

Appropriation of Information and Communication Technology by Kinese Internet Users: The Paradox of Uses of Digital Social Networks

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Abstract:- The appropriation of information and communication technologies has led Internet users in general and particularly those living in the city of Kinshasa to deliberately live a paradox. This forces them to breathe in a digital universe that is both satisfying and disturbing. Through the analysis of a case of usurpation of the digital identity of a victim on the social network Facebook, we demonstrate how the situation of paradox in the use of digital technologies can push users, through bricolage, to an evolving spring of use and creativity

I. INTRODUCTION

The revolution of information and communication technologies is today based on the ideal of progress, thus provoking the upheaval of societies, including the Congolese ones as a whole, and particularly that of Kinshasa. Thus, this progress is undoubtedly supported by the development of computer science and the Internet network.

Considered as the most active technologies, the Information and Communication Technology (ICT) have been of great contribution, as no other type of ancient or antediluvian technology had been able to do it, becoming not only among the types of the most profitable technologies, but also the most accessible. Moreover, they opened the prologue of the famous "digital era", considering the advances that were made around them, and that increasingly stimulated the importance of digital. It is with reference to this revolution that our reflection focuses on the appropriation of the said technologies from the point of view of their use, by Internet users of social networks in general, and those using Facebook in particular, considered as the most used social network in the Congolese capital.

Thus, so many opinions on appropriation accepted in the field of communication, find their foundation in the *Cultural Studies*¹. Indeed, many authors have oriented their

work towards the analysis of the appropriation process (Hatchuel, 1996; Ciborra, 2000; Orlikowski, 2000; Lorino, 2002; De Vaujany, 2005, J. Zetlaoui-Leger, 2012, Lino Pungi 2013). From then on, many theories have been interested in appropriation (from the sociology of ICT use, which analyzes by domain (work, domestic life, citizenship, consumption, leisure, etc.) to the management of appropriation of management tools (which analyzes through the tools used). Finally, many concepts have been grafted onto the appropriation concept (adoption, acceptance, assimilation, integration, diffusion, infusion, structuring, in a more collective perspective)². Appropriation seems to be the sum of all these concepts, at the risk of appearing as their common denominator.

The "paradox", on the other hand, is understood as an opposition that contains or seems to contain a logical contradiction, or a reasoning that, although without apparent fault, ends in an absurdity, or a situation that contradicts the common intuition³. It appears as the fact of affirming or denying a thing and its opposite.

Within the framework of the appropriation of the ICT and their uses, the paradoxality appears at the same time as the result of a contradictory process satisfying and not satisfying, of intelligence and moral idiocy; of responsibility and irresponsibility of disposition and use. Using social networks, the special framework of our study, the appropriation of this digital tool could lead to a use that is at the same time adequate and threatening. In this optic, Milad Doueïhi affirms that *"digital technologies are at the same time innocence and limitless potential, they also become the place of cunning, of a technique- induced miscegenation, in short a technical wound"*⁴.

From the above, leaving aside the sphere of absurdity, paradoxes can be used as positive opportunities to push the individual who is subjected to them to choose a way out of the problem as it had been formulated. This illustrates the principle of paradoxical interventions in which the paradox

¹ Cultural studies is a research current of Anglophone origin at the crossroads of sociology, cultural anthropology, philosophy, ethnology, literature, mediology, arts, etc. With a transdisciplinary aim, they present themselves as an "anti-discipline" with a strong critical dimension, particularly with regard to the relations between cultures and power. Transgressing the academic culture, cultural studies propose a "transversal" approach to popular, minority, protest cultures, etc. (on https://fr.wikipedia.org/wiki/tudes_culturelles).

² J.F., TRINQUECOSTE, "regards croisés sur le processus d'appropriation des technologies de l'information et de la communication", in *revue de Management et Avenir, Management Erospective* Ed, Volume 5, N°45, 2011, pp. 175-178.

³ www.techno-Science.net, *paradox*, accessed July 22, 2021 at 1:26 PM.

⁴ M. DOUEHI, *Qu'est-ce que le numérique*, PUF, Paris, 2013, p.16.

forces a reframing of the perception of the situation. The paradoxical intervention is the specificity of a therapist: the latter provokes a cognitive tension which pushes the individual to make a qualitative leap to reframe. Such a process constitutes a spring of creativity⁵.

Given this dual reality of paradox, we resorted to the analysis of digital identity theft on the social network Facebook, asking how paradox can become an opportunity for creativity in the evolution of technological use?

