones to be important for maintaining family relationships from a distance. In order to communicate with older members of the family in their country of origin (parents, grandparents), Moroccan women need phone-based communication, be it mobile or landline. Some of the Moroccan women interviewed combined mobile phones with calling centers for transnational family communication.

For younger Moroccan women, mobile phones represent an important information and communication technological device. A 21-year-old Moroccan woman, who had three mobile phones, all with prepaid cards from different phone companies, said: "I have three mobile phones, all for me, because I bought one and then I liked another one and so on...I use all three of them...all three have touch-screen and Internet connection."

Moroccan women with higher levels of education are also more likely to use the Internet (Messenger, Facebook, or video-calling via Skype) to communicate with their families in Morocco. Transnational communication becomes easier when families live in urban areas in Morocco with better technological infrastructure. A 40-year-old Moroccan woman with a high level of education explained: "Earlier, I used to communicate with my family in Morocco by email, but ever since they have got their own computer with Internet connection, I also communicate with them through 'Messenger' or Skype."

The Geographical Dimension of Migrant Women's (Transnational) Communication

All women interviewed belonged to transnational families, meaning family units that do not coexist or reside in the same household, and at least one unit of the household lives in a different country (Camarero, 2010, p. 49). Most Ecuadorian women emigrated alone in a desire to secure a better life for themselves, or more likely, for their children. At the time of the interviews, most lived with their husbands and children in Catalonia. Most still had parents, sisters and brothers, or grandparents in Ecuador.

Romanian women came to Catalonia because of their husbands, who arrived first. As one Romanian woman said: "I am here for love." Some of them had left their children back in Romania, while others had brought them along. Moroccan women too came to Catalonia due to their husbands. Some of them had recently arrived, while others had lived for a long time in Catalonia with their husbands and children.

Although Ecuadorian women appeared to be better equipped technologically, there are infrastructure and time differences between Ecuador and Catalonia that make it difficult for them to communicate with their

families in Ecuador. Calling up their family members in Ecuador makes them feel closer to their families, besides keeping them abreast of events at home. For example, a 23-year-old Ecuadorian woman, who lives with her parents in Catalonia, said:

I phone my grandmother every week. I am very close to my grandmother who is like my own mother. I always phone her up to see if she is ill...or how she feels... On my birthday, my grandmother phones me up and puts some music on the phone...she is like this.

Mobile phones also allow Romanian women to feel closer to their families in Romania. Transnational family communication provides Romanian women emotional comfort and tranquility. A 33-year-old Romania woman said: "Mobile phones can help you maintain your family relationships from a distance as family members feel you are close to them, and you can attend to them whenever they need."

Mobile phones also make the migrant women feel that they can transcend the barriers of time and space. For example, a 20-year-old Ecuadorian woman, who owned a smart phone with an Internet connection, and who had family members in Catalonia, Ecuador, and Italy, declared: "Mobile phones allow you the luxury to call from wherever you are, and whenever you feel you want to communicate with your family."

A 40-year-old Romanian woman also acknowledged the role of the new technology in transcending time and space: "Mobile phone or Internet allows you to communicate faster, and of course there are no space barriers. We live here but we can easily speak with and see people who live back in Romania." Another 43-year-old Romanian woman emphasized the fast nature of mobile phone communication in the context of a transnational family:

Mobile phone facilitates my life as I can communicate with my family whenever I want. Earlier, if you wanted to talk to your family you needed to write letters and wait a lot for their answer. Now if I want to tell them something, I just pick up my mobile and call them up.

Sometimes communication through mobile phones makes up for physical absence so well that families no longer feel the urgency to visit home. A 28-year-old Romanian expressed this with frustration:

Mobile phone is very good because I can speak a lot with my mother in Romania, but thanks to it I do not feel the need to go and see her. As I frequently speak with her by phone, I do not go to Romania to visit her. In the end, I do not get to see her at all.

Echoing her sentiments, a 20-year-old Moroccan woman said: “I believe that technology use can also be negative. For example, if you speak too much on the Internet or by mobile phone with your family in the home country, you might not feel like going to visit them.”

Nevertheless, this feeling of co-presence through a phone call is not very strong among the three groups of women interviewed. Many of them declared that phone calls cannot replace physical presence. As a 42-year-old Ecuadorian woman put it: “I do not believe that a phone call makes you feel closer to your homeland. On the contrary, I believe that it makes you feel that you are far away from home...You can call your family back home, but they are still far away from you.”

