COMMUNICATION & SOCIETY

Saleta De Salvador Agra

saletadesalvador@gmail.com Visiting Professor. Department of Sociology, Political & Administration Sciences and Philosophy. University of Vigo. Spain.

Yolanda Martínez Suárez dalanyom@gmail.com

Postdoctoral Researcher. The Communication Institute (InCom-UAB). Autonomus University of Barcelona. Spain.

Submitted May 7, 2015 Approved October 2, 2015

© 2015

Communication & Society ISSN 0214-0039 E ISSN 2386-7876 doi: 10.15581/003.28.4.87-107 www.communication-society.com

2015 - Vol. 28(4), pp. 87-107

How to cite this article:

De Salvador Agra, S. & Martínez Suárez, Y. (2015) Nomadism and Intermittent Ubiquity in 'Off the Grid' Shuar People. *Communication* & *Society 28*(4), 87-107.

Nomadism and intermittent ubiquity in 'off the grid' Shuar people

Abstract

Media ecology suggests that the anyone, anywhere, anytime slogan of the ubiquitous society characterizes our times. A priori, mobile technology in the "digital ecosystem" fits this circumstance. However, if we delocalize to a remote area, this initial assumption changes. Results of a case study analyzing the use and appropriation of mobile phones in the indigenous Amazon Shuar communities show a different reality that could be labeled 'intermittent ubiquity'. How does the delocalization facilitated by mobile telephones affect a remote area? How do Ecuadorian Shuars appropriate digital mobile technology? How does technological novelty become apparent in a context that is currently 'off the grid'? These questions drive our interest in examining the three premises of the ubiquitous society slogan in this specific context.

Keywords

Nomadism, mobile phones, 'Off the Grid', intermittent ubiquity, discontinuous access, indigenous, Shuar people

1. Introduction: in times of intermittent ubiquity

Media ecology suggests that the *anyone, anywhere, anytime* slogan of the ubiquitous society characterizes our times. *A priori*, mobile technology in the digital ecosystem (Aguado, Feijóo and Martínez, 2013) fits this circumstance. However, if we delocalize to a remote area, this initial assumption changes. Results of a case study analyzing the use and appropriation of mobile phones in the indigenous Amazon Shuar communities show a different reality that could be labeled 'intermittent ubiquity'.

The Shuar people are among the most famous Amazonian indigenous communities. Also known as the Headshrinkers, or the People of the Sacred Waterfalls, the Shuar are an indigenous nationality that belongs to the Jivaroan family. Shuar, which means people, is the self-designation of the celebrated warrior people, one of the most belligerent peoples in South America, heterolabeled by both Americans and Europeans as *jíbaros*, which takes the meaning of "savage". Currently this ethnic community numbers some 110,000 members, dislocated along the Peru-Ecuador border. In Ecuador they live in the seven provinces of the Amazon region, especially in the provinces of Zamora Chinchipe and Morona Santiago.

The Shuar deities, (*Arutam*) are in Nature, habitat of this nomadic community, which respectfully makes the most of a part of the rainforest. Shuar spirits live in waterfalls and, together and, like animals, they take part in a never-ending migration cycle towards the Beyond. The geas, or Shuar traditional dwellings, last as long as the family settlement in a given area. Usually, the years it takes the land to be used up by hunting, fishing and gathering fruits. The household or Shuar family is the social and political unit. The organization is hierarchical and democratic. Each community chooses its own community representative every two years. They meet in assemblies to report and make decisions about community affairs. Since the seventies they have formed a federation which brings different associations together including the communities. In their assemblies they make decisions on important community-related issues in a democratic way. All respectable men or women in the community can be appointed *síndico*.

Nowadays, migrations to cities, the penetration of mining companies in the rainforest and the resulting decrease of communal lands, have transformed the semi-nomadic traditional habits. The Shuar are turning into contemporary nomads. The new generations are abandoning the Shuar Language, an oral-tradition language of the Jivaroan family.

Their cultural traditions and adulthood rituals, the shrinking of a head for boys (*tsantsa*) and the possession of a stone, which symbolizes the fertility of the land and the family, for girls (*nantar*) are also being abandoned. However, some dances and traditional costumes are still preserved in their celebrations (Barriga, 1986, Chinkim, 1995, Karsten, 1988).

Currently, Shuar communities, due to technological progress and the advance of roads, have different levels of accessibility. There are from isolated communities in the rainforest reachable only by small plane, canoe, suspension bridges and long walks to those with access from roads.

At this point, we must indicate that the field research was done in communities close to mixed-race urban nuclei, accessible by road and in communities accessible by river on small Shuar *peque-peque* boats. This implies a situation of relatively greater coverage than in more remote Shuar communities, thanks to the current government policy of broadly facilitating access to technology.

The primary meaning of ubiquity indicates presence in various different spaces at one same time¹. In the dynamic, cyclical and one-dimensional Shuar cosmovision, space passes simultaneously with time in the *Tsawant* (day): the total time-space dimension. Mobile devices are also inherently nomadic; they free us from spatial contexts and transfer us to a communication flux environment where only time is maintained. Authors such as Ling and Haddon (2001) emphasize the influence of mobile phones and micro-coordination in movement patterns, highlighting "the freedom of contact" offered by new technology.

The second meaning of ubiquity emphasizes the possibility of being in continuous movement. Mobile phones bring us closer to a nomadic way of life by transforming us into what Fortunati (Castells et al, 2006) likened to snails. We carry with us everywhere the entire 'shell' of our network of relationships, a range of real possibilities at every instant thanks to hyper-connectivity. If we assume this metaphorical maxim, an analysis of mobile phone usage by a nomadic people such as the Ecuadorian Shuar becomes particularly

¹According to the definition of the *Diccionario de la Real Academia Española* (Dictionary of the Royal Spanish Academy).

interesting. The absence of pre-established time among these nomadic ethnic groups collates with the flexibility that defines the *Mobile Age* (Castells et al, 2006). The infinite spiral of the snail shell, which the Shuar use to describe nature and their worldview, finds an echo in the current mobile technology we all carry.

Focusing on mobile phones as "nomadic objects" (Lasén, 2006) makes it possible to analyze the flow and mobility, the friction and the cosmovision that is revealed by the use and imaginaries associated with these devices. Uses are determined by the appropriation of this technology for specific needs and circumstances. In light of this, how does the delocalization facilitated by mobile phones affect a remote area? How do Ecuadorian Shuar appropriate digital mobile technology? How does technological novelty become apparent in a context that is currently 'off the grid'? In this peculiar context, how is ubiquity –the "always on" hyper-connection described by Turkle (2008)– manifest? These questions drive our interest in examining the three premises of the ubiquitous society slogan (anyone, anywhere and anytime) in this specific context.