The first point of our reflection outlines the generalities on appropriation, use and paradox. The second point analyzes the paradoxical appropriation of the social network Facebook by Kinshasa's Internet users, using a concrete case of digital identity usurpation. Finally, the third point presents the virtue of the paradox that leads to creativity and technological evolution.

II. APPROPRIATION, USE AND PARADOX

A. On ownership

The concept of "*appropriation*" comes from the Latin "*appropriare*", which means "*the action of making one's own, of appropriating*". It takes into account two notions: on the one hand, the idea of appropriation of a thing for a defined use, and on the other hand, the action aiming at making something own (exclusive, personal, individual). That is to say that the individual fully enjoys the object, and holds the exclusive right of disposal and use.

As for Josiane Jouet, she finds that appropriation is another act that runs through the problems of domestic and professional uses and that we find analyzed in its subjective and collective dimension. He adds, "*appropriation is a process: it is the act of constituting a self*"⁶. In the construction of the use, it is also based on processes which testify of a stake in the personal identity and the social identity of the individual. The appropriation proceeds then from a double affirmation: of the singularity and of the belonging which connects to the social body⁷.

From the above, we can understand from these definitions that appropriation is an individual process whose expression is manifested at the social level. In addition, it is important to emphasize with Nelly Massard⁸ that appropriation covers three processes, each of which gives rise to a result that she has named "state" of appropriation:

- **The cognitive process:** appropriation is the process that allows an individual to rebalance his cognitive structure

following disturbances in his environment. His representations will guide his action with the tool and this action will update his representations. It is a recursive process. The result of this process is a "stability" recovered following this phase of disturbance in the individual's cognitive structure. In the case of the appropriation of a tool, it is manifested by a recurrence in terms of use and is characterized by a minimal cognitive and technical mastery of the technical device in order to use it. In the case of the appropriation of knowledge, we speak of an internalization of knowledge.

- **The process of constructing meaning:** here, appropriation is the process by which an individual invests meanings and values in the use of the tool. It is the process by which an individual will give meaning to a tool. The designer of an object has prescribed uses and the user, through a process of appropriation, will construct his own use of it. The result of the process is characterized by a difference in usage between those imagined by the designers and those actually used by the users, and by different usages between users in the same context.
- **The process of forming practices:** appropriation is the process by which the organization's routines will be built on the basis of the properties of the technology. The mechanism (at the organizational level) is the following: the organization has social structures. The developer of the technology incorporates the social structures of the organization into the technology. The technology has social structures (structural characteristics and spirit). Its introduction will disrupt the stability of the organization. From several cycles of structuring (action of the users with the technology), there is production of social structures of the organization with a technology in use. The organization thus finds a stability.

Nelly Massard thus provides an integral definition that allows for the cognitive, relational and praxeological factors of appropriation to be taken into account. With Serge Proulx, apart from the fact of first having access to the technical device (a prerequisite), four conditions are required for the appropriation of a technique to take place:

- Technical and cognitive mastery of the artifact;
- Significant integration of the technical object in the daily practice of the user;
- The repeated use of this technology opens up creative possibilities (actions that generate novelty in social practice);
- Finally, at a more properly collective level, social appropriation implies that users are adequately represented in the establishment of public policies and at the same time taken into account in the innovation processes (industrial production and commercial distribution)⁹.

Indeed, the identification of the specific characteristics of a dominant technology allows to approach its consequences on the culture and the functioning of the society. Besides, the appropriation is the power to use, to personalize the use of the object to purposes that seem the

⁵ Y. GIORDANO, *Le paradoxe : Penser et gérer autrement les organisations*, Ed. Perret, V. & Josserand and Ellipses, Paris, 2003, p.14.

⁶ J., JOUËT, " Retour critique sur la sociologie des usages ", in *Réseaux*, n°100, vol.2, Univ-Paris- Est, La découverte, February 2000, pp. 487-521.

⁷ *Idem*, pp.487-521.

⁸ N., MASSARD, *Revisiting the notion of appropriation: For an application to the case of ERP*, 14th Colloquium of the Association Informatique et de management, Marrakech, Morocco, June 10-12, 2009.

⁹ S., PROULX, *op.cit.* pp. 7-20.

most advantageous, independently of the primordial destiny of the object¹⁰. The user appropriates the technical object by personalizing to other purposes that the manufacturer destines to his subject. In this order of ideas, Serge Proulx underlines that "it is the way by which an individual acquires, masters, transforms or translates the codes, the protocols, the know-how necessary to deal correctly with the technical tool"¹¹.