A 33-year-old Romanian woman expressed the importance of physical presence in family communication and the danger of addiction to technology:

Nothing can replace physical presence. However, if you make a phone call and give your family support, at least they will know that you are behind them. I believe that technology abuse is problematic. When you abuse, you give more importance to virtual than physical presence. It is an abuse. You can easily become addicted to technology.

A 39-year-old Moroccan woman also emphasized the danger of addiction to technology, especially among youngsters:

I do not like my children to be addicted to computer...or to Facebook or to mobile phones. I believe that they are too young and they still have to experience many things, and they have to go out with their friends, read books, and play. But if they are addicted to technology, they can miss out all this. I believe many children and teenagers today neglect this part of life. Of course, they should use technology but in a limited way.

Migrant women with higher educational level also perceived this danger of becoming disconnected from reality because of technology use. A 30-year-old Moroccan with a good education said:

You can lose a lot of things. I connect to Internet at home only when I need. Internet connection to your mobile phone might become addictive. It is like with video games. They disconnect you from your surroundings. Yesterday, I told one of my workmates: "I will throw your mobile phone out of the window." He is totally addicted to texting.

Some of the migrant women interviewed felt that phone calls might hide things from them as they cannot actually see the faces and expressions of their interlocutor. For example, a 34-year-old Ecuadorian woman, whose father was keeping poor health in Ecuador, explained why she preferred to video-call her parents instead of just speaking to them on phone: "It is not the same to just speak with them... through the webcam you can receive an image of tranquility or of anguish...I need to see my father, face to face, so that I can assure myself about his health."

The Social Dimension of Migrant Women's (Transnational) Communication

The results of our study show that mobile phones allow migrant women to be localized by or to localize their family members; communicate with their families in Catalonia, Ecuador, or other countries; take care of their children by monitoring them; maintain their ties with friends from different cultural backgrounds; and look for a job and improve their employment opportunities or status.

Transnational families depend on long-distance communication for preserving their bonds. Many government agencies and telecommunication companies in both destination and home countries also facilitate and encourage mobile phone use among transnational families (Madianou & Miller, 2011). Many migrant women studied are ambivalent about the role of the mobile phone in transnational family communication. Most of them felt empowered as it allowed them to partially reconstruct their role as mothers, spouses, sisters, or daughters through (transnational) family communication. But some also felt a sort of family pressure or obligation to maintain transnational communication. As a 30-year-old Ecuadorian woman explained:

If I do not call my mother, then after a week or ten days my brother phones me up or sends me messages to ask me what has happened to me, and he urges

me to call my mother. And my mother, crying, asks me: “My dear daughter, what has happened to you that you have not called me until now?” She has got used to the fact that I call her every week. It is not an obligation. It is...as she is my mother, I care for her.

Missed calls from family members back home bring certain anxiety to migrant women and a feeling of obligation to call back. A 34-year-old Ecuadorian woman said:

Sometimes, my sister phones me up to say: “*Ñaña* call me as it is urgent!” Then, she hangs up because the phone calls are expensive there too... But she does not even let me tell her that I am at work, and I will phone her back later when I get home. I become very nervous and end up calling her back and then we start talking and I do not realize that minutes just pass away and this for my salary...it means a lot.

Transnational families have their own mechanisms of family organization and division. Normally, economic power and decision-making is transferred to the displaced members, while family care remains largely the responsibility of the non-displaced members (Camarero, 2010). That explains why many of the Ecuadorian women interviewed had invested in new technologies (computer and Internet, mobile phone) not only in the destination country but also in their country of origin. Some of them even re-charge the prepaid cards of their family members abroad, or send them money. A 30-year-old Ecuadorian woman declared:

As a daughter, I send my mother money every month. I help her with money. If one month I cannot do it, then I tell her: “Mother, this month I cannot send you money.” Since I arrived here, I have always sent her money. I send money to my mother and she distributes it among family members according to their needs. I also send my family mobile phones and computers, and other things from here.

Sometimes, young Ecuadorian women are forced to give up their education, and enter the job market abroad to economically help their (transnational) family.

Mobile phones allow Ecuadorian women to find or maintain jobs, particularly in domestic cleaning. These phones are essential to them for using their social networks to find work, or to be localized by their employers.

