The Relationship With Space In The Digital Era: A Reinvention of The Identity and The Environment

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ABSTRACT

Whether resulting from a voluntary act or not on the Internet, digital traces forge the invisible elements of a dynamic ecosystem (Doueihi, 2013), which recomposes and invents our society. The digital increases and rebuilds the metric space combining new types of social practices, while being tracked by different applications, software, and algorithms indexing each data. Defining space as an organized distribution of elements (Beaude, 2012) begs the question on how the link between the digital and space redefines the identity, and most importantly in which environment. Is the digital identity limited to a collection of traces of activities and movements reshuffled by the search engines (Ertzscheid, 2013)? Does this identity define beings as a person-data rather than a human-trace (Galinon-Mélénec, 2011)? How can we define the digital environment born from the new individual and collective practices, and from "mechanic" operations? In our research, we studied the different uses of the "Places" application on Facebook by a group of 30 international students in Paris, by means of a questionnaire and semi-structured interviews. The analysis of these uses shows the introduction of a space dimension in the building of the identity, in addition to the construction of a digital "urbanism" in perpetual elaboration and permanent mutation. Space as a "practiced lieu" (De Certeau, 1994) suggests that the presence produces itself with practice. Being present is the result of a process of experiments and forges itself over time. Thus, the digital environment, as well as the digital presence (Merzeau 2010) are social. They are continuously built in the invention of the everyday lives.

Keywords: Space, Digital, Identity, Environment, Information, Communication.

INTRODUCTION: A NEW RELATIONSHIP WITH SPACE IN THE DIGITAL

The digital interferes in almost all our daily activities. It structures societal evolution and presents itself as an increasingly obligatory passage towards accomplishing everyday tasks. It changes the relationship to space and time. We are present in a place without the need to move. We are also continuously connected to others, everywhere and at any time. In its functioning as an ecosystem, the digital recasts the modes of organization in society and changes the terms of the interaction between its components.

Exceeding the technical computing to the cultural uses in the digital, or the passage from "computing" to "digital" (Doueihi, 2011) rewrote the social interaction. The latter, being a process of interpretation and definition, lost the symbolic aspect (Mead, 1934) by which people establish the meaning of actions and gestures of others, and indicate in return how they would react. We are therefore faced with a paradigm shift from the interaction to traceability in an environment where we can't not leave traces (Merzeau, 2009). The digital traces of users' activities and arranged by machines, are detachable and calculable. The user does not own what he says or

writes. Everything can be fragmented, cut, interpreted and taken out of context. Thus, the digital affects individual and collective identity. Our identity cards no longer define who we are today. It is our profiles on social network sites, our blogs, our photos and all the tracks and traces we leave behind that tell more about us.

"Where are you?" The famous question with which we often began a phone conversation, is not far from disappearing. It has been substituted in the relational platforms by small icons showing the location and the name of the place, by the word "online", or by small green dots announcing the present connection of the individual-user. However, describing where the person is (be it in metric space or the digital environment) indicates the importance of knowing where we stand in the context of interpersonal communication. Pinpointing the location has several functions that may fall within the conversational routine. It also allows to establish the availability of the sought person. This is one of the proposed usages of geographic localization applications: to know in real time where our friends, colleagues, parents or others are. Physical space, far from being outdated, becomes the support for indexing and transmitting content. Nevertheless, location-based services offered by social networks on mobile phones, refer to the process that allows the dissemination or disclosure of content, text or multimedia messages, depending on the geographic location of the user. This phenomenon stems from the desire to change and override distance. The goal is no longer to deliver content at any time but rather to link the relevance of the content to the space in which the user evolves.

To change space is to change our relationship to the world. The act is always spatial and cannot think of one without the other. Geolocation associates territories and networks, the material and the immaterial, analog and digital. Hybridization of space also requires consideration of the body, of the disembodied identity and of the *inter-spatiality* (Beaude, 2012). But does the use of these location-based applications consist only of curiosity to know where the other is, or does it make part of the construction of identity in the digital environment? Does publicly disclosing our movements count as an act of showing off, of linking relationships, or is it simply a form of expressing the link between the spatial dimensions of the action?

