

PHOTOGRAPHY 2.0: COMPETENCES AND CULTURAL PRACTICES IN DIGITAL NATIVES

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Abstract

In the following work of research, we shall present the results of a study on forms of digital photographic socialization as carried out by the so-called “digital natives” in order to explore their competence in managing digital photographic output and cultural practices. This shall be done under the following categories of analysis: **snapshot, organization, socialization, reception, privacy and copyrights** in digital photography. The study explores the forms of digital photography production, technical problems of photographic management and the final uses that digital photographers give to their photos in terms of web tools 2.0, Mobile telephones and social Networks. Digital photography technology, compact cameras, mobile phones with cameras, specialized websites in photography and the Internet generate new forms of production and emerging styles of digital photographic socialization. The study is carried out using a defined sample of university students, those “digital natives” who create and use digital photography.

Keywords

Digital photography, socialization, digital photographic competency, cultural practices, digital natives.

The emergence of digital photography on the scene of contemporary image production demands delving into technological competences and cultural practices that the “digital natives” create with it, within the framework of digital socialization technologies. Clashing with analogic photographic culture, digital photography implements a new and complex technological architecture which both surpasses the boundaries of traditional photography and modifies the models of production and photographic socialization.

Unlike the traditional model, this new technological architecture, composed of digital cameras, mobile phones equipped with cameras, participative 2.0 websites, social networks, and computer programs for management and photographic treatment, demands new technological competence and extends the limits of photographic socialization. It is therefore pertinent to explore responses to questions which fall into the following categories: What are the main characteristics of the process of taking photos? What main problems arise in the process of creation and digital photographic organization? What are the relevant characteristics in the process of photographic socialization? What are the characteristics of the process of photographic reception? What notions do young people have regarding privacy and copyrights at the moment of socializing their photographs?

The objective of the work at hand is to explore the technological competences and cultural practices among a sample of 63 young Mexicans between the ages of 19 and 23. The students belong to middle, upper middle and higher classes. The sample was taken from three groups of university students taking university degree programs in Communication Sciences, and Digital Art and Animation, and who take the Digital Photography and Images course in a private higher education institute in Mexico City. The approach of this study is quantitative, through multiple choice type questions. The questionnaire was carried out during March 2010. Data was gathered through an electronic survey system, sent by the students through email.

2. Previous Studies

Currently there is very little documented research into technological competences and cultural practices that the “digital natives” carry out with digital photography. The problematic in the study of digital technologies has generally been its constant renewal and change. We may observe basically two fields of academic thought on this topic; one related to the conceptualization on aesthetic, economic, social and technological models and paradigms that describe the characteristics of the competences and technological socialization; and the

other field of study which is related to technological and cultural practices directed at specific samples which provide a parallel exploration in time and space, subject to changes at the moment.

In the first more general field, we find important conceptual and methodological contributions in the studies carried out by researchers such as Rheingold (2004) on multiple intelligences, Castells (2009) on *Communication and Power*, as well as *Mobile Communication and Society*; we also find interesting theoretical contributions by Lash (2005) in his *Critique of Information* on differentiation, identity and criticism; the theoretical corpus of Zygmunt Bauman (2007), represented by *Liquid Times*, as a reflection on the sociological consequences of the information age upon human relationships; in Pierre Levy (2004) from his *Collective Intelligence*, as a repositioning of a social model through human interaction with technology; some shorter revisions such as that of Naief Yehya (2008) on *Technoculture* in which a recount of cultural practices and evolution of the digital technologies of interaction and socialization is made; relative analyses of image and interaction surrounding the war in Irak, in Thompson (2005), in his *The New Visibility*; and conceptualizations on image in philosophical, religious, ethical and esthetic terms such as that by Jacques Rancière (2007), in *The Future of the Image*.