In the context of information and communication technologies, Since 1975, informational technologies have been mobilized in the in-depth reorganization of industrial societies. The technical key which allowed the takeoff of the informational technologies resides in the digitalization of the signal which made possible the technological convergence between the big domains of the computing, the telecommunications and the audio-visual. Digital technologies penetrate all economic sectors (primary, secondary, tertiary). Digital technologies participate in the transformation of the modes of production, consumption, communication, circulation of knowledge and acquisition of knowledge. A recent significant event was the advent of the Internet phenomenon, in particular the general public diffusion of this innovation with the implementation of the World Wide Web and the commercialization of the network of networks in 1995. At the dawn of the 21st century, the trend is towards the universal adoption of the IP (*Internet Protocol*) standard in technical telecommunication protocols, which is causing a generalization of the presence of the Internet on a global scale¹².

In the same perspective, Silverstone in his work analyzes the domestication of ICT in everyday life in four phases: "appropriation, objectification, incorporation and conversion.

- *The appropriation*: the technique leaves the world of the goods, the individual or the household makes it his own. He must acquire a certain amount of knowledge and know-how to master the object;
- *Objectification*: the new technique finds with objectification a material location in the familiar environment which allows it to be used. Often a special differentiation appears between what is individual or shared, adult or adolescent, male or female;
- *Incorporation*: the technical object is used and incorporated into the routines of daily life. This process is accompanied by a constant work of differentiation from the other technical objects and of particularization;
- *The conversion*: corresponds to the process during which the ICT in use "establishes new relations between the

home and the outside world". The user shows himself to others with the technology, he tells them about it"¹³.

In a logic of dialogical interaction between the user and the technical device, Serge Proulx thinks that the interventions that users can make directly on the devices constituted in the perspective of making a use of it more in accordance with what they wish. Thus, four cases are highlighted:

- *Displacement*: the user modifies the spectrum of uses without introducing major modifications in the technical device;
- *Adaptation*: the user modifies the device to fit his use without changing the original function of the object;
- *Extension*: elements are added to the device to enrich the list of functions.
- *Hijacking*: the user uses the device for a purpose that has nothing to do with its intended use¹⁴.

B. On the use

The Robert dictionary of sociology gives two main meanings to the notion of usage. Firstly, this notion refers to the "social practice that seniority or frequency makes normal in a given culture", a meaning close to the term of *mores*, the practices being here "lived as natural". Secondly, the authors of the sociology dictionary specify that use refers to "the use of an object, natural or symbolic, for particular purposes". We are thinking here of the social uses of a good, an instrument, an object in order to highlight "the complex cultural meanings of these conducts of everyday life"¹⁵. It is certainly this second meaning that is used in the context of ICT usage studies.

One of the first uses of the notion of use in media sociology comes from the American functionalist current of "uses and gratifications", close to the Columbia School. In the 1960s and 1970s, researchers wanted to distance themselves from the dominant unitary thinking that described media action too exclusively in terms of *effects* ("what the media do to people"). They seek to abandon this *mediacentrism*. They propose a shift of the research program towards the uses ("what people do with the media"). They thus postulate that audience members "actively" use the media to derive specific satisfactions that meet psychological or psychosociological needs. For example, *environmental radio listening* is described as a "compensatory use" that fills the psychological gap of loneliness. This fiercely functionalist perspective was rightly accused by researchers from other currents of being reduced to a psychology of uses¹⁶.

¹⁰ KAGAMA, "L'appropriation des TIC et de développement," in www.er.URGAN.Ca/NOBE/D3.61/DEVELOP, (Accessed March 17, 2023 at 11:55 AM).

¹¹ S., PROULX, quoted by Florence MILLERAND et alii, *La culture technique dans l'appropriation cognitive des TIC. Une étude des usages du courrier électronique*, Paris, Acte du colloque international, ICUST, 2001, p.408.

¹² PROULX, *op.cit.*, pp. 7-20.

¹³ P., FLICHY ; " Technique, usage et représentations ", in *Réseaux*, n° 148-149, February 2008, Univ-Paris- Est, La découverte, pp. 147-174.

¹⁴ PROULX, *op.cit.*, pp. 7-20.

¹⁵ *Id.*

¹⁶ B. PHILIPPE and S. PROULX, *L'explosion de la communication. Introduction aux théories et aux pratiques de la communication*, La Découverte, Paris, 2006, available at www.sergeproulx.info.

In 1980, a French historian Michel de Certeau published, with members of his research team, his famous book entitled *"The Invention of the Everyday"*, in which he recognizes from the outset the capacity of individuals for autonomy and freedom. His approach consists in grasping the mechanisms by which individuals create themselves autonomously as subjects in certain key domains of cultural creativity of ordinary people, such as consumption, housing or reading¹⁷.