The new report introduced by the digital with mobility in metric space and in the digital environment pushes us to enquire the nature of this emerging and growing environment, and to examine the mechanisms of development of digital identity in the frame of a relational and informational building of individual networks. We study in this article, using the Facebook "Places" application, how the relationship with space in the digital redefines the identity, and produces a new environment in constant mutation.

THEORETICAL CONCEPTS

1. The digital shakes the conventional modes of sociability

From the social interaction to the digital trace

During concrete interactions with partners, a person produces meanings that depend on its actions and interpretations, and are defined by a situational context. He is an actor interacting with social elements. He builds his universe of signification through a determined and conscious activity of giving a meaning. The symbolic dimension determines his relationship to the world. George Herbert Mead introduced the concept of interaction to contemplate the relationship of the human being to the world in terms of symbols, of what makes sense. Mead said cognitive

access to the meaning of the phenomena, both subjective and objective, proceeds from an interpretation, and the latter follows the dynamic processes of inter-individual interaction. In a symbolic interaction, subjects interpret their activities and act based on the meaning produced by this interpretation. This interaction is always positioned and its spatial dimension is always interrelated. The understanding of space begs us to consider the measure of the order of things that constitute it, and the dynamic relationships between them. From a semiotic point of view, the sign is the result of the interaction between humans and their environment. Interpersonal communication between two individuals is an exchange of "sign- traces" (Galinon-Mélénec, 2011). By "sign-trace", we gather that:

1. The process that shaped the sign is present in the sign itself;
2. The interpretation of a sign indicates the presence of a presupposition that drew the attention to a sign rather than another;
3. The interpretation is a trail-sign;
4. There is a circular and continuous process from the trace to the sign and vice- versa (Galinon-Mélénec, 2011: 193).

Noteworthy, that the combination of the two terms "sign" and "trace" connects the past traces to their present interpretation. With the advent of the digital, the process o[i]f social interaction has been shaken. In the digital environment, any act of communication is an inscription that increases the number of traces. This traceability, which combines declarative traces of users with those calculated by machines, has many consequences, both on customizing the information and on "indexing of behavior" (Ertzscheid, 2009). Consequently, the interaction between individuals via the digital is no longer in the co-presence. The "sign-traces" through which individuals in the co- presence influence each other cannot exist in a context where the digital traces no longer belong to the user. Accordingly, the body signs of the individual in the metric space become traces in the digital environment. Once sought, these traces combined and associated with specific contexts, provide preferences and behaviors.

In our movement, transactions and relationships, as well as in our expressions or productions, we leave traces. As a polysemic concept, the trace is far from easy to define. We consider that granting an inscription the status of a trace comes from the way an observer sees it, and from the relationships and interactions he maintains with the environment. Alain Mille explains the difference between an imprint and a trace. Mille said the imprint is *"the inscription of something in the environment at the time of the process"* and the trace is *"the observation of this imprint in a temporality that cannot be anterior to it (but may be the simultaneous)*" (Mille, 2013: 8). It is therefore the observation, as a cognitive process that allows us to distinguish the imprint and the trace of something that can make sense. Once detected by an observer, the imprints become interpretable and exploitable traces. They acquire the status of inscriptions or impressions of knowledge in the cognitive context of the observer. "*Observation can take place retrospectively or in real time in situ. An impression is always an imprint of something, like a trace is always a trace of an activity*" (Mille, 2013: 112).

As for the digital trace, it is made from digital imprints left voluntarily (or not) in the computing environment during IT processes (Mille, 2013: 113). One of the major risks of this digital traceability is the threat to reduce the horizon of the information on a person to the limits of its social graph. As per this logic, the digital social platform filters the information it

provides to each user based on his connections and relationships. The social graph adds to the social network the terms of connection of one user to the others: location, work, interests, etc. Therefore, traceability constitutes today a major economic and political issue. "*The digitization of our imprints is not resumed to the technological challenge alone: it raises the question of the future of our identities, our sociability and our freedoms in a renewed environment*" (Arnaud, Merzeau 2009: 10).