In the "informational promised land" (Aguado & Martínez, 2009: 156) that was proclaimed with the implementation of mobile cell phone platforms, anyone is invited to access unlimited data. However, if we look at a specific country as a frame of analysis, reality is still far removed from the paradise of unlimited connectivity. Institutional data indicates that 50.4% of the Ecuadorian population age 5 and over has as least one active cell phone, with the highest density of possession among 25 to 34 year olds (77.6% according to the *Instituto Nacional de Estadísticas y Censos*, INEC, 2012). In the Zamora province, access to cell phones is below the national average. The most recent non-aggregate data (INEC, 2011) for all provinces of the Ecuadorian Amazon (which are statistically combined into a single unit because data by province is not representative in these areas), reported that only 31.7% of the population had an active cell phone, in contrast with the national average of 46.6% and a high of 55% in Pichincha. Smart phone use is lowest in the Amazon provinces (20.3%), in contrast with 75.5% in Pichincha and 76.3 % in Guayas (INEC, 2011).

2. Objectives and methodology

The two-fold purpose of this text is 1) to provide an overview regarding the degree of technological nomadism and ubiquity, and 2) to alleviate the statistical dearth corresponding to these collectives and areas by compiling empirical data on the appropriation and utilization of mobile phones among the Shuar people, focusing on gaps in use and access.

We have chosen a triangulation method, involving 135 anonymous surveys (quantitative), 21 in-depth interviews (chosen for their knowledge of shuar life and for their different level of studies, jobs, age, gender and involvement in their community) and 8 ad hoc workshops in which various information collection techniques are used for participant observation (qualitative).

The anonymous surveys were filled up in Spanish by the respondents. Sometimes, older respondents needed help to complete them, due to their low literacy level. Furthermore, it was necessary to call on local interpreters, who volunteered to translate expressions into the Shuar language, mostly in the case of old people, more specifically, old women who just speak Shuar. As to illiteracy and low-literacy cases, the respondents concerned were assisted by the researchers, who read and explained to them the questions they did not understand, so that they could answer all of them. The questionnaires were divided into 6 blocks, namely: personal data, family data, phone communications (access, use, benefits), public sphere (socialisation), means of communication (device-dependent cultural consumption and virtual socialisation) and techno-citizenship. Most questions were Yes/No questions and others involved rating consumption frequency by choosing among five

values; but there were also open questions such as: "If you use a mobile phone that is not yours, state whose it is".

The in-depth interviews were structured upon the following topics: uses and appropriation of mobile phones, media and cultural consumption, techno-citizenship, etc., and they were carried out among members of the Shuar community, observing the gender, age and occupation balance. The in-depth interviews were recorded and transcribed into written form in order to proceed to the analysis of their contents.

The *ad hoc* workshops focussed on the following dynamics: designing the ideal mobile device, resolving social conflicts through mobile communication, and the construction of community profiles regarding representative social networks, cosmovision and imaginaries associated with mobile phones. Data collection was systematically carried out using purpose-specific fact sheets. The ad hoc workshops, carried out by the researchers were attended by 136 participants. Depending on the number of participants (which ranged between ten and forty), the workshop would be conducted by one of them, while the other took notes, or it would be conducted by the two of them while a third person took notes. We did not record data from the workshops. We just took notes while they were conducted (with the help of a third person) or immediately afterwards, when they were over (writing our own notes).

The selection of the sample was made after signing an agreement with the FEPNASH, the Shuar federation for the province, with whom the realisation of the workshops was decided. The approach to the Shuar people is complicated because this nationality has been studied on many occasions, mainly by anthropologists. And as, more often than not, they did not receive anything in exchange for their cooperation, they have become wary towards certain academic practices. Hence, the relevance of designing an *ad hoc*, adapted methodology, and the signature of a previously-drafted agreement by the researchers and the respondents. The 136 attendees (over fourteen years old, both male and female and with different occupational backgrounds) and other neighbours from the communities were surveyed. At the same time, informants were searched for and interviewed in depth.

Data was collected between March and July 2014 in the southern Ecuadorian province of Zamora Chinchipe, in rural and semi-urban zones one of the main locations of the Shuar community. More specifically, the techno-citizen workshops were carried out in the communities of Shaime, Tsarunts, Guayzimi, Zurmi, Nuevo Paraíso, Wants, San Carlos de las Minas and Achunts. The surveys were further completed by respondents who had attended the workshops and by people from other communities we could access: Tiukcha, Zhacay, San Vicente de Caney, Yacuambi, Zamora, Zumbi, La Paz and Guadalupe, all of them in the Zamora Chinchipe province. Zamora is the southernmost province of Ecuador; bordering Peru, it is divided into nine cantons, and it was in seven of those cantons (Zamora, Yantzaza, Centinela del Cóndor, Paquisha, Yacuambi, El Pangui and Nangaritza) that this empirical study was carried out.

A total of 135 individuals were surveyed (Table 1) between the ages of 12 and 80, with an average age of 28.7, and a gender distribution of 48.1% male and 51.9% female. As to the Shuar language (Graph 1), it is spoken by the elderly, in particular men (81.4% vs. 65.7% of women).

| Average | | | $\overline{\mathbf{Q}}_1$ | Q ₃ | | |
|---------|------|------------|---------------------------|----------------|------|------|
| Gender | age | Ν | Percent. 25 | Percent. 75 | Min. | Max. |
| Male | 28,7 | 65 (48,1%) | 16,25 | 38,75 | 12 | 80 |
| Female | 28,8 | 70 (51,9%) | 17,00 | 38,25 | 13 | 65 |
| Total | 28,7 | 135 | 16,7 | 38,6 | 12 | 80 |

Table 1. Statistics of the distribution by gender (surveyed sample)



Graph 1. Percentage of Languages usage by sex

The amplified sample (Table 2), involving complete data regarding family members of each individual surveyed (the questionnaire was designed to gather the use/ownership of mobile phone and sociological data of the relatives or friends with which each respondent lived, because there were no data about mobile access/use by indigenous inhabitants of this area of Ecuador), included 571 persons, 530 of whom were over the age of 5.

| (amplified sample ≥ 5 years old) | | | | |
|----------------------------------|-------------|-------------|--|--|
| Gender | Average age | Ν | | |
| Male | 26,4 | 274 (51,7%) | | |
| Female | 23,8 | 256 (48,3%) | | |
| Total | 25,1 | 530 | | |

Table 2. Statistics of the distribution by gender (amplified sample ≥ 5 years old)

Family units were composed of 4.8 individuals on average, with the middle 50% composed of between 3 and 6 members (Kalba, 2008). The age range for the in-depth interviewees was 18 to 25 years, evenly distributed by gender and educational level. Ecuador is a young country (INEC, 2010) and shuar People live with relatives (sons, fathers, fathers-in-law, cousins, uncles, etc.) and friends.

