

MOBILE CONNECTION, DIGITAL GENERATION AND VISIBILITY:

A study on the use of smartphone applications among adolescents in Brazil

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ABSTRACT: Smartphones have become an important tool for adolescents to access information, talk with friends, consume online content, and share images on social media. How do teenagers appropriate these platforms to express the world around themselves and to build on their identities through mobile applications? With the objective to contribute to the knowledge about this phenomenon from Communication perspectives, this article discusses the use of apps among adolescents in Belo Horizonte, Brazil, as a channel for visibility from the context of digital culture. It begins with an understanding of the development of Information and Communication Technologies (ICTs), highlighting the advent of smartphones; after that it addresses the concept of digital generation and its specificities in the age of connectivity when it comes to visibility, dialoguing with Le Breton (2017a, 2017b), Palfrey and Gasser (2008), Livingstone (2011), and Sibilgia (2016). From this point, the author presents an empirical qualitative research conducted with 32 teenagers, using participant observation (Cottle, 2009) and semi-structured interviews (Triviños, 1987), in a public school in Belo Horizonte, applying Content Analysis (Bardin, 1977) to analyze the transformations that the mediation of mobile devices bring to the relations of this young generation with visibility practices. Results show that although coming from an underdeveloped community, the group has been using smartphones in their daily life since an early age, a majority of them spend more than 1/3 of the day online, mostly on social media, and ephemeral images are now a significant part of their visual digital expression.

KEYWORDS: Adolescents, Visibility, Digital Culture, Smartphones, Mobile Applications

Introduction

The attentive eyes watch the screen, while the fingers touch digital images in an experience of visibility that involves the body, the mind, and the almost uninterrupted connection. From time to time, a performance is placed in front of the camera for recording and

sharing with the world that also watches on the other side of the screen. Teenagers' daily lives are transformed into imagery fragments, Stories told with the addition of visual elements such as stickers, geotagging, hashtag, and other filters.

In the digital culture traversed by mobility and visibility games, several details of the perceived world - bodies, food, landscapes, phrases, music, selfies - gain brief, ephemeral records, which remain in the air for up to 24 hours. Soon, they disappear to make room for new images and new experiences. For adolescents, the relationship with smartphones shows a latent hyper connected behavior in contemporary society, as studied by Le Breton (2017a), Livingstone (2011), Palfrey and Urs Gasser (2008), among other researchers.

The relevance of smartphones for communication and comfort in performing daily tasks - transportation, food, entertainment, shopping, imaging records - can be seen when observing the penetration of devices in society. According to data from the Pew Research Center (2019), more than 5 billion people rely on mobile devices worldwide, most of them smartphones.

Something that is still not entirely clear refers to how adolescents use these platforms to express the world around them and develop their identities among peers through ephemeral images. In this sense, this article summarizes part of the dissertation research carried out during the master's degree in Social Communication that analyzed, over two years, the mediation of the visibility experience in digital culture, studying the applications and social networks of ephemeral publications on devices among adolescents in Belo Horizonte, Brazil (Veloso, 2018).

In this article, it is specifically addressed the field research part conducted in 2017 and 2018, in which the author had a participant observation practice (Cottle, 2009) to gather initial insights into teenagers' smartphone usage habits, followed by a semi-structured interview (Triviños, 1987) with 32 adolescents to collect and analyze data regarding their experiences with mobile devices and ephemeral content consumption. The main objective here is to explore and typify their practices and habits of mobile applications usage and the relationship the subject keeps with mobile devices, adding their own perspective to this phenomenon.

Smartphones and visibility

When the look is directed to contemporary practices, flows and processes involving smartphones, the same mobile device is found with new configurations and covering even more technologies and functionalities. Cell phones now incorporate, through applications, a good part of the functions of other technology tools - radio, music or video streaming, etc. -, the consumption of products and services, entertainment by digital games and many other practices are available, as we discussed in another paper (Veloso, 2017).

Sibilia (2016) shows that the development of new technologies and the incorporation

of functionalities to digital devices, such as the cameras present in computers and cell phones, promote changes in terms of visibility - in relation to previous periods, such as modernity. The visible becomes, then, intrinsically allied to the intense connectivity of the mobile Internet.

Visibility and connection without pause are two fundamental vectors for the ways of being and being in the world more in tune with the rhythms, pleasures and demands of today, guiding the ways of relating to us, with others and with the world. (Sibilia, 2016, p. 21, our translation)

This cyberspace is becoming more complex and gaining new configurations with the advent of other Information and Communication Technologies, the uses that society gives them and the sociocultural and economic transformations of the contemporary world. One can point out smartphones here as an example of devices that have been expanding cyberspace, in a movement to intensify practices, flows and processes in the digital universe, as explained by Serafinelli and Villi: “With smart mobile devices photography has become so ubiquitous that the existence of events, people, and objects seems to be directly connected with being photographed”. (2017, p. 3).