With his detailed descriptions of the "arts of doing" and the "ways of doing" of users, Michel de Certeau seeks to highlight the operations of the "practitioners" by which they socially mark a gap in a given provided by technocracies and cultural industries through their practices. Ordinary people are capable of creativity, he asserts: they are able to invent their own way of navigating the constructed universes of the cultural industries (through tricks, bricolages, poaching or detour). By setting in motion a subtle game of *tactics* (assuring them the control by time) inscribing itself in false against the *strategies* of the big technocracies (having the control on the space), the practitioners show a moral and political resistance which opposes the offer of cultural products by the industries of the consumption.

From all that has been said above, Proulx draws a satisfactory reflection of social uses that goes beyond the individual framework, which is the result of Pronovost's work. Thus, *"social uses are defined as the patterns of use of individuals or groups of individuals (strata, categories, classes) that prove to be relatively stabilized over a more or less long historical period, on the scale of larger social groups (groups, communities, societies, civilizations)"*¹⁸.

C. The paradox

The concept "paradoxical" comes from *"Para"*: next to, hence "contrary", and *doxa*: "opinion", forming the Greek adjective paradoxos, substantivized into paradoxon and then taken up by the Latins. Its plural paradoxa gave Cicero the title of a treatise on the surprising propositions of the Stoic doctrine. Borrowed from Latin, it designates, by extension, *"what goes against the commonly accepted opinion"*. Above all of *"logical nature"*, the paradox is defined from its characteristic property: to rest on true premises and to lead, by a valid reasoning, to contradictory conclusions¹⁹.

Watzlawick distinguishes between antinomies, semantic paradoxes and pragmatic paradoxes. Antinomies, or logical paradoxes, appear in formal logical- mathematical systems and provide the theoretical framework for the analysis of other paradoxes. Linguistic paradoxes (Peano, 1906), or semantic paradoxes (Chwistek, 1937) are

paradoxical definitions, still called "semantic antinomies", "epistemological paradoxes" (Ramsay, 1926) or "paradoxes concerning propositions". The paradoxes of infinity, such as Zeno's, and the visual paradoxes²⁰ can be related to them.

Fortuitously, we can think that the paradox often appears as an amiable game of the mind. It appears in contradictory statements, where a cleverly concealed riddle has no other purpose than to surprise the recipient. This relegates it to the rank of a meaningless distraction.

Indeed, in philosophical thought, the paradox is an object of study in itself, which questions our modes of reasoning and puts our theories to the test, not only in formal systems, but in many fields of our knowledge. From this point of view, its study belongs to logic and to the philosophy of knowledge. Insofar as we consider the contents of conscious mental states as propositions, the paradox takes place between cognition and truth as well as in what links truth and propositions. Therefore, we attribute to it another, less known role: the persistence of the logical problem in which it participates leads, according to certain hypotheses, to personality disorders. Fortunately, if used properly in an appropriate context, it would become an effective factor in recovery²¹.

In the field of communication, Gregory Bateson, through his work in epistemology of communication, developed the pragmatic perspective of paradox. Later, Paul Watzlawick and his colleagues from Palo Alto, will spread his writings, insisting on the inhibiting role of paradoxes in human communication. If in linguistic pragmatics, the paradox is rather studied for itself, in communication pragmatics, the paradox is interesting for its effects on the individuals in interaction. In order for a possible communicational paradox to appear, it is necessary to interpret interaction situations from the following premises: the unit of analysis is the meaningful interaction for the individuals who participate in it. All communication has two levels: the first transmits information about facts, opinions (it is a *"clue"*). The second, simultaneously, expresses something about the relationship established between the interlocutors (it is an *"order"*). Usually, if the double dimension of the communication does not appear, it is because the two levels are *"congruent"*. But if a contradiction occurs between message and meta-message, the superposition of the two levels appears. For example, declaring *"I am delighted"* with a tense smile or *"I am listening to you"* while looking out of the window will create discomfort in the interlocutor: there is a superimposition of two antinomic messages with the obligation to take both into account at the same time²². A paradoxical injunction is presented as an order which contains in itself a contradiction in such a way that the one to whom it is intended is unable to answer it in a satisfactory way. Communication is paradoxical when it contains two messages that qualify each other in a conflicting way.

¹⁷ S. PROULX, *op.cit.*, pp.7-20.

¹⁸ S. PROULX, *op.cit.*, pp.7-20.