Gradually, more direct studies have emerged to provide more specific information and results on image and digital photography, interaction, socialization and consumption, such as the initial compendium in Lister (1997), *The Photographic Image in Digital Culture*, or in his more recent *A Sack in the Sand: Photography in the Age of Information* (2007), in which a theoretical framework is put upon the tendencies of contemporary digital photography; more specific essays related to historic, technological and philosophical reflection into the future of the medium of digital photography can be found in the compilation made by Joan Fontcuberta (2008), *¿Soñarán los androides con cámaras fotográficas?*

More specifically, we may find studies that analyze photographic interaction and socialization experiences, largely focused on the Flickr.com platform, a social network that had more than 3 billion on-line photographs by 2010. A basic study of reference was carried out by Chalfen (1987), *Snapshot Versions of Life*, a grassroots work on technological competences and cultural practices of amateur photographers in what the author calls “Kodak Culture”; more recently, the study by Van Dijck (2008), *Digital photography: Communication, Identity,*

Memory, in which he explores the transformation in individual and social practices brought by digitalization and instantaneity in photography, as well as the impact in the creation of virtual identity and memory.

Other relevant studies on digital photographic socialization are the following: from Miller and Edwards (2007), *Give and Take: A Study of Consumer Photo-sharing Culture and Practice*, who bring forth a comparative analysis among the traditional users, the “digital immigrants” who belong to a Kodak Culture, and the new producers-diffusers of digital photography in social networks, the “Snaps”, characterized by their high technological capabilities in the use of digital photography in social networks such as Flickr, an interlude into the socialization of privacy in social networks and through sharing their images almost instantaneously.

By Nov, Naaman, Ye (2008), we find *Community Photo Sharing: Motivational and Structural Antecedents*, a study in which the authors propose a model of digital photographic exchange, based on two great fields of individual motivations and communal structural relationships; Counts and Fellheimer (2004) explore the increase in photographic exchange upon daily life events, through an application created for the mobile phone, Flipper, similar to Snapfish; House and Davis (2005) *The Social Life of Cameraphone Images*, explore the uses of images through the Mobile Media Metadata 2, a system of photo exchange through the telephone, which are: memory, socialization, self-presentation, personal expression, functional uses and documentary uses; and in Sarvas and Lehmuskallio (2008), *Snapshot Media: “Kodak culture” in the 21st Century*, who formulate the term snapshot media, and conclude that the processes of photographic snapshots, production and socialization exclude the older generations and certain groups who are not familiar with digital technologies.

Nevertheless, we do find a delay in the specific reflection on image in Internet times and a certain void surrounding the study of digital photography as an instrument of creation, knowledge and socialization. We attribute this neglect to the fact that photography has been considered a technology of image production centred on the individual and not on the more structured mediatic and cultural industry such as cinema, television or videogames.

3. Methodology

The work at hand is a result of an empirical study which explores the technological competences and cultural practices among 63 university students; 26 women and 37 men, from a private higher education institute in Mexico City who belong to middle, upper middle and upper classes. An important factor in the sample selection was that students needed to be enrolled in photography courses and studying the degree programs of Communication Sciences and Digital Animation and Art.

Another important factor is that these students are the “digital natives” (Prensky, 2001) (Palfrey, 2008), born around 1990 and who were between 19 and 25 years old. Yet other considerations were that the students had access to Internet, were users of some type of social network, had a digital camera and used mobile phones with cameras. It was not required for them to know how to operate a digital reflex camera or to have an existing profile on any site specializing in photography such as Flickr.com

A questionnaire was carried out in which the students anonymously submitted answers to 30 multiple choice questions using a digital system sent through their emails where a month was given for replies. Questions were formulated around six main categories in the use of digital photography: the snapshot, organization, socialization, reception, privacy and copyrights. The research work at hand is an initial approach, which shall undoubtedly become the object of future, more specific approaches toward this topic.

4. Analysis and interpretation of results

Following, we shall present and analyze results of the questionnaires based on the following categories: snapshot, organization, socialization, reception, privacy and author rights. And through these results, we may reflect upon technological competences and socialization practices within our sample.