It is not a question of giving technique, technology, or technological apparatus an extreme, deterministic power, but seeking to understand their intersections, interconnections, and reverberations in society with today’s cultural formation.

Adolescents in the digital culture

Thinking scientifically about adolescence makes it clear that this is a too complex object, with a multiplicity of relationships and processes that are not always possible to be perceived and understood in all its extension. To exemplify, the very classification of the demographic structure of this period is diversified among the institutions that comprise it, such as the World Health Organization (WHO) - 10 to 19 years old -, the United Nations (UN) - 15 and 24 years old - and the Brazilian State, through the Child and Adolescent Statute (ECA) - 12 to 18 years old.

According to the 2015 TIC Domicilios survey, the most frequent profile on the Internet corresponds to 13 to 14 years old (88% of the public connected) and 15 to 17 years old (85% connected). Of this total, another relevant data is that 85% of children and adolescents already accessed the Internet via cell phones in the analyzed period, as it can be seen in the following infographic (Figure 1).

Figure 1 – Percentage of children and adolescents online in BR



Percentage of children and adolescents online in BR



- 23,7 millions youth on the Internet
- 80% of those between 9-17 are online

TIC Kids Online 2015

For Le Breton (2017b), digital social networks gain space in the universe of the studied public because they acquire the aspect of a mirror that helps in the narrative construction of themselves, their identities.

Social networks promote an exposure of multiple identities. They become the main tools of socialization and experimentation for young generations, a place for confronting the intimate experience with the experience of others. The recognition coming from this transmission is undeniable, they are increasingly absorbed by the reality that they themselves help to build. (Le Breton, 2017b, p. 20, our translation)

Researcher and director of EU Kids Online, of the LSE (London School of Economics and Political Science) Department of Media and Communication, Sonia Livingstone (2011), argues that it is important to look beyond the positive and negative issues that the Internet brings to that audience. When analyzing the uses, possibilities, risks and opportunities, among other aspects, that the younger portion of the population has in relation to the Internet, Livingstone (2011) emphasizes that “while young people make the transition from their family of origin to a culture of broader peers, they realize that the media offers a fundamental resource for the construction of their identity and for the mediation of social relations” (2011, p. 1).

Other researchers dedicated to assessing the impact of technology on young people’s lives were John Palfrey and Urs Gasser (2008), with the publication “Born Digital: understanding the first generation of digital natives”, which infer that there is a common

culture connecting such an audience: “Major aspects of their lives—social interactions, friendships, civic activities—are mediated by digital technologies. And they’ve never known any other way of life” (p. 2).

In a game between visibility and invisibility, public and private, intimacy gains new contours, the permanent connection and the communication crossed by mediatization in the digital culture make the limits more fluid, flexible and elastic, when these do not disappear completely. The addition of augmented reality and ephemerality, among the other features of Stories, with the acceleration of communication flows on the Internet and the mobility of new ubiquitous devices, takes this game to an unprecedented level.

Methods

Regarding the methodological contribution and procedures adopted, the first part of the complete Maters’ research, which is addressed in this article, consisted of a participant observation (Cottle, 2009) followed by semi-structured interviews (Triviños, 1987) with 32 adolescents aged 16 and 17 from the second year of high school at Padre João Botelho State School, in Belo Horizonte. Throughout the participant observation period, the researcher immersed himself into the school environment, delivered weekly workshops on Media and Information Literacy to a diverse group of High School students and had discussions in these classes about smartphones and mobile technology. Thus, the participant observation (Cottle, 2009) provided the scope to collect basic information on the group habits to further structure and develop the interviews.

Following the first step and already with an initial understanding of the group smartphone usage, the interview was designed and delivered in a one-to-one person process, giving space for each student to point out their response choices and to openly talk about the subjects. The 32 students all belonged to one specific classroom of second year of High School. This choice was made considering their average age (between 16-18 years old) and the availability to individually take part in the interviews, after consultations with the school pedagogic coordinator.

The form with the questions and questionnaires applied to the students addressed three main points about the researched process: 1) survey of the sociodemographic profile of the interviewees; 2) consumption habits and use of smartphones and mobile Internet; 3) The relationship with Stories and ephemeral publications in applications and social networks on smartphones.

To systematically analyze the material, the researcher adopts Content Analysis (AC) - as methodological procedure - (Bardin, 1977), first organizing the semi-structured interviews (Triviños, 1987) to generate patterns of the sociodemographic characteristics and then analyzing and classifying the open responses. By adopting these two methods, it is possible to cover the research purpose, explore and typify the adolescents’ practices and habits of mobile applications usage, as well as their relationship with mobile devices,

gathering in-depth understandings from the subject's perspective. Before its development, the research was submitted and approved by the Ethics Committee of the educational institution.