Geolocation: an identity strategy on the social networks?

The geolocation in mobile applications is the search process that determines and provides the exact location of a mobile device. It locates the device thanks to geographical coordinates and measurements. Thus, it is possible to accurately position an individual in real time and mobility. Geolocation goes through our personal digital identity in two ways (Perriault, 2009): the personal digital traces that help locate any individual and allow him/her to locate him/herself, and to know with great precision where he/she is. Being in a space helps one to situate himself socially in an "uncertain society" (Perriault, 2009), but also in an ever-changing digital environment.

In this study, we examined the *Places* application on Facebook. For us a social network site is a web-based service that allow individuals to:

1. Construct a public or semi-public profile within a bounded system;
2. Articulate a list of other users with whom they share a connection;
3. View and traverse their list of connections and those made by others within the system (Boyd, Ellison, 2007: 211).

The nature and nomenclature of these connections may vary from site to site. Social networks are nowadays a real media of socialization: they allow linking but also sharing all types of media products.

Facebook announced *Places* on August 18th of 2010. It is a feature that lets users "check in" to the social platform using a mobile device to let a user's friends know where they are now. The application was reported discontinued in August of 2011, but was relaunched in November 2014 with more options to add like cover images, city/category landing pages. Nowadays, Facebook has developed his location services adding "Check in", "Nearby Friends" and "Nearby Places" to his features. The first one can be used independently and is integrated in the top of the News Feed. It lets the user select a nearby location and add it to his timeline. It also exists optionally in the space special for writing comments or sharing videos or/and photos. Whereas the two others are independent features which enable to share with friends' information about nearby places and people. Eventually the three demands to turn on Location Services before using it.

The "Places" application belongs to the family of geo applications where space acts to provide community services or content sharing. It is consulted on mobile phones which have become a fundamental part to the daily lives of individuals. The ability to mark the environment represents a new form of communication in which space and place are not an end. The purpose is rather to share information related to these places. Launched in August 2010 in the United States and in France in late September of the same year, "Places" allows Facebook members to indicate their presence or that of friends in proximity, using a Smartphone. Users can then share their location with friends and go to new places that friends have themselves discovered. It can also find out which friends are nearby. In addition, when the user indicates that he is in a certain place, only friends can see Facebook events

associated with it (unless he has chosen to make this information visible to everyone). On the other hand, the user can delete news on his whereabouts from his phone or the Internet. The service attracted advertisers and campaigns geotagged, but caused some worries related to security and respect for privacy.

The digital fully addresses the modalities of contact. The latter are deeply transformed, thus affecting people's ability to adapt to an ever changing, and intense environment and intense troubled by the reposition of its distances. To question the changes brought by location-based services is to question the relationship between technology and society at large. In different periods of history, technical innovations have produced new aspects of which the economic, cultural and political consequences are in the present traces of the past. *"This temporal dimension of the trace (past and present) must be placed in perspective in a more comprehensive approach that integrates the future (which implies that is the interpretation of traces of human today)"* (Galinon-Mélénec, 2011: 16). In this context, other questions arise, such as: can we separate the "technical" from the "cultural"? Is the evolution of information and communication technology an aspect of social change, or is it essential? Can we consider the operation of geolocation media yet another commercial operation ran by large companies with the aim of tracking the movement of individuals and making them new consumption offers? What is the connection between the building and management of the digital identity on social networks and on geolocation?