3. Anyone: the nomadic Shuar user and shared identity

Moving on from statistical information to user perceptions, male Shuar taking part in indepth interviews consider access to cell phones to be equal between genders. This perception is not supported by the survey data, participant observations or the comments of female Shuar who were interviewed.

There is a big difference between female Shuar living in cities and those living in the rural contexts. In cities, there is almost full equality in technology ownership, perhaps even 60%– 40%, but in rural areas men have more cell phones and more access to Internet. Why?

Because rural women dedicate 80% of their time to domestic labour. If they are teachers or civil servants, they come home from work and dedicate their time to their husbands and children, with. So they have no time left for using a cell phone or accessing technology (Female Interviewee 21, 43 years).

The Shuar men interviewed considered females to be the main owners and users of cell phones, or indicated a sense of gender equality regarding ownership. Most men taking part in in-depth interviews agreed that women in their communities have as many mobiles phones as they have or even more than them. However, data from anonymous questionnaires revealed that Shuar men have greater access to cell phones. In the amplified survey of 532 individuals, 40.15% of the men were reported to have cell phones, in contrast with 20.7% of the women. Most of the subjects interviewed claimed not to possess a cell phone (69.25%); but a significant percentage of interviewees borrowed cell phones. While only 30.75% actually owned a cell phone, 53.2% of the total considered themselves cell phone users. The gender difference was smaller for usage: 56.2% male in contrast with 50% female. Specifically, the data shows that the percentage of men who own cell phones is twice that of women (Graph 2).





The hypothesis of Fortunati suggests that cell phones offer greater individualism than other technologies by providing a communicative public sphere to traditionally excluded groups such as women, adolescents and the elderly. "The mobile phone, more than the fixed phone, respects the independent identity of women, children, adolescents and the elderly, by giving them the individual right to speak and no longer just as members of a family" (Fortunati, 2003: 247). However, in spite of gender differences in ownership and usage, the Shuar people interviewed generally believed they all had a cell phone: "In our communities, most people have a cell phone" (Male Interviewee 17, 55 years).

"I always say that every Shuar has a cell phone, even in the most remote communities, because they come out, add minutes and turn on their cell phones. For us, communication is very important: from the *tuntui*² signals to the bull's horn to the snail shell to the cell phone" (Female Interviewee 13, 45 years).

"Now everyone has a cell phone; even if it is the cheapest one, such as the Nokia 1100 with a flashlight, everyone has one. The young people have smartphones, and the elderly have a traditional phone for calling or at most one with music" (Male Interviewee 10, 33 years).

One relevant theme surface in the last quote that can help identify the prototypical user: the age of the owners (Graph 3) and the difference in phones among age categories. The average age of a cell phone owner is 31.2 years, while the average age of those not owning a cell phone is 22.4 years. Usage follows a similar pattern: the average user is 27.9 years old, while the average non-user is 22.1 years old. This means that cell phone owners are older than the other users, maybe (among other factors) because they can afford it. As in other societies, young Shuar people – unlike adults – have no job; and, thus, they cannot buy a mobile phone.



Graph 3. Average Age

From this we conclude that the prototypical Shuar cell phone user (53.2%) is a young man. The interviews confirmed that "youth use cell phones more, as we elder Shuar say that cell phones don't let us work because people call and interrupt." (Male Interviewee 4, 40 years). Based on their discourse, we deduced the elderly to be the most distrustful of cell phone technology, due to its influence on customs and the rhythms of life.

"Perhaps because this technology did not exist before, my grandparents did not understand cell phones nor considered them positive; but said they were a distraction for us. Some parents feel

 $^{^{2}}$ The *tuntui* is a musical instrument analogous to a drum. It is traditionally located at the door of the house and serves as a means of communication. Every Shuar has a *tuntui*, which is also called a *tunduy* or *dunduli*: "an enormous hollow log that sends messages, according to the rhythms it creates, inviting us to celebrate or to mourn the death of a family member. It is a means of instant communication in these isolated stretches that reach beyond simple sight" (Barriga, 1986: 144).

the same way and consider that their children are wasting time when they are chatting [on their cell phones]. This also happens in society at large. There is still a need to socialize and help elderly Shuar understand [this technology], in order to see it as something positive. Older Shuar consider it a negative means. Not all, some do understand it. My parents, for example, sent us off to study in big cities, but in general the Shuar are distrustful of technology" (Male Interviewee 1, 22 years).

The main deterrent to accessing a cell phone is not coverage but monetary resources, as seen in the disparity between the average age of users and owners (Ureta et al., 2011). The interviews supported this gap between access and consumption: "within our communities those who most use cell phones have monetary income; money influences both use and consumption" (Male Interviewee 2, 39 years). Another interview nuanced the same idea: "the main ones with cell phones are those who have professional opportunities, and sometimes farmers or small-scale entrepreneurs" (Female Interviewee 21, 43 years). In such circumstances, the culture of sharing is a key to overcoming access gaps for many individuals.

The extensive Shuar practice of sharing cell phones –as shown in the surveys- annuls the certainty Ferraris (2005) expresses regarding these devices. This Italian philosopher argues that a fixed telephone line offered certainty regarding the location of the interlocutor, but not his or her identity; while cell phones reverse these certainties as the name of the interlocutor appears on the cell phone screen. Of the 135 Shuar persons we surveyed, 41.4% of users borrowed from a member of their extended family, a friend or a neighbour. It is common to hear the following: "they have asked for my cell phone saying 'I need to communicate, let me make a free call or message" (Male Interviewee 15, 33 years). Several interviewees said they borrowed cell phones from their friends until they got one of their own. Shuar also engage in the practice of inserting their own individual SIM cards into another person's cell phone.

"When they go to a city, the members of our community ask their neighbour, father, mother or sibling for a cell phone and insert their own SIM card. When another person travels outside the community, the same happens again with the same cell phone." (Female Interviewee 8, 27 years).

"Before I had my own cell phone, I shared one with a friend. He had his own SIM card and would use it to call his contacts. When he got bored, he would hand it to me." (Male Interviewee 12, 35 years).

The practice of sharing phones without SIM cards would not undermine Ferraris' argument. Yet it discourages personalization of the cell phone, both in external appearance (stickers, shell...) and internal features (polytones, photographs on the screen saver, Whatsapp and other apps with personalized content). While "as an element of consumption, the cell phone generates and transmits identity in symbolic and aesthetic terms" (Aguado & Martínez, 2006: 332), full identification of the cell phone user is impeded in this case. This applies both to the device itself and its use. Cell phones and the linking of phones and user identities –along the lines of Foucault's technologies of the self, Haraway's cyborg or McLuhan's corporeal media as a prosthetic extension– have sparked an unprecedented revival of the history of technology (Lasén, 2006, 2009; Fidalgo et al, 2013; Castells et al, 2006, Aguado, Feijoo & Martínez, 2013; Pertierra, 2005; Fortunati, 2003, 2005; Stald, 2009). Does the Shuar use of cell phones point to a shared nomad identity? As we have indicated, the practice of sharing involves identitary counter-effects. Pertierra (2005) argues that sharing affects identity construction; making appropriation neither complete nor natural. "Without a cell phone, I feel like nobody, like I have disappeared. When I use someone else's

phone or another phone, I live in constant tension, thinking I might damage or break it" (Male Interviewee 11, 28 years).