Romanian women use their jobs (as shop assistants, cultural mediators, psychologists, waitresses in restaurants, cleaning ladies, or as caregivers for the elderly) to meet people of different origins, especially natives, from whom they manage to secure the necessary social resources for living in Catalonia. In general, Romanian women show a greater interest in their future in Catalonia than the other two communities of women. Their discourse suggests that, although they want to keep in touch with their families back home, they also want to live their lives fully in Catalonia.

Most of the Romanian women interviewed use mobile phones mainly to communicate with their family members in Catalonia or to take care of their children. A 43-year-old Romanian woman explained how she tries to combine her work with caring for her children: "I use mobile phone to monitor my daughters. I work ten hours outside home, so when my daughters arrive from school I phone them up. When they go to school, they phone me up, and if they have any problem I try to resolve it over the phone." To communicate with their family members in Romania, they prefer the Internet or calling centers.

The Romanian women also tends to use mobile phones to stimulate their social networks and find jobs, mostly in domestic cleaning or in hotel and catering services. Some Romanian women with higher levels of education and more specialized professions, such as, cultural mediators or psychologists, use mobile phones for work as well.

Moroccan women who have recently arrived in Catalonia (generally young, newly-married women) have very limited social ties as compared to those who have lived in Catalonia for long and who have developed relations with people of different origins. In fact, some young women who came to Catalonia as children, now have more ties with Catalans, Moroccans, and people of other nationalities in Catalonia by virtue of socializing in various public spaces, such as, schools, workplace, and neighborhood. A 32-year-old Moroccan woman, who came to Catalonia to join her family when she was 12, said: "I have all my family and friends here in Catalonia. I use the mobile phone to communicate with them."

This is one reason why younger Moroccan women tend to make a more generalized use of their mobile phones. As a 21-year-old Moroccan woman put it: "I have three mobile phones... I use them to phone, send messages, connect to the Internet, listen to the radio, watch YouTube and

videos...I use them to phone up the three friends I have here, my aunt and grandmother in Morocco, and my cousin in Barcelona.”

Most older Moroccan women have spent most of their time looking after their homes and caring for their husbands and children, and have not developed strong bonds with other people, except within their community. In their case, longer residence in Catalonia has not led to further development of more heterogeneous social ties. In this context, mobile phones play an important role, especially for maintaining family bonds and friendship with people from their own community. And these ties provide them the necessary emotional and economic sustenance for living in Catalonia.

Moroccan women with basic education tend to make very limited use of their mobile phones, often using these only to call up their husbands or family members living in Catalonia. To communicate with their family members in Morocco, they prefer a calling center. Since some of them cannot even read or write, they use a notebook in which they write down all the phone numbers in the order of preference. A 38-year-old Moroccan woman explained: “I know who calls me up because I remember the first or the last two digits of the phone numbers. I also keep a notebook in which I write down all the numbers in the order of preference: first, that of my father, and so on, depending on who I phone most often.”

But educated Moroccan women tend to use mobile phones not only for family communication and to monitor their children, but also for work.

Conclusion

Global network society, through its inherent condition of transcending state borders, creates the illusion of addressing existing global inequalities based on income, employment, education, age, gender, and ethnicity. Nonetheless, the digital divide in terms of ICT equipment, access, and usage adds to existing social inequalities in contemporary network societies. Women, and in particular migrant women, represent a major vulnerable group in terms of new technology use.

Several studies have shown that many migrant women have progressed from no access to new technology to possession of a mobile

phone, or from not knowing how to use a computer to regularly surfing the Internet. Recent quantitative data illustrate that migrant women in Catalonia tend to use ICTs at a similar level as native women, and that the digital divide by gender has considerably diminished. However, not all migrant women know how to use ICTs for their personal empowerment. In this context, understanding the role of ICTs for migrant women's empowerment in contemporary network societies is an important scientific endeavor needed to re-design inclusion policies for this segment of population.

ICT dissemination in most domains of women's life, such as, family communication, work, civic and political participation, has produced radical changes in their information and communication practices. The use of mobile phones, for example, has brought in new forms of transnational communication and social interaction, as well as new logics of text and image production and transmission. Through the use of this smart technological device, migrant women move and live in a new TGS space where their individual and collective imaginaries (set of values, institutions, laws, and symbols common to a particular social group and the corresponding society) are continuously redefined. This new TGS space configures the e-migrant woman, a new type of migrant woman who requires different policy measures for her inclusion in contemporary network societies.