Research findings

The first part of the research with the participant observation (Cottle, 2009) of adolescents, together with data from the semi-structured interview (), brings elements to assist in the understanding of who these analyzed subjects are and the context to which they belong. In the set of demographic information surveyed, it appears that adolescents started using cell phones in childhood, usually for entertainment. Of the 32 respondents, 21 had the first access to the devices before the age of ten, while the other group started between 11 and 13 years old.

When asked about the time they spend using the Internet effectively on cell phones, the minimum times - which would be "I rarely use the Internet on cell phones" and "less than two hours a day" - were not indicated by anyone. At the other end, represented by the use "most of the time", are 29% of students, followed proportionally (22.6%) by those who spend between 8 and 12 hours daily on the mobile Internet and those who use the Internet between six and eight hours a day (22.6%).

After consulting smartphones to count the applications, it was questioned which were the five apps most frequently used by teenagers. It was found that 31 of them (96.9%) mentioned WhatsApp, 22 (68.8%) Instagram, 21 (65.6%) Facebook, 12 (37.5%) YouTube and 11 (34.4%) Snapchat. Other applications were also mentioned, such as the music player on the device itself and the digital music service Spotify, with six mentions each.

From the above, the prevalence of social networking applications, messaging, and video consumption among the most used by adolescents is perceived. In addition, four of the five most mentioned apps had a tool for ephemeral publications in the period (except YouTube), putting a good portion of students in direct contact with the function, even if it is not used effectively by everyone.

Next, the form addressed the motivation for using the applications. All participants said that "watching videos and photos" is among the main reasons, followed by "listening to music" and "talking to friends and family" (both mentioned by 30 people), "maintaining work or study contacts" and "getting around the city" (with 25 mentions), "posting videos and photos" and "meeting new people" (mentioned 23 times). By making a comparison between the most used applications and the reasons for their use, one can see how the issue of visibility is constantly present. Facebook, Instagram, YouTube, and Snapchat are platforms in which images have great strength, bringing as one of the possibilities to see and be seen.

It is common for teenagers to do a second activity concurrently with the use of the cell phone. Studying was the most cited among nine possibilities: 29 of the 32 respondents

reported accessing smartphones while studying; eating and watching television appear next (23 responses each); 19 talk in person with other people at the same time that they touch the devices. Two situations stood out in the area designed for “other activities”, for open responses: bathing and doing household chores, each mentioned by eight people.

And by accompanying this audience in many of the daily activities, the smartphone starts to occupy a prominent place in the lives of teenagers. It was found that the impossibility of using the cell phone to connect with the world is seen in a negative way by many adolescents. Openly asked about what they feel in this situation, they demonstrate intense use of the devices on a daily basis and some of the reports indicate symptoms similar to disorders found in contemporary psychopathological classifications¹ - although the proposal here is not specifically the clinical diagnosis - as if you can see below:

“It is very difficult to be without the Internet because I have nothing to do. I consider myself addicted to cell phones”, informs @Adolescent28, 16 years old. “Empty. It seems that something is missing. I feel that a piece of me is missing. My mother even complains because I get very nervous”, points out @Adolescent25, 17 years old. “Despair. Empty. There is nothing to do. In a farm, a place, those places that do not use the Internet, I don’t even go”, claims @Adolescent13, 16 years old.

The dependence on smartphones even crosses the discourse of those who claim not to use them intensively, referring to the need to “detoxify” or “relief”, since they carry the meaning of “intoxication” and “overload”, respectively. It can be seen from the opinion of @Adolescent9, 17 years old, how the constant connection behavior is fed through the capture and maintenance of the users’ attention, without them being able to perceive this agency. “Social networks today and the Internet on cell phones are an addiction. Sometimes you think: ‘it’s just 5 minutes’, but then you see something else, something else... and when you run out of Internet, desperation comes.”

With the constant and intense use of cell phones, being applications with ephemeral publishing tools among the most popular, teenagers’ exposure to this type of content also becomes frequent. However, there are different ways of appropriating these apps, be it Instagram, WhatsApp, Snapchat, or Facebook. Regarding the use of ephemeral publishing tools, only one teenager commented that he did not use any of them. Most of the teenagers interviewed, (68.8%) use Instagram Stories effectively, whether to publish and view content or just to see what other users share. However, during the follow-up, only seven (46.6%) out of the 15 participating profiles made any posts.