In the digital, Internet users are subject to an increasingly uncontrollable traceability, since every act on the Internet leaves traces. This traceability is part of a sociability to which users are attached, but it produces a "machinic" memory where traces tell more than our real names, and where the individual is abbreviated to the collection of its traces. In the Web 2.0 environment, the management of one's identity is no longer to lock their data, but to methodically build their profiles and networks. The user is recognizable by the traces he/she leaves or others leave about him/her, including those of geolocation. Thus, the digital identity construction process, far from being reduced to a collection of tracks, shows a learning mechanism and management of relational strategies. The "digital hexis" (Georges, 2008) or digital identity can be defined as a self-acting sculpture in the virtual world. It includes three dimensions (Georges, 2008):

- Declarative identity, informed directly by the user;
- The active identity indirectly informed by its activities;
- The calculated identity, produced by treatment of the active identity by the system.

Translated into traces, identity then is more and more the result of calculation and documentation. We continuously document our digital identities and traces. I turn, each of those can be (re) annotated, indexed and compiled in other contexts and for other purposes.

If in the early 2000s blogs were the social software, they have clearly been surpassed today by the social networks such as Facebook. We can say that the entire web is becoming a relational platform. It is the identity and enrichment, the extension and exploitation, the evaluation and projection of the relationship to the other that constitutes the heart of Web 2.0 (Kaplan, 2008). In this relational social context, geolocation densifies the memory of places by discovering, exposing and reinventing sometimes hidden places for all to see. The space becomes more and more alive every time a user checks into a location.

3. Space: a practiced lieu

Digital: a changing environment

The space is a reality that does not allow an easy explanation. It is not a carrier or container without which it should be itself supported or contained. In this sense, space is not one thing, but the ordering of things (Beaude, 2012). With Kant, the thought of the space was renewed (in the 8th century). Space is our capacity to obtain sensation, but representation of objects does not pertain to the sensible (spatial) world at all. For Kant space by itself is given in a pure intuition. And in this pure intuition, the object is produced by the representation. For Mead, objects are man-made constructions, and not entities that would otherwise exist by themselves. The nature of an object consists of the significance it has for the person. The object is a social one in the sense that it is built and transformed by the process of definition that takes place in social interaction. This is what the semiotic approach in the French School of the Trace sustains, by considering that digital traces as artifacts are objects whose significance depends on the interpretation of the user.

Space and time allow us to perceive reality and to associate between objects that make up our experiential situations. Michel de Certeau makes a distinction between the lieu and the space. Certeau said lieu is a place in which things are organized, whereas space is a crossroad of movement, a consequence of the operations that orientate directions and contextualize them. For him, space is a "practiced lieu" (De Certeau 1994: 84), meaning that lieu becomes a space from the moment it is invested. This activity that connects and shares all objects in one place depends on the point of view or the representation of the user.

Relational platforms offer large exhibition spaces for users. *"It is very striking to see, in contrast with all concerns around digital surveillance and respect for privacy, that users take a lot of risks with their identity"* (Cardon, 2008). As Milad Doueihi puts is very well, we are experiencing the emergence of a "new virtual urbanism", with its architecture, aesthetic, its values, and its literature. Digital users inhabit this new hybrid urban planning and conduct their businesses. They interact with the various platforms that have become essential in the urban planning, thanks to the activities of users in places of convergence between information, communication, knowledge and sociability. What are the internet users doing on the Web other than marking these networks to apprehend these semipublic spaces? Michel Serres notes, *"The property is marked just as a footstep leaves its trace."*

By writing on the web and inventing various language productions, users mark their space. Internet creates new territory. It recreates continents, gives birth to cities of data. These spaces cannot then be owned by users. They will never belong to them as they are built and managed by companies. However, users rent these spaces by their imprints. They pay the access fee to these spaces with their personal data that become metadata, once drawn following their digital activity. A metadata is literally data about data. It is a structured set of information describing any given resource. Metadata describes various attributes of information and give them meaning, context and organization. *"We no longer buy, we rent,"* says Serres. Personal data *"is distributed and marked in various cards with or without chip, often called loyalty cards whose contents often belong to us much less than they pertain to private and public institutions enterprises"* (Serres, 2008: 30). States, banks, hospitals, department stores, mobile operators, search engines, data hosting, and others own the personal data of individuals. *"For now, our data does not belong to us alone. I mean*

completely. In a while, we will only enjoy them as merely tenants" (Serres, 2008: 30).