The three group of migrant women studied—Ecuadorian, Romanian, and Moroccan—own mobile phones and use them. Ecuadorian women seem to own more technologically advanced mobile phones than their Romanian and Moroccan peers. Ecuadorian women, followed by Romanian women, also make more frequent use of their mobile phones than Moroccan women. These differences in ICT equipment and use among the three groups of migrant women might also be due to the differences in their employment status. All migrant women interviewed spend on average around 40 Euros per month on family communication, whether national or transnational.

All three groups of migrant women in this study use mobile phones, particularly for (transnational) family communication. However, the most common form of transnational family communication through the use of mobile phone tends to be through beeping or missed calls so that members involved can connect through cheaper communication technologies like Internet or landline telephone. Texting is seldom used.

Ecuadorian and Romanian women also seem to use mobile phones to find or maintain jobs. Women with better education and more specialized professional qualifications tend to make more generalized use of their mobile phone, regardless of their origin.

Ecuadorian women derive emotional sustenance mainly from their strong bonds with family or friends in their own community in both Catalonia and Ecuador. Most of these women cite family or friends from the same group as the people they call most from their mobile phones. These phones also allow them to use their social networks in Catalonia to find or maintain jobs. Ecuadorian women would like to continue their lives in Catalonia, as most of them have brought their children to Catalonia, many of whom are enrolled in the Catalan education system.

Most of the young Ecuadorian women interviewed arrived in Catalonia to join their spouses or families. These young women communicate with their family members (grandparents, aunts, uncles, and cousins) through the phone or Internet (chats, video-calling, social networking sites such as Facebook). Adult Ecuadorian women tend to employ both landline and mobile phones to stay in touch with their transnational families, using a mix of direct calling facility, special mobile phone plans for their home countries, calling centers, or prepaid cards. Many of these women migrated alone, but brought their nuclear families (husbands and children) to Catalonia over time under the family reunification policy.³

All the Romanian women interviewed lived with their nuclear families (husbands and children), as most of them arrived in Catalonia to join their husbands. For these women, the mobile phone is primarily an instrument of communication with their husbands and children living with them in Catalonia. Only in case of emergency do they use mobile phones to communicate with their family members in Romania. For transnational family communication, they tend to combine landline and mobile phones, or Internet and calling centers.

Romanian women seem to have forged better and more widespread relations with the Catalan population as compared to Ecuadorian and Moroccan women. But like Ecuadorian women, Romanian women too tend to use mobile phones to keep up with their social contacts in order to find jobs and continue their lives in Catalonia.

Like the Romanian women, the Moroccan women interviewed also lived with their nuclear families (husbands and children), as most of them had arrived in Catalonia through family reunification policy.

Moroccan women use mobile phones mainly to communicate with their family members in Catalonia, while using the Internet (particularly “messenger”), calling centers, and prepaid cards for transnational family communication.

E-migrant women live their everyday lives in a new TGS space that provides them with new opportunities to maintain contact with family members in their home countries. In this new TGS space, the family relationships of migrant women are significantly redefined in technological and geographical terms, but far less in social terms. E-migrant women cannot always escape family and community-based social networks, and continue to maintain their traditional roles as mothers, daughters, sisters, and spouses from a distance. These self or socially perceived roles do not change, but rather are perpetuated in a different way in the new TGS space, as distance significantly transforms the patterns of interaction among families.

Legal, social, cultural, economic, and digital constraints play an important role when analyzing the inclusion of migrant women in contemporary network societies. The emergence of a new TGS space that accommodates the e-migrant woman should compel social scientists to analyze more deeply the role of ICTs in different aspects of women’s empowerment—from the maintenance of family relationships from a distance to different forms of economic, social, and political participation—to come up with more innovative and effective inclusion policies.

Acknowledgments

The authors would like to express their gratitude to Ferran Ferrer, Cecilia Gordano, Ismael Peña, Adela Ros, and the Internet Interdisciplinary Institute (Universitat Oberta de Catalunya) for their assistance in the preparation of this article.

Funding Acknowledgment: This research work was supported by the Institut Català de les Dones (grant number U-76/10).

Notes

1. Foreign population by place of geographical origin, the Catalan Institute of Statistics (Idescat, 2010).
2. Survey on ICT Equipment and Use in Spanish Households, the National Institute of Statistics (INE, 2011).
3. See Chapter II of the Spanish Organic Law 4/2000, on rights of foreigners in Spain and their social integration (<http://www.interior.gob>).

es/normativa-89/leyes-organicas-1273/ley-organica-4-2000-de-11-de-enero-1341#Pre%C3%A1mbulo%20LO%202/2009).