Stald (2008: 151) relates the lack of a cell phone to the questioning of identity: "the absence of the mobile (...) is a threat to the important updating of the social network, and hence also to one's own position, one's ability to take part in social activities, and ultimately to one's self-perception or identity". An interviewee explained his feelings about not having a cell phone: "years ago, I was envious of those who had cell phones. Since I did not have one, and had no numbers in my agenda; I felt I had no significance" (Male Interviewee 9, 26 years). Along these lines, Stald develops the concept of mobile identity as a fluid physical and personal phenomenon in which we move and the phone, with all its information, moves with us. In the Shuar context, this extends to the person that borrows it, reinforcing Stald's mobile identities theory with a community dimension that multiplies identities. In an openended survey question, users highlighted the emotional benefits of having a cell phone: "I like it", "I feel calmer", "it makes me happy", "it makes you feel good". On a multiple response question, the Shuar indicated the main benefits of a cell phone (Graph 4) was convenience, or the saving of time and money in being able to call relatives or friends (64 %); that it was helpful to their work (42.3%); that it provided security in emergencies or accidents (30.6%); that it facilitated listening to music (26.1%) and that it was fashionable (5.4%).



Graph 4. The main benefit of a cell phone

Cell phones in the Shuar community analyzed were mostly first- or second-generation devices. Of the 135 pollees, only 29.2% of the men and 7.1% of the women had a smart phone with 3G Internet. This corroborates official figures. In Ecuador, smartphones increased by 60% between 2011 and 2012, according to data from the *Instituto Nacional de Estadística y Censos de Ecuador* (INEC), going from 522,640 to 839,705 users in a single year. The INEC figures are based on a December 2012 study of 21,768 urban and rural homes. In spite of this spectacular increase in smart phone use, it only represents 12.2% of total cell phone usage

among a total of 50.4% of Ecuadorians over 5 years of age. This indicates that only 2.4% of the total population uses a smartphone. The main deterrent to ownership, expressed in interviews and by the data, was financial (as, in other context, describe, for example, Bidwell et al, 2011): most opted for a pre-pay structure in which they could pay for minutes by adding a few dollars at a time. The survey revealed that only 13.8% of pollees had a cell phone contract billed through a bank. As one interviewee indicated: "we don't have enough money to maintain a calling plan, or to always have Internet on the cell phone, but we do make an effort to connect" (Male Interviewee 11, 28 years).

The Word poverty doesn't exist in the Shuar language or culture. There is only Naitiak which means "shortage"; Uwi "abundance" and Tsuka "temporary shortage". The Shuar nation depend on natural cycles and they respect Nature to ensure their survival. This leads us to conclude that the Shuar practice of sharing cell phones and even SIM cards undermines the unequivocal individualized user-phone and content-identity relationship (Aguado, Feijoo & Martínez, 2013). In the Shuar world of communication, one same device serves several users and thus affects identities. The SIM-identity mobility and the device-identity mobility indicate a nomadic user who shares an identity.

4. Anywhere: in the context of discontinuous access

The 2001 work of Plant clearly demonstrated how cell phones are changing our way of being, "the way we work, play and talk with each other" (Plant, 2001: 22). Four years later, Ferraris (2005) went even further to describe the cell phone as a "philosophically interesting" object that might merit full philosophical treatment. By asking what type of object a cell phone is, we formulate an ontological question, which has led Ferraris to propose a "mobile ontology". The change we are living could be summarized in the words of Plant as "Where are you?" This 'perfect' mobile question elicits the perfect answer: "on the cell phone". Being 'on your cell phone' is not the same as being 'on the telephone'; the substantial difference between talking on the phone and talking on the cell phone teaches us about mobile ontology and points to digital nomadism. Our research has uncovered the most paradigmatic version of identitary nomadism, since the Shuar are nomadic by tradition and cell phones are also defined by their mobility. Lasén (2006) holds that this is their defining characteristic and nomenclature, as cell phones are "nomadic objects by definition". Pertierra (2005: 23) indicates that "with the aid of nomadic technologies, virtual social communities in diaspora emerge in physical spaces". Additionally, "mobile phones allow absent subjects to exercise a daily presence in their communities of origin". Applied to the Shuar, this implies potential for identity reinforcement and construction.

"The cell phones are used for communication and help us to adapt without losing our identity" (Male Interviewee 12, 35 years).

"We think the cell phone helps us maintain our identity and our culture; so these can also be part of that technology because we Shuar are also living in modern times" (Male Interviewee 12, 35 years).

"I ask my grandparents how we can use technology without damaging our knowledge base, our structures, or any part of the identity of peoples and nationalities. Our grandparents had dictionaries, knowledge, wisdom" (Female Interviewee 21, 43 years).

"We Shuar are not a world apart, we must adapt to this globalized world without losing our identity" (Male Interviewee 15, 33 years).

The fixed nature of land lines contrasts with the nomadism of cell phones. Land lines are scarcely present in the Shuar communities of Zamora-Chinchipe, and cell phones are relatively recent. Only 11.1% of those surveyed have a land line, and have only had it for an average of 28 months. Castells et al. (2006) link the lack of land line infrastructures with the

direct passage to cell phones among Latin Americans and suggest corruption in Latin American land line telephone companies as a factor in the exponential growth of cell phone use. This lack of landline phones and the exponential growth of cell phone use were confirmed in our case study, but we didn't study the contributing factors as Castells et al did. However, our study confirms the perspective proved by them.

The average time of cell phone ownership among Shuar was 29.5 months. However, the pattern was very irregular and the median time of ownership (the most representative figure) was 16 months (Graph 5).



Graph 5. Average time of cell phone ownership

In line with what Castells et al. (2006) reported, in our survey we found that only 18.5% of cell phone owners also had a land line. Certain characteristics of the mobile device are easily adaptable to the Shuar context and customs. Cell phones require less financial investment, which Shuar indicated to be important in their traditional economy. Furthermore, in tropical forests it is very difficult to open and keep a bank account, for example. So, cost matters, as far as the "everywhere" condition is concerned.

"Cell phones have advantages over land lines, which offer no service if you don't have money for them. With a cell phone you can send a message saying 'get in touch with me because I'm out of minutes' or 'add some minutes to my phone so I can call you and talk' (Male Interviewee 6, 38 years).

"Before, with analogical technology, that is a land line, you had to spend quite a lot of money to call someone in the United States or Spain or wherever. I think cell phone technology now makes that free for many people and information generated in real time is effective. You can be informed of political matters and issues regarding rights that are important for indigenous peoples" (Male Interviewee 2, 39 years).