The geolocation on Facebook brands our activities in transit areas, travel and visit multiplying metadata and reinventing spaces. What is new with the digital is that it preserves the metric space but develops at the same time, a new non-metric, dynamic and moving environment. The regular change affecting the platforms and digital programs does not allow them to acquire the characteristics of the place, particularly in relation to the organization of the elements of which it is made. This restlessness that exemplifies the digital makes it a *"dynamic ecosystem driven by an algorithmic normativity and inhabited by polyphonic identities capable of producing dissenting behaviors"* (Doueihi, 2013: 22).

The endless movement of platforms and the sustainable transformation of socio-cultural practices in digital issues, make it difficult to define the digital as a lieu/place or space. We are faced with *"an environment that embraces and connects us, an environment in permanent construction environment that affects the development of humans and influences their behavior"* (Saba Ayon, 2016: 143-144). This new digital environment can be described as an "EntreNet" (Kaplan, 2006). "Between", like "between us", of course, but also as "intermediary": communicating one to one - on one side - the community on the other, are only borderline cases at both ends of a continuum of uses. The key is to look between these two poles. Kaplan said that the "EntreNet" is full of small things rather than big speeches, and of day to day matters rather than projects, of practices that pile up, rather than plans.

Would this new environment have legal and political powers? It does not seem to have distance, whether typological or metric, it is an "area of lawlessness" (Serres, 2005). *"I do not know what the rights (...) on the web would be, gradually, we will never apply the law outside that space, but from within this space of lawlessness, a new original law will emerge and rule"*. From the place to the territory to the social graph

If space only becomes a lieu when it is invested by use, the distinction between a lieu and a territory refers to the clash of two rival phenomenologies: localization and extension (Urbain, 2014). The differentiation between the two reveals competing experiences of space and two modes of being. *"These experiences are the result of intersects between agro-pastoral and nomadic societies. The first are lieu societies, while the second are territorial ones: mobile, made of men on the move (...)". To* mark one's location on social platforms is to display our mobility within territories. Jean-Didier Urbain recalls that some lieu is reached (destination) while a territory is crossed (traffic). Thus, the development of networks promotes the mobility of people, of information, goods and capital.

We are witnessing a transition from a world organized around defined territories, to a reticular world characterized by spatial fluidity. According Montulet and Kaufman (2004), the space is undefined and open, it is full of opportunities in constant reorganization, and the world is nothing but a vast interface. We wonder if the territory could not be anything else. Might it not be built around networks? Research on the role of transport on the programming of everyday life showed that the stations and trains are suitable for individuals as a lieu "in motion": Stations and trains are invested and are home of social practices or activities (Montulet, Kaufman, 2004). We therefore ask ourselves: is there today an emergence of a new mode of regionalization supported on the networks and geolocation?

Facebook is a social platform where the ID/username proposed by the platform, the preferences and relationship network