The content brought to the realm of the visible in ephemeral publications was the subject of another question, to which the most recurring answers indicate records of important

1 The two main classifications of mental disorders caused by obsessive behaviors are the Diagnostic and Statistical Manual of Mental Disorders (DSM – 5) - Manual of Diagnosis and Statistics of Mental Disorders 5th edition - of the American Psychiatric Association, and the International Statistical Classification of Health-Related Diseases and Problems (ICD10) from the World Health Organization (WHO). Issues and aspects related to disorders due to excessive use of smartphones, internet connection and video games are under discussion in both entities and were mentioned in the appendix of DSM – 5.

events or activities (concerts, celebrations, trips etc.), and images in public places (squares, landscapes, parks, streets, restaurants etc.). In parallel, there are publications portraying spaces more restricted to intimate life (in the bedroom mirror, in the bathroom etc.), everyday situations (breakfast, lunch, dinner, studying, exercising etc.), in addition to content from third parties (memes, quotes, prints, lyrics etc.) and promotional images (product/service announcement, poll, Instagram sponsored or informative content).

The variety of formats of the publications, application of elements on the images, themes and situations addressed and intensity of use reveal different appropriations for the tool in the group of adolescents studied: while some use Stories to show any fact of their daily lives, without a specific criterion of relevance among the experiences made visible, others choose to share mainly what is highlighted on the agenda. There are also those who rarely share an image, but nevertheless stop using Stories and, consequently, gain some visibility among peers.

In response to the question “*what do you think motivates people to use Instagram Stories?*”, we find evidence of the practice. “To keep the friends informed about the moment, what is happening, to be closer to people” (@Adolescent20); “To share the day, something more momentary, that doesn’t always have to remain in there” (@Adolescent13); “It’s more for you to show your mood at that moment, whether it’s good or bad. For people to see what you are doing, a song you like...” (@Adolescent29); “There is an audience on Instagram that is not on Facebook or WhatsApp. Each social network has a segment and there are things that people just post there [on *Stories*]” (@Adolescent14).

The words “moment” (mentioned ten times spontaneously) and “show” (13 mentions) are noted as constant in the responses, indicating characteristics of ephemeral publications. Based on the interviewees’ report and on the evaluation of the 63 publications, it can be inferred that instantaneousness is one of the imperatives of the tool. Apart from specific dates - such as Thursday, #TBT (Throwback Thursday) - *Stories* is used to make something that is lived instantly visible. “It’s like this: you saw it, you shot it, you posted it!”, summarizes @Adolescent12, 17 years old.

Final remarks

The dialogic exposition made up to this point, with the articulation of empiricism and theory addressed in this paper (Le Breton, 2017b; Palfrey and Gasser, 2008; Serafinelli and Villi, 2017; Sibia, 2016) together with the methodology applied in the research, sought to deepen the study and theorization about the mediation of experience in mobile devices as processes and phenomena of cyber culture. With that, it was possible to explore and classify elements present in the adolescents’ mobile practices and to point out some transformations that applications with ephemeral publications on mobile devices bring to communication in the context of the digital culture.

Our main discussions and findings from this research can be summarized as it

follows:

- Although coming from an underdeveloped community, the group has been using smartphones in their daily life since an early age;
- A majority of the teenagers spend more than 1/3 of the day online, producing and consuming content;
- The most used apps are social media and messaging apps, with ephemeral images being a significant part of their visual digital expression;
- They multitask when on their phones: it's common for them to do more than one activity simultaneously while using smartphones;
- Mobile phone usage impacts on the mediation of their various experiences, from private life (intimacy) to public activities.

It was also noticed evidences that adolescents tend to present symptoms of psychopathology disorder when they can't connect with their smartphones to use the Internet (especially anxiety), but this characteristic needs further studies from other research fields, such as neuroscience and psychology. Therefore, the mention in here aims to highlight this subject and motivate other researchers to develop more analysis into the matter, since it was not the focus of the present project.

To conclude, it is also noted that social networks and cell phones are increasingly becoming a resource for continuous connection, even during sleep intervals at night. This practice towards the digital universe is not permanent, but also part of being an adolescent today, of life itself, as pointed out by Le Breton: "disconnecting is, for many, a symbolic death, an impossibility to think about the continuity of their presence in the world" (2017b, p. 19). In this way, these technologies enable multiple experiences and bring new possibilities for living adolescence in the contemporary times.

Acknowledgments

The author recognizes and publicly thank the important contributions of his Master Thesis supervisors Bruno Vasconcelos de Almeida and Mozahir Salomão Bruck to the development of this research. Although the first work was in Portuguese, this paper contains parts of the discussion conducted in the thesis translated into English and updated.

The present publication is the outcome of the project „From Talent to Young Researcher project aimed at activities supporting the research career model in higher education”, identifier EFOP-3.6.3-VEKOP-16-2017-00007 co-supported by the European Union, Hungary and the European Social Fund.

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