The mobility of cell phones also fits perfectly with the nomadic habits of the Shuar, because they can carry it with them when they are on the move, as several interviewees stated:

"Cell phones offer more advantages than land lines because cell phones can easily be transported. If in the future cell phone coverage reaches this place we will be able to communicate in case of an accident" (Male Interviewee 12, 35 years).

"We are talking about mobility, freedom, space, access anywhere" (Male Interviewee 10, 33 years).

"You can carry it with you to different places" (Female Interviewee 19, 46 years). "It's easier to carry anywhere, in contrast with a land line at home, which you could only use to communicate when you arrived home at night" (Male Interviewee 1, 22 years).

"We use the cell phone anywhere to do business anytime. The land line stays home." (Male Interviewee 17, 55 years).

The cell phone that we carry in our pockets means that a telephone is no longer limited to the home. As we establish multiple connections and save them on our device, "the mobile phone in itself becomes a true mobile home" in the SIM-identity sense (Fortunati, 2002: 520). This statement is particularly important in the Shuar case because their seminomadic identity does not make it possible for them to have a permanent home and this is one of the reasons why they do not have landlines. Unlike being 'on the phone', the ubiquity derived from 'always being on the cell phone', leads to what is known as the deterritorialization effect. The cell phone offers us the possibility of belonging, or being "active in various spaces at the same time" (Nyiri, 2010: 129), while still maintaining our local coordinates. Lynch (2010: 83) affirms that "cell phones have achieved the complete deterritorialization, while simultaneously achieving the most precise localization, of the individual." Portability has facilitated a renewal of nomadism; which emerges as an object of social connectivity that can bring the citizen closer to the world, or the world closer to the citizen. However, as always, that which has the potential to draw near also has the potential to distance. At the negative pole, we could find ourselves in a situation that condemns those 'outside the coverage area' -those with interrupted access and intermittent ubiquity in the Shuar case to what Ferraris refers to as "total ontological isolation".

"Welcome to Claro!" or in other words: "the telephone you are calling is either switched off or outside the service area". "The person you are trying to call is not available at this time". These phrases summarize the daily experience of most Shuar communities in the Ecuadorian Amazon. Of the three cell phone companies in Ecuador –CNT, Claro and Movistar– only Claro provides service to the upper Amazon and specifically to the most inaccessible canton of Nangaritza. However, it only covers the semi-urban parish of Guayzimi, leaving the remaining Shuar parishes 'outside the coverage area'. "In the villages that are close to the cities or colonist population hubs, there is access to the cell phone network and Internet through private operators; but not in the most interior jungle communities" (Male Interviewee 2, 39 years). In spite of this situation, the Shuar surveyed have an optimistic perception regarding coverage (Graph 6).



Graph 6. Percentage perception regarding coverage at home

It is helpful to note that one of the main places for cell phone use is *la cancha* or *la finca*, open spaces that serve as Shuar commons. Such spaces are also considered 'home' in a broad sense. Thus, private conversations end up in public spaces (Fidalgo et al., 2013), thereby blurring the classical public-private dichotomy. Fortunati (2002) points out that with the mobile phone we occupy public space, while changing its meaning. As we appropriate the public domain, it becomes less univocal. Ubiquity creates a crisis in the classical associations of public space-physical space and private space-psychological space. "Thus the possibility of a nomadic intimacy is achieved, but at the same time there is the giving up, discovering and living directly everything that social space can offer" (Fortunati, 2002: 516).

When pollees were asked where they preferred to use the cell phone, they indicated multiple access zones that did not always correspond to areas of coverage. This multiplicity implies trans-locality, which is understood as "the possibility of being connected while off-location through broad spaces or complex trajectories" (Aguado & Martínez, 2006: 319), that may indicate a new geo-spatial situation of the speaker and user. The Shuar' list included 'rural plots', 'away from home', 'travelling', 'in the city', 'out in the open', 'where there is cell phone coverage'; 'to see if there is coverage', the park, the city centre, the school, information centres, 'at work' or 'at home'. A full 60.4 % of users located this activity at home, while the remainder used cell phones elsewhere. Here we note that use of a cell phone does not necessarily imply coverage. "Many families in the communities have technology (Direct-TV, land lines, cell phones) as toys. Even without coverage many people use them as cameras, MP3s, etc. They are expensive cell phones if used for such things". (Male Interviewee 11, 28 years).

Through participant observation in workgroups and in-depth interviews, we determined that communities with discontinuous access had located points of intermittent coverage. Users accessed the connection points when they needed to make or receive calls, messages, etc. "They climb to the top of the hill and there they have a place from which to communicate. They say, 'I will go up the hill and speak there with my relatives'" (Female Interviewee 19, 43 years). In other words, "they know that on that hill there is coverage and so they go there to call" (Female Interviewee 20, 25 years). Specifically, 48.7% of the users surveyed who lacked coverage at home (35.1% of the total), or had it intermittently, indicated their home as their main place of cell phone use. Cell phone ownership was lower in this group (28.6%). Non-coverage is a reality in these communities, and they emphasize their strong feelings of discrimination and the comparative injury they experience with regard to the cities, where they go to buy and use technology, among other things.

"In the Amazon there is still no good telephone coverage. I try to forget about it when I go to places with no coverage. I instead have fun with the music, camera and games on the cell phone. I return to the city with a sense of suffering, eager to know what has happened in my absence. It is as if I had been asleep for a week" (Male Interviewee 11, 28 years).

"When you go to our community, sometimes at the beginning you say: 'I have disconnected myself from the world.' Nobody calls you, nobody is ringing" (Female Interviewee 21, 43 years).

"When I have no cell phone coverage, for me it is like being in another country. I feel a bit sad because I don't know how my family is doing, or what is going on with my friends. In other words, I am totally disconnected from the global world and don't know how to live that way" (Male Interviewee 15, 33 years).

"Not having cell phone coverage generates despair. In communities with no coverage it is impossible to upload a photograph, or send a project, even if you have a smart phone" (Male Interviewee 10, 33 years).

"I feel worthless, lethargic, when I have no coverage" (Male Interviewee 17, 55 years).

"Some young people, who go to the city buy cell phones and then return to our community to use them for listening to music; or also as cameras or for recording audio files, if they have those functions" (Male Interviewee 12, 35 years).

The Shuar are fully aware of the possibilities that new technologies, particularly cell phones, offer them. They complain about the difficulty of accessing good coverage, gaps in coverage, and the resulting intermittent ubiquity; while devising strategies to overcome it.

"Sometimes I worry about missing certain calls. When I have a commitment, or something going on, I go to where my mom or sister is. I tell them that I have to go somewhere without coverage, for such and such a reason, and they pick up the message for me" (Male Interviewee 1, 22 years).