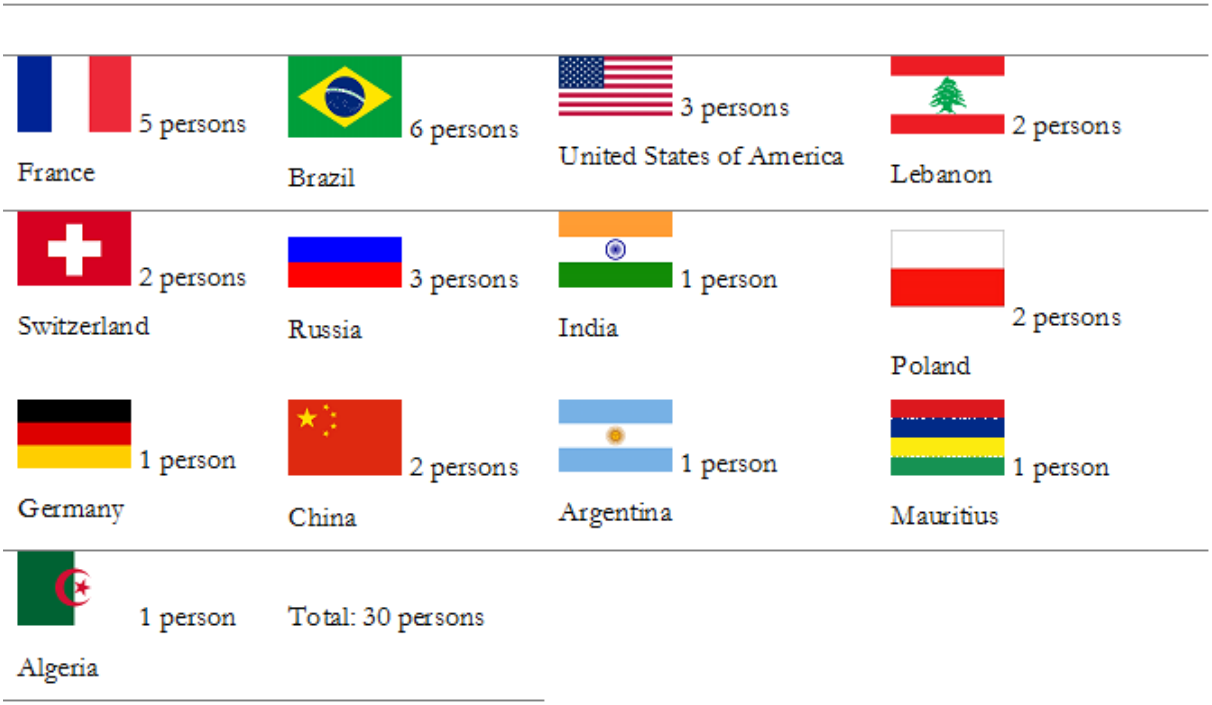
associated with it are "transportable" in a multitude of different environments. This is what Facebook calls the social graph. In other words, the social graph is defined as *"the network of connections and relationships between people on Facebook, which allows the dissemination and effective filtering of information"* (Pisani, 2007). This is where the true power of the social network resides. It occurs in its potential to find the friends of users on other sites they use. When connecting to Facebook, identification is the least important function that the person uses via Facebook Login. The most important, is the importation of his network of relationships and preferences wherever he goes. Facebook is a connector that allows its user to board with social relationships and preferences on more sites. By using "Places", the personal information of the digital user is indexed and embedded on the different sites. Facebook has two types of graphs: the graph of recommendations (the likes) and the social graph (the relationships). They are strictly related, but they are very different in nature. The social network has worked on the graph recommendations rather than on relationships. The "Like" buttons have become a form of advertising: they can appeal to recommendations from friends of users to deliver targeted advertising or tips, as is the case with the application "Places". This is one of the options offered by the recommendation graph: to think that all actions of the user represent him and depict his behaviors, desires, tastes and movements in a geographical space. This is the summary his entire marketing profile.

In this context, our paper discusses the socio-cultural aspects of users of geolocation, but it also inspects the "editorial content" of urban space through location-marking services. By exploring and listing all existing places, the "urban explorers" discover, unmask and reveal relationships and places, sometimes hidden to the eyes of all. They move entire parts of a city from Nature to Culture. *"Like / Comment / Share: stemming from social networks, these practices go beyond the Web to invest the city, carried by the secular ambition of the inhabitants to mark their space with their imprints"* (Gargov, 2010).

4. Use of "Places" and the link to the lieu and the others

Describing and accounting for specific processes and locations in which individuals of a given community are involved, must absolutely go through a careful analysis of linguistic interactions of the "common sense", and especially the ways in which people interact in their environment and build their social reality. When discussing the use of a geolocation application on mobile phones, we brought up to the ethno-technology approach to study the effects left by the technical use on the users and their environment. This approach seeks to understand how society produces its technical - mainly innovative mechanisms - and how these techniques act retroactively in transforming society. In the observation of the interactions between technologies, practices and society, ethno-technology shares interests with the sociology of uses and mediology. The first focuses on the analysis of the uses of information technology and communication as well as the new communication practices, while the second examines the symbolic effects of media on culture and behavior. In our qualitative methodological approach, we investigated the use of the application "Places" on Facebook by a group of 30 international students at the *Cité Internationale Universitaire de Paris* (CIUP). The latter is a private rights foundation grouping a set of university residences located in the 14th arrondissement of Paris.