¹⁹ J.C, KELLER, *Le paradoxe dans la communication : implications épistémologiques et usages thérapeutiques*, Thèse de doctorat, Université Paul Verlaine de Metz, École Doctorale Perspectives Interculturelles : Écrits, Médias, Espaces, Sociétés, 2018, p.42.

²⁰ *Id.*

²¹ J.C, KELLER, *op.cit.* p. 42 to 45.

²² *Idem*, p.9.

The Palo Alto researchers have highlighted the fact that we can be subjected to paradoxical injunctions, which force some people to take time off from their tasks.

The double bind, a very pernicious form of paradoxical injunction, has been studied extensively by Bateson, particularly in the psychiatric context. The elements that make up a double bind can be described as follows:

- Two or more people are involved in an intense relationship which, for at least one of them, has great psychological value. The situations characteristic of intense relationships are multiple: couple relationships, parent-child relationships, material and psychological dependence, loyalty to a cause, a norm, an ideology, professional commitment, etc.;
- In such an emotionally charged context, a message is delivered and structured in such a way that :
 - ✓ it asserts something;
 - ✓ he affirms something about his own affirmation;
 - ✓ these two statements are mutually exclusive.
- ✓ Finally, the receiver of the message is prevented from leaving the framework set by this message, either by meta-communication (which would constitute unacceptable criticism) or by withdrawal (if his position of power forbids criticism)²³.

That the message appears to be meaningless is not the most important thing. It has, on the other hand, a much more formidable pragmatic reality: one cannot not react to it, but one cannot react to it in an adequate (non-paradoxical) way either, since the message is itself paradoxical. Consequently, an individual caught in a double constraint is in a very uncomfortable situation and can:

- feel "punished" (or at least guilty) if he detects the double constraint;
- be considered "crazy" if he insinuates that there is a discrepancy between what he sees and what he "should" see²⁴.
- In the long run, only three outcomes are possible, which depend largely on the power system in place:
- resentment and withdrawal if the recipient(s) are in a position of weakness, with the establishment of a "*never-ending game*" in which the protagonists find themselves trapped in a game that they themselves have created and which they help to reproduce;
- conflict, if the balance of power is more equal;
- end of the relation (the receiver "unmasks" the paradox and puts an end to the relation). It is clear that many situations make this last solution impossible and therefore put the receiver in a literally "crazy" situation because he is in a "low" position that forbids him to meta-communicate²⁵.

We can see that a communicative representation of paradoxes can be interesting to mobilize for contexts broader than the couple or the family. This is precisely what

many authors in organization who are interested in situations of emergency, conflict or change have done. In these situations, context and relationship have an important psychological value: emergency decisions are made in a context of strong uncertainty about their validity; conflicts are costly for many stakeholders; changes disrupt the established and generate anxiety.

III. THE PARADOX OF THE APPROPRIATION OF DIGITAL SOCIAL NETWORKS BY KINESE INTERNET USERS

A. Context of use

Referring to the work of A.S. COLLARD and J. JAQUES²⁶ on the appropriation of digital social networks, but also in light of all the attempted definitions provided above, the appropriation of social networks by Kinshasa's users involves four elements: usage practices, digital literacy, social representation, and DIY.

➤ Usage practices

Usage practices refer to the implementation of skills, experience and resources in the use of digital social networks by users. Chaudiron and Ihadjadene define these practices as "a set of devices, formal or informal sources, tools, and cognitive skills that are effectively mobilized by an individual or a group of individuals in the various situations of using digital social networks²⁷". These are ways of doing things that are individually, socially and culturally established. The analysis of informational practices implies to be interested in the contextual factors of the situations in which these practices see the light of day, broken down into specific actions, and drawing their meaning with regard to more global projects.

While practice defines the actions carried out by the user, the term usage is reserved to designate the interactions between users and the devices. From the above, by observing the uses of digital social networks by Kinshasa's users in order to inform and be informed, to entertain, to communicate with their relatives, to assert their identity and to build their e-reputation, etc., it is worth noting that they end up with the possibility of relationships to be built between the said users and the technical object, but also with the possibilities of uses offered by the affordances perceived by them in order to appropriate the social networks. In other words, the appropriation of social networks by Kinshasa's users is a function of the affective character, the competence and the capacity to use the digital device, which offers the inherent facilities to inform; to entertain; to build one's identity, one's reputation, etc., taking into account Kinshasa's social and cultural practices.

²⁶ A.S. COLLARD and J. JAQUES, " Appropriation des réseaux sociaux numériques et compétences médiatique ", in *CRIDS (Centre de recherche en information, Droit et Société)*, speech on the LUDOVIA conférence, N°12, Ax-les-Thermes (France) from 24 to 26 August 2015, pp. 1-11

²⁷ CHAUDIRON, M. IHADJADENE, De la recherche de l'information aux pratiques informationnelles ", in *Études de Communication*, numéro 35, 2010, pp. 13-30

²³ GIORDANO, *op.cit*, p.10.