References

- Baldassar, Loretta. (2007). Transnational families and aged care: The mobility of care and the migrancy of aging. *Journal of Ethnic and Migration Studies*, 33(2), 275–297.
- . (2008). Missing kin and longing to be together: Emotions and the construction of copresence in transnational relationships. *Journal of Intercultural Studies*, 29(3), 247–266.
- Beck, Ulrich, & Beck-Gernsheim, Elisabeth. (2012). *Amor a Distancia (Love from a distance)*. Barcelona: Ediciones Paidós.
- Beck, Ulrich, & Grande, Edgar. (2010). Varieties of second modernity: The “cosmopolitan turn” in social and political theory and research. *British Journal of Sociology*, 61(3), 409–443.
- Beck, Ulrich, & Sznaider, Natan. (2006). Unpacking cosmopolitanism for the social sciences: A research agenda. *British Journal of Sociology*, 57(1), 1–23.
- Camarero, Luis. (2010). Transnacionalidad familiar: Estructuras familiares y trayectorias de reagrupación de los inmigrantes en España (Family transnationality: Family structures and trajectories of family reunification of immigrants in Spain). *Empiria. Revista de Metodología de Ciencias Sociales*, 19 enero-junio, 39–71.
- Castells, Manuel. (2004). *La era de la información: Economía, sociedad y cultura (The era of information: Economy, society and culture)*, Vol. III. Mexico, Argentina, Spain: Siglo XXI Editores.
- . (2009). *Comunicación y Poder (Communication and power)*. Madrid: Alianza Editorial.
- Castles, Stephen, & Miller, Mark J. (2003). *The age of migration: International population movements in the modern world*. New York: Palgrave Macmillan.
- Corbetta, Piergiorgio. (2003) *Social research: Theory, methods and techniques*. London: Sage Publications Ltd.
- Escobar, Arturo. (2000). Welcome to cyberia: Notes on the anthropology of cyber culture. In David Bell & Barbara M. Kennedy (Eds), *The cybercultures reader* (pp. 56–76). London and New York: Routledge.
- García Canclini, Néstor. (2004). Diferentes, desiguales o desconectados (Different, unequal or disconnected). *Revista CIDOB d’Afers Internacionals*, 66–67, 113–133.
- Georgiou, Myria. (2010). Identity, space and the media: Thinking through diaspora. *Revue Européenne des Migrations Internationales*, 26(1), 17–35.

- Graham, Stephen, & Marvin, Simon. (2001). *Splintering urbanism, networked infrastructures, technological mobilities and the urban condition*. New York: Routledge.
- Gómez Cruz, Edgar. (2003). *Cibersexo ¿la última frontera del eros?* (Cybersex: The last frontier of Eros?) *Un estudio etnográfico*. México: Universidad de Colima.
- Hafkin, Nancy, J., & Huyer, Sophia (Eds). (2006). *Cinderella or cyberella? Empowering women in the knowledge society*. USA: Kumarian Press.
- Horst, Heather. (2006). The blessings and burdens of communication: Cell phones in Jamaican transnational social fields. *Global Networks*, 6(2), 143–159.
- National Institute of Statistics (Instituto Nacional de Estadística, INE). (2011). *Encuesta sobre Equipamiento y Uso de Tecnologías de la Información y Comunicación en los hogares* (Survey on ICTs equipment and use in households). Retrieved June 29, 2012, from <http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t25/p450&file=inebase>
- Kang, Tingyu. (2012). Gendered media, changing intimacy: Internet-mediated transnational communication in the family sphere. *Media, Culture & Society*, 34(2), 146–161.
- King, Gary, Keohane, Robert O., & Verba, Sidney. (1994). *Designing social inquiry: Scientific inference in qualitative research*. Princeton: Princeton University Press.
- Levitt, Peggy. (2001). Transnational migration: Taking stock and future directions. *Global Networks*, 1(3), 195–216.
- Levitt, Peggy, & Glick Schiller, Nina. (2008). Conceptualizing simultaneity: A Transnational social field perspective on society. In Sanjeev Khagram & Peggy Levitt (Eds) *The transnational studies reader* (pp. 284–299). New York: Routledge.
- Madianou, Mirca, & Miller, Daniel. (2011). Mobile phone parenting? Reconfiguring relationships between Filipina migrant mothers and their left-behind children. *New Media and Society*, 13(3), 457–470.
- Maharaj, S. (2010). “Small change of the universal”: Beyond modernity? *The British Journal of Sociology*, 61(3), 565–578.
- Nedelcu, Mihaela. (2009). *Le migrant online: Nouveaux modèles migratoires à l'ère du numérique* (The online migrant: New migratory models in the age of information). Paris: L'Harmattan.
- Olivera, Nihil. (2012). E-migration: A new configuration of technological, geographical and social process. *Special issue of International Journal of e-Politics (IJEP) on Immigrant Inclusion by e- Participation*. ISSN: 1947-9131.
- Parella, Sonia. (2003). La inserción laboral de la mujer inmigrante en los servicios de proximidad en Cataluña (The labor integration of the migrant woman in