4.1 Snapshot

In the category of the snapshot we have grouped questions related with the photographic shot, the type of devices used to create photos: the compact camera, mobile phone camera, reflex camera (SLR) analogical (film), digital reflex camera (SLR) and scanner; we also explore the frequency with which photos are taken and the principle technical problems encountered in shots. We have found that the majority of students take photos with compact digital cameras (60%), while only 19% are using a mobile phone. It is quite significant that the mobile phone

is not the most widely used advice for photographic creation. Another important piece of information is that the percentage among those taking photos with analogue reflex camera (film) (9.5%) and digital reflex camera (11.1%) is quite similar, indicating that the students have inherited some competences and practices from the “Kodak Culture” (Chalfen, 1987). In terms of technical problems encountered in results of digital photography, we find “blurred photos” with 36% and “dark photos” with 28%. Only 16% report problems with camera commands and options. This indicates that the students know how to use their compact cameras, yet since these are “automatic”, they present unresolvable problems such as being out of focus, blurred movement, and over exposure (18.3%).

In terms of frequency of photographs, 36.8% of students report taking photos once a week, and 29% report taking photos three times a week. This shows that the majority of students are taking photographs at least once a week, while 17% take photos once every 2 weeks.

4.2 Organization

This category takes into account the management of digital photographs: storage, organizational criteria (date, topic, number of people, titles for each photo, by event) and the destination of photos (leaving them on the computer, uploading them to a social network, sending by phone message, sharing by email, printing them). The main storage problem is creating order for the photos (51%), the second being the use of the chosen photo producing program (24.1%). This shows that the students do not have sufficient technical capabilities to manage a photographic storage program such as Lightroom (Adobe).

The most widely used organization criteria is “by event” (48%), followed by “date” (24%). This indicates that the students prefer semantic (or significant) labelling rather than chronological.

The destination of the photo is understood here to be what the students do with the photos once taken. The most frequent practice is leaving the photos on the computer (83.1%), uploading them to a social network (70%) followed by printing them (64.7%). The fourth least practice carried out is sending photos by email and the fifth, by cellular. Thus, the two most widely used practices are maintaining photos on the computer and putting them up on a social network. It also implies that neither mail nor mobile are habitual forms of sharing photos.

4.3 Socialization

In terms of socialization, we are interested in exploring with whom the young people are sharing their photos, how long they spend sharing them, which social network they are using, if they have a personal page in some digital platform, if they add any type of commentaries, which topic they tend to photograph more and their motives to do so. The most frequent socialization practice is made for friends and family (60.7%), and generally occurs “a few days after” the photo is taken (53.4%). The social network of Facebook is the preferred medium for socializing photos (79.7%), which contrasts with Twitter (5.1%). The majority of students add a personal commentary to their photos when they upload them to a social network (72.1%). We find only 29% to have their own personal page in which to upload and share photos, of Blogger or Flickr type. The theme or topic most photographed by the young people is “friends” (50%), followed by “trips”(45.7%). The third is “events” (54.2%). The main motive taking a photo is “to keep a memory” (53.4%). The finality for these young people, or what moves them to upload their photos onto a social network, is to “share them with friends” (91%).

These figures show that the majority of young people are sharing their photographs with friends, also being the most frequent theme or topic shared through Facebook, adding a commentary and motivated by keeping alive their memories. We find that very few students have a specialized website in which they can upload their photos, since the main socialization practice is that of sharing with friends; thereby making photography an important medium in establishing and conserving friendship links.

Another socialization practice is the fact of commenting on photos where 95.1% admit to commenting on photos with friends. The most frequent practice for commenting on photos is through a social network (66%), “in front of a computer screen” (41.5%), and the third is “personally, without having an image before me (56.4%). We must notice that these are combined, not exclusive practices.

4.4 Reception

Our exploration on the practices of reception and consumption of photographs was centred in knowing what type of photos are most frequently seen, which is the main means of reception, what is the source of the photos and what the young people do with the photos they receive.

The type of images most seen by the young people is “friends” (54.4%), received through a social network (74.4%), and those “friends” are the main source of these images (91.8%). Once the photos are received, the most frequent practice is to “comment on them” (56.9%), the second is “to download them to the computer” (49%), and the third is to “resend them” (54.2%) or “erase them” (53.8%). This indicates that the practices of commenting, downloading, resending photos and erasing them are not exclusive; they correspond to a user priority and they are carried out in the same social network.