²⁴ *Idem*, p.11.

²⁵ *Ibid*.

Thus, contemporary social practices of publishing information, entertainment and identity construction place the sharing of personal information at the heart of the uses of digital social networks, raising questions about the way in which this data is published and the way in which it brings into play the identities of users²⁸. These online publication sites support self-expression but also different forms of sociability through which Kinshasa's Internet users organize or accommodate the relationships they develop there. The observation of these practices among Kinshasa's users reveals forms of appropriation of digital social networks, highlighting an empowerment, i.e. the way in which they define their own uses.

This empowerment is supported by the digital skills they can mobilize, skills that are manifested in the ability to use digital social networks and manage relationships, to organize the network, to evaluate the opportunity to publish personal information, to entertain, etc. The autonomy of users is a process of individual appropriation, but it is also dependent on their social and cultural capital²⁹, their identities, their belonging, their perceptions, and the dispositions that structure their relationship to the world³⁰. In particular, the appropriation of digital social networks by Kinshasa users projects social representations coming from the social discourse conveyed by educational institutions, colleagues, friends, family members, the media, public meetings, etc.

➤ Digital Literacy

Many authors have focused on the skills needed to deal with the challenges of digital social networks and have proposed different models of digital literacy skills. These proposals are mainly focused on skills related to mastering technical tools, adapting to their use and creating functionalities related to their cultures and needs. From the above, the appropriation of digital social networks by Kinshasa's users is a function of holding basic knowledge of writing, reading, navigation and organization³¹. The city and province of Kinshasa is the largest agglomeration in the DRC to have a higher number of digital alphabets, which justifies the high number of users of social networks.

Indeed, the appropriation of digital social networks by Kinshasa's users can only be read through the evaluation of the results of uses that are both good and bad at the same

time, which creates the paradox of use. In this respect, Bulea and Bronckart maintain that competence does not exist in itself; it can only be understood in a situation, when the individual is confronted with concrete situations in which he or she takes action to achieve a goal³². It is motivated by a goal, an expected result, which makes evaluation possible. The social dimension of competences is then translated by the fact that their evaluation is deeply linked to the judgment of others³³. The competent person is always competent for one or more "others" who recognize him as such. A competent person is therefore someone who will mobilize resources and take action to achieve the objective set in a given situation and in a socially accepted way. In this sense, competence is at the center of relationships of legitimacy and recognition.

➤ Social representations

Individuals are social beings, that is, they bring into their representations the ideas, values and models they hold from their groups or from the ideologies conveyed in society. Taking the form of reference systems, categories or theories, social representations convey practices, images, opinions, attitudes, relating to an object such as an activity, an event, a person, an idea³⁴, etc.

As a result, the appropriation of digital social networks by Kinshasa's users reflects the values of sharing and sociability, but also a way of looking at technically instrumented relationships, as Jouet points out, "a form of technical rationality"³⁵. It also includes norms such as the respect of privacy, the respect of the integrity of the person³⁶, etc. Through the sharing of values, norms, attitudes, the social representations define the individual and collective identity. Each "group expresses its contours and its identity by the meanings with which it invests its representation"³⁷.

Thus, the practice of using digital social networks, through the Kinshasa social representations that users put on, participates in defining the identity of different Internet users, hence the bloggers, influencers, cybercriminals, etc.

³² E., BULEA ; J.-P., BRONCKART " La saisie des compétences dans l'interprétation de l'activité de travail ", in *Bulletin Vals/Asla*, number 84, 2006, pp.143-171.

³³ The competent person is always competent for one or more "others" who recognize him/her as such. A competent person is therefore someone who will mobilize resources and take action to achieve a given objective in a given situation and in a socially accepted way. In this sense, competence is at the center of relationships of legitimacy and recognition

³⁴ D., JODELET " Représentation sociale : phénomène, concept et théorie ", from his book " Psychologie sociale " *S.Moscovici*, PUF, Paris, 1984, pp.363-384

³⁵ J., JOUËT, *op.cit*, pp.487-521.

³⁶ S., PROULX, " Trajectoires d'usages des technologies de communication : les formes d'appropriation d'une culture numérique comme enjeu d'une société du savoir ", in *Annales des télécommunications*, numéro 57, 2002 ; pp.180-189.

³⁷ D., JODELET, *op.cit*, pp.363-384.