"I go the satellite telephone and ask a friend with coverage to please contact certain other people for me" (Interviewee 17, 55 years).

"Since there is Internet available here, people send messages by Internet" (Female Interviewee 3, 18 years).

"In that high spot (Nuevo Paraíso) there is still no coverage. We are asking the CNT to provide it so we can communicate from here to anywhere, without having to actually go places and fill in forms and documents. By Internet we can make 'written phone calls'" (Male Interviewee 4, 40 years).

So the Shuar, faced with irregular access and location-dependent connectivity, devise strategies for accessing digital nomadism. In doing so, they must make use of non-digital nomadism that involves traditional means of movement. This unequal situation is marked by the context of discontinuous access to connectivity, dependent on location.

5. Anytime: mobile uses and content in cyclical time

Cell phones dilute the borders between time and space. In the Shuar concept of *tsawant*, time is cyclical and occurs simultaneously with space in a uni-dimensional sphere. Fortunati (2002: 513) recalls Meyrowitz and other theorists in reminding us that the medium is "also a specific concept of time and space, that is, a specific dimension of existence". New technologies have irrefutably modified conceptions of time and space in modern societies, but how do they affect the nomadic time-space of Shuar communities? How does the *tsawant* translate into digital language? How do the Shuar live the new cell-phone-based concept of time? Have they made the transition from clock time to the satellite/electric time described by Fortunati (2002)? The answer to these questions can be summarized in the words of an interviewee, who stated that: "a cell phone helps you to see time" (Female Interviewee 13, 45 years). It allows you to 'see' time in an organizational sense, since the Shuar use cell phones to organize their agenda, but it also alludes to their worldview, the *tsawant:* the total time-space dimension (Shakai, 2008; Campión, 2014).

"Cell phones allow us to organize things better. We also use them as an alarm clock or as a time organizer, because sometimes one is distracted and a cell phone helps you to see time." (Female Interviewee 13, 45 years).

"I already have everything organized on my cell phone agenda." (Female Interviewee 21, 43 years).

"With cell phone apps you can control your time and organize yourself. The cell phone can be everything." (Male Interviewee 11, 28 years).

As the last interviewee indicated, the cell phone has multiple uses and functions that the Shuar people adapt to their specific traditions and context. "Precisely because of its ubiquity and linkage to identity", characteristics that were analyzed in the prior section, Aguado and Martínez (2009: 156) emphasize the "great capacity for adaptation to the user and context of use" offered by the cell phone.

The results of our field research supported the conclusion of Aguado, Feijoo and Martínez (2013): namely that the cell phone is a new platform and multi-purpose device. Though the availability of digital devices in the Shuar context is insufficient to generate high levels of use, the desire for more exists. "We like cell phones with quite a bit of technology for several uses, including all the social networking features" (Female Interviewee 20, 25 years). Another interviewee explained that "it's about having lots to make use of: audio, video, games, calls, messages, all in one." (Male Interviewee 10, 33 years). Another Shuar emphasized the same idea: "cell phones can fulfil the functions of all sorts of devices" (Male Interviewee 11, 28 years). In participant observation and in the ad hoc work groups, we implemented a design dynamic for the ideal device. Shuar users expressed a desire for access to the latest technology and all possible functions, even though they found it difficult to describe the desired device.

"I want my cell phone to have every new feature" (Shaimi work group, 17)

"It should have all the applications of first and best technology" (Tsarunts work group, 1)

"I'd like a package phone complete with all services" (Tsarunts work group, 10)

"I want a cell phone with the latest technology, including all possible accessories" (Nuevo Paraíso work group, 5)

"I want a tablet with the latest technology" (Nuevo Paraíso work group, 12) "I'd like to buy the newest cell phone available" (Achunts work group, 8)

"I'd buy a good brand of cell phone." (Achunts work group, 12)

The Shuar surveyed reported the main cell phone uses (Graph 7).



Graph 7. Percentage of usages of cell phones

Calling relatives and friends ranked in first and third place. This undoubtedly reflects the type of device being used, which is primarily 1G. After calling family members, the next most frequent use was listening to music. This tends to be more common among male interviewees, one of whom explained that "some young people go to the city, buy a cell phone and when they return to the community they use it to listen to music. If it has good features, they use it also as a camera and for audio recording" (Male Interviewee 12, 35 years). Another commented that "in the community there is no coverage; but if you go to see the young Shuar, they have cell phones - not conventional phones - and they are listening to music, taking photos and things like that" (Female Interviewee 21, 43 years). They use mobile phones at all times, even when they have no coverage, because they use them for multiple purposes. Participant observation made it possible to confirm that listening to music as a group was one of the main cell phone uses for Shuar youth. They listen to radio and download music to share via Bluetooth, or listen as a group. In another sense, this confirms the logic of sharing mobile phone content as a characteristic of consumption, which was described by Aguado and Martínez (2009: 157). Radio has been very present in Shuar communities since the 1980s. At this point, data of Table 3 show the high percentage of cell phones with radio.

| Cell phones | Male | Female | Total | Average age | |
|-------------|-------|--------|-------|-------------|---------------|
| (Radio) | | | | with radio | without radio |
| users | 79,3% | 60,4% | 70,3% | 24,0 | 36,5 |
| owners | 88,1% | 60,9% | 78,5% | 26,2 | 35,5 |

Table 3. Cell phones with radio. Percentage of users and owners by gender. Average age.

The flashlight, or electric torch, was listed in fourth place and shares an analogue cell phone function alongside music/radio. The flashlight is an especially valuable feature in the rural jungle context. Privately supplied electric energy tends to be unreliable and outages are frequent; public electric lines do not reach all the area, as Kalba (2008: 654) said: "Latin America does not generally have an egalitarian income infrastructure". This generates the need to light footpaths at night. The flashlight feature on cell phones favours their appropriation and serves to de-activate apprehensions associated with new technologies in a traditional context. Flashlights are a useful everyday object in Shuar communities, accelerating the acceptance of cell phones among adults.

Table 4. Cell phones with flashlight. Percentage of users and owners by gender. Average age.

| Cell phones | Male | Female | Total | Average age | |
|--------------|-------|--------|-------|-----------------|-----------------------|
| (flashlight) | | | | with flashlight | without flashlight |
| users | 63,8% | 64,2% | 64,0% | 24,7 | 33,1 |
| owners | 71,4% | 69,6% | 70,8% | 26,8 | 31,6 |

Sending an SMS to friends and family come sixth and seventh in usage preference. We should bear in mind that the Shuar are a people of oral tradition and may primarily be due to the absence of certain symbols (phonemes and graphemes) representing their language on QWERTY or multi-tap keyboards. One interviewee told us that her son dreams of being a systems specialist in order to "invent a computer and cell phone with not only English or Spanish letters on the keyboard but [...] alphabets in different languages, where texts are [...] available [...] even in Shuar-chicham, our language" (Female Interviewee 21, 43 years).