Figure 1: Nationalities of the participants in our survey about Facebook «Places" application



RESEARCH METHODS

To accomplish this study, we distributed a questionnaire and conducted semi-structured interviews aimed at understanding the rank that the application "Places" occupies in the lives of users; how often it is used; for what purposes; its relationship with space; its importance in interpersonal communication; and its link to "digital urbanism" (Doueihi, 2011).

RESULTS

The results showed us mainly an audience aged 18 - 25 years (60% of subjects). They check their Facebook profiles on their mobile phones and use social networks to promote their identities and socialize with their peers. 80% of them had used a geolocation application before using "Places", which shows that geolocation is important in the use of a social platform. Yet, the use of "Places" is not common. Half of the respondents said they consulted it once a month or sporadically. Users are more and more interested to know where their friends are at any time, and therefore prefer to comment geolocation statuses of others to create a type of communication via the app. The identification via geolocation looks like a display material that leads to reactions and interpretations by the public concerned.

Approximately 50% of respondents consult "Places" once a month or sporadically or irregularly. Users use social networks for a large part of their daily practices, but benefit from the service of geolocation irregularly. More than 43% of respondents

commented on the statuses of their friend who identifies himself via "Places" in their same location. The use of the application supports and develops social skills in the digital space, rather than a sociability in the physical space via meetings on site. Even the on-site meeting is conditioned by the importance of the other person and the link that binds him/her to the user.

The application is further used to search for nearby places and not to discover new places. It does not seem to be a tool of discovery of the urban space.

Although data protection and intrusion related risks in private life are a problematic of location-based services, the results of our survey showed that 56.7% of users of "Places" do not fear exposure of their location-based information to their friends. This application that touches the private sphere to varying degrees, and allows for access to the location of people in real time or in the past, does not scare its users.

The search for places and locations aims at specifying marks and knowing places (50% of respondents look for nearby places). Users describe their movement by identifying and announcing what they do in these places (30% indicate where they are and 20% indicate their locations and announce what they do). These results show two profiles of users:

1. Those who barely use the application (irregularly) and do not join meetings in the metric space;
2. Those who use the application sporadically, and join meetings in the metric space.

Respondents are willing to expose their image in the identification by geolocation. They tell their friends where they. They will meet their friends there, but depending on some criteria: The priority is for close friends, then for those they have not seen in a long time, and finally those with whom they must maintain contact. Furthermore, the use of the application also helps avoid people they do not want to see. They say it is vital to maintain sociability in the metric world. They think that the Internet can invent a life, personality and relationships, but all this does not eradicate the importance of relationships in the physical space.

ANALYSIS: Archiving is growing a presence

Motion tracks the new environment

Users are increasingly interested to know where their friends are at any time, and they consequently develop a form of communication by using and commenting on geolocation statutes. Our study confirms that "Places" is used sporadically and unevenly, and its use appears to be related to self-exposure rather than places research process. This means that it is part of a digital identity construction processes.

It outlines the imprints of individual movement and occupation of territory. It does not work like a GPS that guides the user and offers him reliable geographical indications and space. It is not either a service that replaces the phone call or online chat or a written comment. Signing in publicly into a place and at any time increases the "feeling of closeness." The use of the application supports and develops social skills in the digital environment through the exchange of comments and photographs more than sociability in the physical space does through face to face gatherings. Even the latter is conditioned by the importance of the person we wish to meet and the link that binds him/her to us/the user.