²⁸ Y. ANDONOVA ; " Parcours réflexif de la problématique des usages : une tentative de synthèse ", in *Communication et organisation*, numéro 25, 2004, on <http://doi.otg/10.4000/com.org.2960>, quoted by A.S COLLARD and J.JACQUES, *op.cit*, consulted on February 25, 2023 at 12h03'.

²⁹ H. BOURDELOIE, L'appropriation des dispositifs d'écriture numérique translittératie et capitaux culturel et social, in *Etudes de communication*, issue 38, 2012, pp.23-36.

³⁰ J. DENOÛËL and F. GRANJON, *Communiquer à l'ère numérique. Regards croisés sur la sociologie des usages*, Presses des mines, Paris, 2011, quoted by A.S. Collard and J.Jacques, *op.cit*. accessed on February 25, 2023 at 12h42'.

³¹ Id.

The social representations of Kinshasa finally orient the behaviors of the users of the digital social networks, they define specific goals and procedures for what they carry out.

➤ *Do-it-yourself*

The socio-technical relationship that binds Kinshasa's users of digital social networks is built more by tactics than by strategies, to use Michel de Certeau's terminology. Instead of strategically managing actions directed towards a defined goal, of activating a rationality, the Kinshasa Internet user seizes the possibilities, plays with what the device offers to turn them into opportunities. For the cybercriminal Internet user, he will therefore rather take advantage, at opportune moments, of the sociotechnical affordances perceived in his environment and combine them according to his needs, his expectations or his circumstantial motivations.

These combinations support forms of bricolage where the elements of the technical and social environment are resources that will be reinterpreted by the user to be adjusted to his activities, by successive approximations³⁸. The bricolage of a Kinshasa Internet user is not an activity in itself, but is grafted onto other activities such as, in this case, the commission of a crime, namely identity theft.

The appropriation of digital social networks by Kinshasa's Internet users takes shape through the development of these forms of bricolage. These DIY uses involve, while participating in their development, the various social representations that the user possesses and imply a process of progressive internalization of skills³⁹. The appropriation results therefore from creative, "disordered and active" learning⁴⁰.

The forms of bricolage observed are supported at the cognitive level by the combination of the different representations present. Chaudiron and Ihadjadene evoke, at the heart of informational practices, the tensions "between mobilizable knowledge, immediate competences, habitus, arts of doing, desires to act"⁴¹, etc.

Among these elements in tension among Kinshasa's Internet users are representations that give rise to a different perception of the situation and their environment, that imply different intentions and that guide action in a different way. To overcome these tensions, Kinshasa's Internet users must make adjustments, combine certain resources and develop new representations that integrate the mobilized representations in a new way. This process can also lead social representations, and the norms and values they

convey, to transform themselves in a dynamic way, leading to new uses⁴².

B. Analysis of the paradox

Our analysis sets in motion the case of identity theft on the social network Facebook, focusing on the content of the text and image of a stolen account of a young Congolese state employee, in order to identify the emerging paradox of use.

Therefore, three sequences of images are highlighted: the first one presents the identity theft of the Internet user and the reactions that follow, coming from different friends, victims or observers of the scene. The second sequence illustrates the replica of the owner of the usurped account and the efforts of the cybersecurity DIY that she provides to secure it. The third sequence finally shows the pleasure of using the social network Facebook of the Internet user; in spite of the damage suffered.

➤ *Pictorial presentation of identity theft*

It is about the identity theft of Mrs. Esther ASINDI, Congolese subject of the public sector work. A cybercriminal hacked her account, pretending to be her, presenting himself in a situation of extreme urgency and contracting loans with the option of repayment with interest within a short period of time, from his friends on the social network Facebook. He asks the poor victims to transfer the money to a phone number used for the circumstance, while morally castigating them that his usual numbers did not pass anymore.

³⁸ M. GENSOLLEN, " Vers une société du bricolage coopératif ? ", in PROULX S., GARCIA J. L., HEATON L., " La contribution en ligne. Pratiques participatives à l'ère du capitalisme informel ", in *Presses de l'Université du Québec*, 2014, pp.33-48.