Photography ranked eighth. The testimonies of several interviewees indicated that taking pictures, along with using files and memory, became more significant in noncoverage areas. A Shuar politician explained how cell phones served as a 'wallet' for keeping pictures of dear ones living far away: "I sometimes store photos of my family and parish members, now that I live far away, and can show them to my colleagues when they ask me about myself" (Male Interviewee 6, 38 years). Another described how the Shuar: "use it as a camera to have photos as mementos" (Male Interviewee 12, 35 years). This use of a "shared biographical register" (Aguado & Martínez, 2006: 330) connects with the thesis of the mobile-identity relationship, which in the words of Lasén (2009: 219) involves "an identity of me and my cell phone". When located outside coverage, pictures are taken with the cell phone and stored on the device, rather than sent to other contacts. This practice was also documented by Stald (2008) in another context.

Downloading photos, games and ring tones ranked tenth are practices that require a ₃G cell phone and certain skills, which explains their low incidence in the population studied. "The young people who are studying use cell phones a lot. They change everything on the cell phone: screens, music, video recordings..." (Male Interviewee 4, 40 years).

Internet use ranked thirteenth, even though 17.8% of the sample population had smartphones. This confirms the distinction between 'mobile Internet' and 'Internet on the mobile' made by Aguado and Martinez (2009: 156).

Significant gender differences appeared in seven of the fourteen uses evaluated.



Graph 8. Percentage of usages by gender

This suggests use of the family cell phone by women and a shift from land lines –a system with its own specific features– have at least partially led to women using cell phones. In societies in which there was a direct shift from landlines to cell phones, people – at least at the beginning – used mobile phones as landline phones. That is, families would buy their

first phone and one of the members would use it as family phone. As women – and even more so indigenous women – stay at home doing housekeeping tasks and taking care of the family, it is them who use mobile phones as landlines. Some of the woman interviewed told us that they borrowed or gave their mobiles to their sons when they went to school or to their husbands when they went to work. And when everybody was at home, it was the mother who carried the phone with her, as part of the housekeeping tasks. Women are the last to customize and really own a mobile phone, because it is the mobile needs of the family – and not theirs – that must be satisfied first.

These gender differences in Shuar cell phone use also reflect a lower level of technological skill among women, the so-called 'gender gap' in cell phone usage.

Based on Stald's taxonomy of usage (2008: 148), "as either practical (instrumental) or related to content (expressive)", we conclude that Shuar usage is mainly instrumental, with priority given to practical or what we have described as 'analogizing' uses. In the Shuar context of discontinuous use, intermittent ubiquity, weak economics and lack of digital literacy, the cell phone is defined as a technology that incorporates a clock, agenda, flashlight, radio, camera; turning it into a recognizable set of instruments. Following Fortunati's classification of usage (2003) would also lead us to conclude that the Shuar are somewhere between receiving and producing information/content in the wake of the 'produser'. Lack of coverage locates them in 'isolation' from modernity. However, we have seen that the problem is mainly due to economic factors and not to an incompatibility of imaginaries.

In the *Mobile Age*, the Shuar, though they appear to be anything but modern, appropriate cell phones as devices that incorporate their own spatial-temporal *tsawant* cosmo-vision or worldview: a space of fluxes or a time of ubiquity. In this sense, they do not need to translate their traditions into digital language, since the two actually flow together. Nomadism is another point of confluence between cell phones and Shuar culture, reinforcing the idea that potential barriers are located in factors such as economics, access or education rather than in the imaginaries. The temporal and spatial alterations caused by cell phones and alluded to by Fortunati and others do not suppose a great leap for Shuar culture, which already functions within a global dimension.

6. By way of conclusion: characteristics of 'non-coverage' cell phone usage

A micro-sociological focus allowed us to grasp specific aspects of the mobile ecosystem and the influence of context on the use of technology. Several features of the Amazon 'off the grid' scenario force a revision of prior assumptions, in line with other case studies about sharing mobile devices or SIM-cards carried out in Africa or Australia:

So, first, we will summarize some of our main findings. We intend to contribute to understanding this specific group, The Shuar People, who lives in a particularly littlestudied place, the Amazonia.

- One device serves several users in the Shuar communicative environment. It confirms the findings of other studies regarding Indigenous peoples in remote regions in other parts of the world.

- A Shuar is a nomad user who shares identities by SIM card-identity and/or device-identity mobility.

- Shuar people has a series of strategies to overcome discontinuous access, making use of non-digital nomadism in order to access digital nomadism.

- Shuar people have a structure centred on relational links through Bluetooth and shared content to overcome a lack of communicative ubiquity.

- In this case study, appropriation of the cell phone due to the confluence of nomadism and the uni-dimensional time-space structure of cell phone and Shuar cultures.

In conclusion, this case study on the use and appropriation of mobile phones by a group of 'off the grid' nomadic indigenous communities calls into question some aspects implicit in the slogan of the ubiquitous mobile society and can inform a revision of several media ecology tenets. But, furthermore, this study will help us understand one particular group, unknown in academic studies on mobile communication and citizenship, the Shuar people.

As other researchers have proved in Australian or African case studies, and as we can confirm in this context, new remote usage does not fit within the Western phases of mobile phone research, though its findings do provide a better conceptual toolkit for approaching this context. Media ecology suggests approaching a new communicative environment in order to examine the prior one in all its splendour. Thus, examining mobile phone use among remote peoples in light of theoretical advances of the mobile age in other contexts offers a richer, fuller understanding of this environment. For example, we can conclude from our case study that connectivity is totally dependent on location and that the single, individualized relation between device-user and content or identity is called into question

Focusing now on the slogan proposed by media ecology to understand the current situation of the mobile age, after completing our study we concluded that:

Anyone. In spite of the exponential increase in mobile phone penetration of Latin America, and Ecuador in particular, the teledensity and real penetration of the newest generation of devices (smartphones) is very low. This is especially evident in remote locations such as those inhabited by the 'off the grid' Shuar people. The common practice of sharing phones among family and friends, and even sharing 'chips' or SIM cards, erases all certainty regarding the identity of the interlocutor. The name that appears on the telephone screen does not always correspond to the owner of the phone, contrary to the assumption of Ferraris (2005).

Anywhere. Ferraris (2005) assumes that "being on the phone" is different from "being on the cell phone". In remote Shuar communities, however, the delocalization and transformation of presence and the ubiquity that cell phones facilitate become a new "physical geo-location of the telephone" analogous to a land line telephone. In cellular communication there is no assurance of the location of the interlocutor, so location in space is a necessary first piece of information: I am "headed your way, on the bus, on the train..." (Plant, 2001). In this Amazon context, receiving a call minimizes the possibility of it occurring in a primary scenario of Western mobile phone use: one's home. To use mobile technology, the Shuar speaker must be geo-spatially located in one of many coverage areas and therefore de-territorialized; home is often 'off the grid'.