As can be observed, again the main practice of reception is centred around “friends”, who are the main protagonists, just as we have seen in the practices of socialization.

4.5 Privacy

Here we explore what type of photographs the young people would not share in a social network, as well as their knowledge of the privacy regulations in the social network they are using.

The main topic that young people would not socialize in a social network is “nudity” (54.2%), followed by “drunken photos of myself” (52.5%). The students were able to choose any of the following options: a kiss, boy/girlfriends, family, travel photos, a girl in a bathingsuit, photos of a party, friends at a party, drunken friends. This indicates that the same percentage of students would not upload nude photos into a social network, nor photos of themselves drunk – private images. The topics which the students give less restriction to are “travel photos” (3.4%), “my photos at a party” (5.1%), and “photos of my friends at a party” (5.1%).

Just as with the Snaps (Miller and Edwards, 2007), our sample of students are willing to share photos of their lives in trips, parties and friends, or even of their “drunken friends” (20.3%), the photo of a “family member in a typical situation” (18.6%), or “a girl in a bathingsuit” (11.9%). Nevertheless, they do maintain moral limitations when it comes to socializing their “most intimate” photographs such as “naked pictures” of themselves.

4.6 Copyrights

In terms of the topic of copyrights and privacy conditions of contracts in the social networks used by the young people, we explore if the students read the conditions of use in the

contracts when they open an account in a social network, and if they are aware of regulations and copyright rules in the social network they are using.

71% of the young people report to not reading the conditions of use when opening an account in a social network, while their knowledge of privacy regulations in social networks appears to be more balanced; 51.7% report that they know the privacy regulations and 48.3% do not.

In terms of their knowledge of copyrights in a social network, only 35% report to know them while the other 65% do not. Nevertheless, 46.7% understand that they lose some rights over their images while 53.3% do not know this.

From these answers, it can be understood that in general, the majority of the young people do not read the conditions of use in the social networks they use and that they know very little about regulations in terms of copyrights.

5. Discussion

The results of this study reveal some interesting characteristics regarding technical competences and cultural practices that the young Mexicans, represented by our sample, carry out with digital photography. The results indicate that in general, the students have a very basic knowledge of digital photography, and yet the device most used is the compact digital camera and their socialization practices are highly centred in the social network of Facebook and around the topic of “friends”. We find a hybrid character between very little technical competence in the actual taking of photos, yet great competence at the moment of socializing these photos in a social network.

Competences

Unlike the Snaps from Miller and Edwards (2007), our young people do not use reflex digital cameras (SLR), but compact digital cameras. The mobile phone, inspire of not yet being a significant device for photo taking, is indeed being used as a medium, which allows us to affirm that the majority of young people are using digital technology (adding compact digital cameras and mobile phones), gradually leaving behind the analogue techniques.

Despite the fact that the majority of the young people are taking photos at least once a week, almost all students report technical problems that they are unable to control such as

movement, darkness and being out of focus. Their technical competences are very limited by their lack of knowledge and by the limitations on the cameras themselves. In spite of being “digital natives” (Prensky, 2001), the very conditions of Mexican society impose a technological delay, a digital gap, as well as conditions of cultural convergence which do not motivate possessing a reflex digital camera (SLR) and where mobile phones are just at the initial stages of holding Internet services which would permit an immediate socialization of photos using this device.

Organization

The young people show great organizational and management problems with their images as they are not using specialized programs; this shows yet another problem in technological competency. It is quite significant that the majority of their photos, once taken, are left on the computer. Nonetheless, this practice is combined with the task of uploading them into a social network, in high percentage. These results indicate that the young people are rarely using email to send photos and are printing them or sending them by phone even less.