Self-presentation via the "Places" is closer to the active identity (George, 2008). It is populated by the "machinic" computing of the platform on the movement and activity of the user. It combines the motion of the user in the metric space (specific place and time) with

his willingness to reach to others in the digital environment, and for various reasons. However, the presence in the digital environment differs from that in the physical space. *"On the screen, the person must act to be present. If she does not respond, it is invisible to others and does not exist"* (Georges, 2008).

In the geo- located identification, the territory and not the person is put forward. The user can hide his real picture. We are not into the exhibition of the body, but rather a form of appropriation of the urban space that has in turn been modified by geolocated services. Each time, this space is densified by the traces attached to a place, and left by users. Traceability is the basis of the fabrication of a digital identity. Let us keep in mind that in the digital we cannot not leave traces. Thus, the digital identity can be defined as the collection of these traces we leave consciously or unconsciously (Ertzscheid 2009: 35), over our navigation, our exchanges and our circulations.

Archiving traces to build a memory

By opposing the reduction of the human to the collection of his traces and the simplified and limited digital identity in platforms belonging to giant digital businesses, the digital presence (Merzeau, 2009) suggests a process of creation and development of digital practices. The presence is built and located in time. It invites the user to control, as much as possible, what he publishes. It also calls him to build his networks, and appraises the notion of digital identity.

Signing in with a geolocation induces communication practices that densify and increase the premises in question. Traces from geolocation show an "edited content" (Bachimont, 2007) of the lieu. *"We talk about the edited content to highlight the fact that indexed segments are enlisted in the editorial process to new publications."* These detachable, calculable and operated traces can be reworked to produce other digital content, of which they are also the components. The geographical location gets a "digital double" that is invented in the emerging digital environment that has become today a big part of our activities.

This environment must first see itself as a space to be lived, built and shared. Thus, we see that the application "Places" which as per result of study stated rarely used by digital users and that sometimes leads to encounters in the metric space does not substitute the actual encounters. On the contrary, it increases it and gives it more substance. Traces from the geo-locations that are grafted on a certain place contribute to the formation of a new memory. This memory is shared between a place and its digital visitors and the machines that index and calculate all digital activities. It is also a default memory (Merzeau, 2011) that develops throughout the work produced in the digital ecosystem.

This web-based "machinic" memory multiplies at each connection the layers where our data are recorded. To counter it, it is important to transform digital traces, including those from geolocation, into individual and/or collaborative memories. Looking at the appropriation of traces as memories involves archiving in an era where the mass of information seems more and more difficult to control. To archive means to collect, preserve and make available information or objects (Chabin, 2007). The purpose of archiving is to find information and to use it later profitably.

Thanks to the geotagging, the places or lieu receive a large amount of both data and quantitative and qualitative metadata that enrich their statutes and memory. But transforming digital traces into a memory points to a logic opposed to the auto-archiving imposed by the digital traceability. The challenge would be selecting the right information,

distinguishing its data, organizing and preserving their functions in their contexts and then saving them into a memorial frame. The "theory of three statuses of information" (Chabin, 2007) focuses on three characteristics of the information to be considered when archiving: the production, the trace, and the source of knowledge. Archiving constitutes today an important aspect of the new growing digital environment. Learning to archive and providing the lieu with memories could be a way to capitalize on the digital traces for future beneficial projects.

CONCLUSION

The digital destabilizes the order of things organized in one place. Its practices reinvent and reconstruct the metric geographical location. The intersection between digital social networks, location-based services and mobile phones creates significant changes on the individual and on the space. The perception of the physical space seems to disappear, giving way to more of a mental representation of the place. Geo-location services are changing the relationship between the user and the lieu. They open new possibilities to interact with the place, and produce new forms of sociability. Cultivating a digital identity presumes strengthening our self-esteem and searching for approval (Perriault, 2009), from the networks to which we belong. As stated, traces of geolocation contribute to the construction of an individual but also a collective identity: that of the group, community, network, and of the lieu. In digital world, the slightest gesture leaves traces. The answer to the default memory generated by the digital traceability would be to take possession of the imprints, archive them and transform their stories into memory projects.

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