Anytime. In the Shuar ethnic and the mobile technology versions of nomadism, there is no real distinction between time and space. In the first case, space and time occur simultaneously in the *Tsawant* (Shakai, 2008); in the second, space becomes the domain of communication flows that are activated when a call is received. The much commented ubiquity of content and communication in this off-the-grid cosmos becomes diluted in the unforeseen 'analogizing' use of mobile phones. Plant (2001) described how mobile phones have radically changed our lifestyles. These *nomadic objects* imply not only technical difference; they alter our "way of being in the world" (Ferraris, 2005). How then do we classify a mobile phone? With the perception-usage of the mobile phone as technology that includes a flashlight, it becomes an object of daily use, a known instrument with extra features. As with the prior two premises, *anytime* is in fact determined by coverage.

References

- Aguado, J.M.; Martínez, M.I. (2006). El proceso de mediatización de la telefonía móvil: de la interacción al consumo cultural [The mediatisation process of mobile phones: from interaction to cultural consumption]. *Zer* 20, 319–343.
- Aguado, J. M.; Martínez, M.I. (2009). De la Web Social al Mobile 2.0: El paradigma 2.0 en el proceso de convergencia mediática de la comunicación móvil [From Social Web to Mobile 2.0: The 2.0 paradigm in the mediatisation process of mobile communications]. *El profesional de la Información* 18(2), 155-161.
- Aguado, J.M., Feijóo, C. and Martínez, M.I. (2013). *La comunicación móvil. Hacia un nuevo ecosistema digital [Mobile communication. Towards a new digital ecosystem]*. Barcelona: Gedisa.
- Barriga, F. (1986). *Etnología Ecuatoriana II. Shuaras [Ecuadorian Ethnology II. Shuaras]*. Quito: Instituto Latinoamericano de Crédito Educativo y Becas.
- Bidwell, N.J., Lalmas, M., Marsden, G., Dlutu, B., Ntlangano, S., Manjingolo, A., Tucker, W.D., Jones, M., Robinson, S., Vartiainen, E. & Klampanos, I. (2011). Please call ME.N.U.4EVER: Designing for 'Callback' in Rural Africa. *Proceedings of The 10 International Workshop on Internalisation of Products and Systems*. Malasya, 117-138.
- Campión, M. (2014). Vivir y organizar el territorio desde los márgenes: alternativas en pugna con la modernidad [Living and organizing the territory from the borders: alternatives in conflict with modernity]. II Jornadas GEALC LAKIT II. Universidad del País Vasco.
- Castells, M., Fernández-Ardèvol, M., Linchuan Qiu, J. & Sey, A. (2006). *Comunicación móvil y sociedad: una perspectiva* global [*Mobile Communication and Society: A Global Perspective*]. Barcelona: Ariel.
- Chinkim, L. (1995). El pueblo shuar [The Shuar people]. In J. Almeida (Coord.). *Identidades indias en el Ecuador contemporáneo [Indian identities in Ecuador today]* (pp. 47-78). Quito: Abya Yala.
- Ferraris, M. (2005). *Dove sei? Ontologia del telefonino.* [*Where are you? Mobile ontology*]. Milano: Bompiani.
- Lynch, E. (2010). La felicidad de las mónadas [*The monads' happiness*]. In VV.AA. *Ontología de la distancia. Filosofía de la comunicación en la era telemática [The ontology of distance. Communication philosophy in the telematic age]* (pp.75-99). Madrid: Abada.
- Fidalgo, A., Serrano Tellería, A., Carvalheiro, J.R., Canavilhas, J. and Correia, J. C. (2013). El ser humano como portal de comunicación: La construcción del perfil en el teléfono móvil [The Human Being as a Communication Portal: Profile construction on Mobile Phones]. *Revista Latina de Comunicación Social* 68.
- Fortunati, L. (2001). The mobile phone: an identity on the move. *Personal and Ubiqitous Computing 5*, 85–98.
- Fortunati, L. (2002). The mobile phone: towards new categories and social relations. *Information, Communication & Society 5*(4), 513–528.
- Fortunati, L. (2003). The mobile phone and democracy: an ambivalent relationship. In K. Nyíri (Ed). *Mobile democracy. Essays on society, self and politics*. Vienna: Passagen Verlog.
- Kalba, K. (2008). The Adoption of Mobile Phones in Emerging Markets: Gobal Diffusion and the Rural Challenge. *International Journal of Communication 2*, 631-661.
- Karsten, R. (1988). La vida y la cultura de los shuar [Shuar life and culture]. Quito: Abya Yala.

Lasén, A. (2006). Lo social como movilidad: usos y presencia del teléfono móvil [The Social sphere as Mobility: Uses and Presence of Mobile Phones]. *Política y Sociedad 43*(2), 153–167.

Lasén, A. (2009). Tecnologías afectivas: de cómo los teléfonos móviles participan en la constitución de subjetividades e identidades [Affective technologies: how mobile phones take part in the constitution of subjectivity and identity]. In G. Gatti, I Martínez

de Albéniz & B. Tejerina (Eds). *Tecnología, cultura experta e identidad en la sociedad del conocimiento [Technology, expert culture and identity in the Knowledge Society]* (pp. 215-248). Bilbao: UPV.

- Pertierra, R. (2005). Mobile phones, identity and discursive intimacy. *Human Technology* 1(1), 23-44.
- Plant, S. (2001). *On the mobile. The effects of mobile phones on social and individual life.* London: Motorola.
- Shakai, M. (2008). Las costumbres, ritos y creencias de la cultura shuar como generadoras de las manifestaciones de reciprocidad y comunitariedad en la zona de Chiguaza [Shuar customs, rites and beliefs as generators of reciprocity and communityship manifestations in the Chiguaza area]. Tesis de maestría. Universidad de Cuenca.
- Stald, G. (2008). Mobile Identity: Youth, Identity, and Mobile Communication Media. In D. Buckingham (Ed.) *Youth, Identity, and Digital Media* (pp.143–164). Cambridge: MIT Press.
- Ureta, S., Artopoulos, A., Muñoz, W. & Jorquer, P. (2011). Cultura Juvenil Móvil en un Entorno Urbano: un estudio de Caso en Santiago de Chile [Young Mobile Culture in Urban areas: a case study in Santiago de Chile]. In M. Fernández-Ardevol, H. Galperin & M. Castells (Ed.) Comunicación Móvil y Desarrollo Económico y Social en América Latina [Mobile Communication and economic and social development in Latin America]. Buenos Aires: Ariel.
- Turkle, S. (2008). Always-On/Always-On-You: The Thetered Self. In J. Katz (Ed.). *Handbook* of *Mobile Communication Studies* (pp.121-138). Cambridge: MIT Press.