Socialization

For these young people, photography is an instrument of socialization and a link for reaffirming friendships in the environment of a social network (Facebook). This practice is mostly centred around friendship and the commentaries made for photos of friends bring these young people closer to the practices of “Kodak Culture” (Chalfen, 1987), which is characterized by the use of photography as a means with which to tell personal stories between friends and family. However, this same practice also removes them from the “Kodak Culture” since they have few limitations at the moment of sharing photos of their daily lives, friends and family members in a very public environment. This differs from the users studied by Chalfen (1987), who were certainly more worried about their socialization in more personal and closed spheres and who were aware of privacy issues.

Another poignant factor at the moment of photographic socialization is that commentaries are made on the photos that are uploaded to Facebook. However, the data reveals the young people carry out hybrid practices at the moment of making a commentary, and that a high percentage still comment personally – face to face – thereby bringing them closer to the “Kodak Culture” (Chalfen, 1987) practices, and it indicates that they are taking photos of people who are close to them and who have contact with them in their daily lives in an

intimate, personal manner. This brings us to think that photography is being used to tighten existing bonds of friendship.

Yet another interesting point is that the young people are socializing their photos in Facebook at least once a week, and the majority do this “a few days after” having taken the photo or sometime during the same week. This brings them closer to Snaps practices (Miller and Edwards, 2007), yet they are still far from carrying out an immediate socialization through a social network. We could say that their cultural socialization practice is still quite “slow”, and that the young people prefer to upload photos to into a network to comment upon them, and that they also prefer commenting personally.

Reception

Digital photographic reception is characterized by “friends”, while “family” appears in second place followed by “classmates”. It is carried out through a social network – in this case Facebook – dominating other forms such as mail, printed photos or mobile phones.

A general cultural practice in the young people is to comment on photos received through a social network, which contrasts with the fact that a great number of students are “keeping them on the computer”. This practice brings these young people closer to the idea of “digital immigrants” (Prensky, 2001), and the photographers of the “Kodak Culture” who confront digital technologies (Miller and Edwards, 2007) while still feeling the need to store photos to “have them” or to see them again, while being able to do so through a specialized network such as that of Flickr.com, of which these young people are not yet users.

Privacy

The young people in this study do not show restrictions at the moment of socializing photos of an intimate and personal nature – friends, family, trips – to a social network. These are traditionally seen as private. For this reason, the young people are similar to the Snaps (Miller and Edwards, 2007). Nevertheless, they maintain certain limitations when deciding to share “naked” or “drunken” photos of themselves. This reveals a social morality which implies restrictions upon the “daily” environment in which photographic socialization occurs.

Knowledge of privacy norms in the social network that students are using is limited and only slightly more than half of the young people report having some knowledge of the subject.

This indicates that the moral limitation is not due to knowledge of privacy regulations but to a cultural trait of “self-censorship”.

Copyrights

The vast majority of students we have analyzed are unaware of copyright regulations since they have not read contractual conditions upon opening their Facebook profiles. This would show that our “digital natives” socialize photos rooted in a “pre-digital” culture, that of the “digital immigrants” (Prensky, 2001) who are unaware of, who choose to ignore or who simply consider irrelevant what happens to photos once they are in a public digital space.

Copyrights and privacy are two spheres in which the users of the digital networks can be seen as being harmed in terms of rights of the exploitation of their images and security. The study reveals an irresponsible culture in the use of social networks (in this case Facebook) by the young people at the moment of sharing photos and commentaries of private and personal nature, thereby putting at risk their security as they expose their images to any use and giving up all rights to commercial exploitation.

6. Conclusions

The technological competences on digital photography are limited in the Mexican “digital natives” analyzed in this study. The cultural practices of socialization are centred around “friends” through a social network (Facebook) which serves as a platform in which to share and comment on photographs of a private, everyday nature. A distinct trait of the cultural practices of these young people is that besides socializing photos in Facebook, they are commenting personally – face to face – on these photos. For this reason, the cultural practices of this sample are characterized as “hybrid”, since they maintain some practices of the “Kodak Culture” (Chalfen, 1987), by establishing links of personal and everyday nature by commenting on photos and also “keeping them on the computer”; at the same time, they are making “Snapr” practices (Miller and Edwards, 2007) by frequently uploading their photos to a social network and establishing it as a principle platform for sharing, commenting on and socializing their photographs.