- reproductive services in Catalonia). *Revista Internacional de Sociología (RIS)*, No. 36 Septiembre-Diciembre, 85–113.
- Parella, Sònia. (2007). Los vínculos afectivos y de cuidado en las familias transnacionales. Migrantes ecuatorianos y peruanos en España (Emotional and caring links in transnational families. Ecuadorian and Peruvian immigrants in Spain). *Migraciones Internacionales*, 4(2), 151–188.
- Parella, Sonia, & Cavalcanti, Leonardo. (2008). Aplicación de los campos sociales transnacionales en los estudios sobre migraciones (Application of transnational social fields in migration studies). In Solé, Carlota, Parella, Sònia & Cavalcanti, Leonardo (Comp.), *Nuevos retos del transnacionalismo en el estudio de las migraciones* (New challenges of transnationalism in the study of migration). Madrid: Permanent Immigration Observatory (Observatorio Permanente de la Inmigración, OPI).
- Parreñas, Rhacel. (2005). Long distance intimacy: Class, gender and intergenerational relations between mothers and children in Filipino transnational families. *Global Networks*, 5(4), 317–336.
- Portes, Alejandro. (2003). Conclusion: Theoretical convergences and empirical evidence in the study of immigrant transnationalism. *International Migration Review*, 37(3), 874–892.
- Portes, Alejandro, Escobar, Cristina, & Walton Radford, Alexandria. (2007). Immigrant transnational organizations and development: A comparative study. *International Migration Review*, 41(1), 242–281.
- Ros, Adela, & Boso, Àlex. (2010). *Informe sobre l'equipament i l'ús de les TIC entre la població estrangera a Catalunya* (Report on ICTs equipment and use of migrant population in Catalonia). Centre d'Estudis d'Opinió, Generalitat de Catalunya.
- Salvador, Miquel, Cortés, Ruth, Sánchez, Rachel, & Ferrer, Lluís. (2004). *Els Ajuntaments de Catalunya a Internet. Un estudi comparat de les pàgines web (2000–2003)* (The Catalan City Councils on the Internet. A comparative study of websites [2000–2003]). Estudis de Ciències Polítiques i Gestió Pública, Universitat Pompeu Fabra, Barcelona.
- The Catalan Institute of Statistics (Idescat). (2010). *Foreign population by municipal residence*. Retrieved May 2010, from <http://www.idescat.cat/poblacioestrangera/?b=6&t=2010&x=13&y=8>
- Torns, Teresa. (1997). Los servicios de proximidad, ¿un yacimiento de empleo? (Reproductive services: A source of employment?) *Revista de Treball Social*, 147, 40–47.
- . (1999). Los trabajadores asalariados, desigualdades de género (Salaried workers, gender inequalities). In F. Miguélez & C. Prieto (Eds), *Las relaciones de empleo en España* (Employment relations in Spain). Madrid, Siglo XXI.

- United Nations. (2006). *World survey on the role of women in development: Women and international migration*. Department of Economic and Social Affairs, New York: United Nations.
- van Dijk, Jan. (2012). *The network society* (3rd ed.). London: Sage Publications Ltd.
- van Dijk, Jan, & Kenneth, Hacker. (2003). The digital divide as a complex and dynamic phenomenon. *The Information Society: An International Journal*, 19(4), 315–326.
- Warschauer, Mark. (2004). *Technology and social inclusion: Rethinking the digital divide*. Massachusetts: MIT Press.
- Wilding, Raelene. (2006). “Virtual” intimacies? Families communicating across transnational contexts? *Global Networks*, 6(2), 125–142.