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References

- CASTELLS, M. (2010). *Comunicación y Poder*. Madrid: Alianza.
- CASTELLS, M. (2008). *Comunicación Móvil y Sociedad*. Madrid: Ariel.
- CHALFEN, R. (1987). *Snapshot Versions of Life*. Bowling Green, Ohio: Bowling Green State University Popular Press.
- LASH, S. (2005). *Crítica a la información*. Madrid: Amorrortu.
- LEVY, P. (2004). *Inteligencia colectiva*. Washington, D.C: Organización Panamericana de la Salud. Retrieved April 6, 2010 from <http://www.udenar.edu.co/virtual/inteligenciaColectiva.pdf>
- BAUMAN, Z. (2007). *Tiempos líquidos*. México: Consejo Nacional para la Cultura y las Artes .
- RHEINGOLD, H. (2004). *Multitudes inteligentes*. Barcelona: Gedisa.
- LISTER, M. (1997). *La imagen fotográfica en la cultura digital*. Barcelona: Paidós.
- LISTER, M. (2007). *A Sack in the Sand: Photography in the Age of Information*. Retrieved April 10, 2010 from <http://con.sagepub.com/cgi/content/short/13/3/251>
- YEHYA, N. (2008). *Tecnocultura*. México: Tusquets.
- FONTCUBERTA, J. (2008). *¿Soñarán los androides con cámaras fotográficas?* Madrid: Ministerio de Cultura-La Fábrica.
- MILLER, A., EDWARDS, K. (2007), *Give and Take: A Study of Consumer Photo-sharing Culture and Practice*. Retrieved April 15, 2010 from <http://portal.acm.org/citation.cfm?id=1240682>
- NOV, O., NAAMAN, M., Ye, Ch. (2008), *Community Photo Sharing: Motivational and Structural Antecedents*. Retrieved March 15, 2010 from <http://www.aaai.org/ocs/index.php/ICWSM/09/paper/download/206/426>
- HOUSE, N., DAVIS, M. (2005). *The Social Life of Cameraphone Images*. Retrieved March 15, 2010 from http://74.125.155.132/scholar?q=cache:yVnueXF0CHMJ:scholar.google.com/&hl=es&as_sdt=2000

THOMPSON, J. (2005). *The New Visibility*, Retrieved March 10, 2010 from <http://tcs.sagepub.com/cgi/content/abstract/22/6/31>

RANCIÈRE, J. (2007). *The Future of the Image*. USA: Verso.

PALFREY, J. & GASSER, U. (2008). *Born Digital. Understanding the First Generation of Digital Natives*. New York: Basic Books.

PRENSKY, M. (octubre, 2001). *Digital Natives, Digital Immigrants*. In *On the Horizon (MCB University Press, Vol. 9 No. 5, October 2001)*. Retrieved April 12, 2010 from [http://docs.google.com/viewer?a=v&q=cache:Yvdyw3gWkxwJ:www.marcprensky.com/writing/Prensky - Digital Natives, Digital Immigrants - Part1.pdf+prensky+digital+natives&hl=es&gl=mx&pid=bl&srcid=ADGEEShFQxIzah0HhFcSWCnyjI4VXP68PbbB-h](http://docs.google.com/viewer?a=v&q=cache:Yvdyw3gWkxwJ:www.marcprensky.com/writing/Prensky-Digital-Natives-Digital-Immigrants-Part1.pdf+prensky+digital+natives&hl=es&gl=mx&pid=bl&srcid=ADGEEShFQxIzah0HhFcSWCnyjI4VXP68PbbB-h)

VAN DIJCK, J. (2008). *Digital Photography: Communications, Identity, Memory, Visual Communication*, *Visual Communication*, Vol. 7, No. 1, 57-76. Retrieved March 20, 2010 from 2010 <http://vcj.sagepub.com/cgi/content/abstract/7/1/57>

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