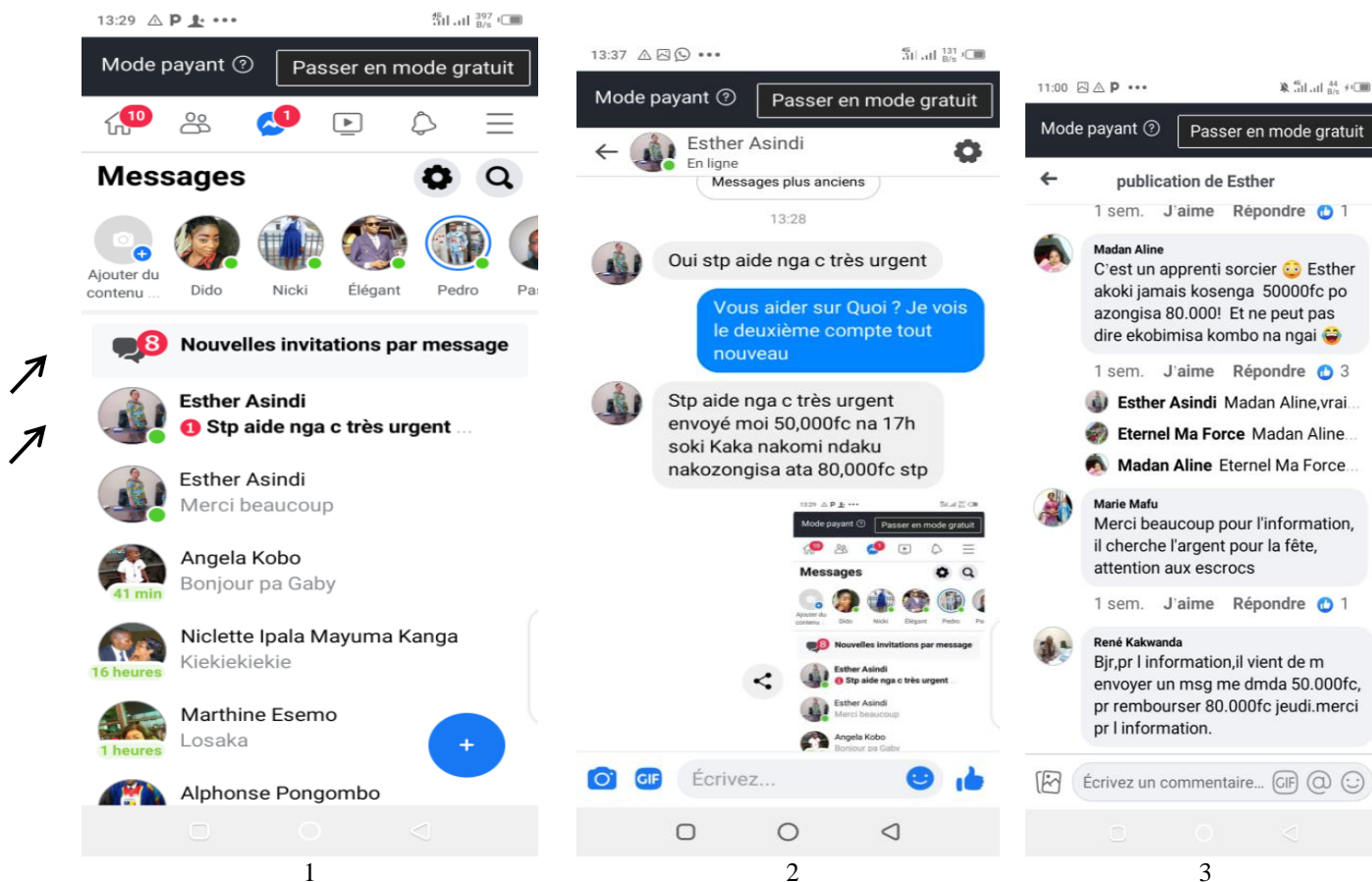
³⁹ F. JAURREGUIBERRY, Proulx S. *Usages et enjeux des technologies de communication*, Erès éditions, Paris, 2011.

⁴⁰ *Id.*

⁴¹ A.S. COLLARD and J. JAQUES, *op.cit.*, pp.1-11.

⁴² S. PROULX, *op.cit.*, pp.180-189

SEQUENCE A



Source: our captures, with certified authorization of the victim of the usurped account

Above we have three different images:

- The first image shows us two accounts of Mrs. Esther ESINDI. The account on top is a usurped identity and the account on the bottom represents the real account of the person.
- The second image illustrates the account of the usurped identity that makes an urgent request for funds to the tune of 50,000FC in the name and without the knowledge of Mrs. Esther ASINDI (first victim), a request directed to

Mrs. ALINE (second victim), with the option of repayment with interest of 70% loan, that is to say 30,000FC, which will make a total of 80,000FC.

- The third image illustrates the detection of Mrs ALINE of the usurping account, which immediately reports to Mrs Esther whose account is usurped, the damage she is suffering.

SEQUENCE B



1



2

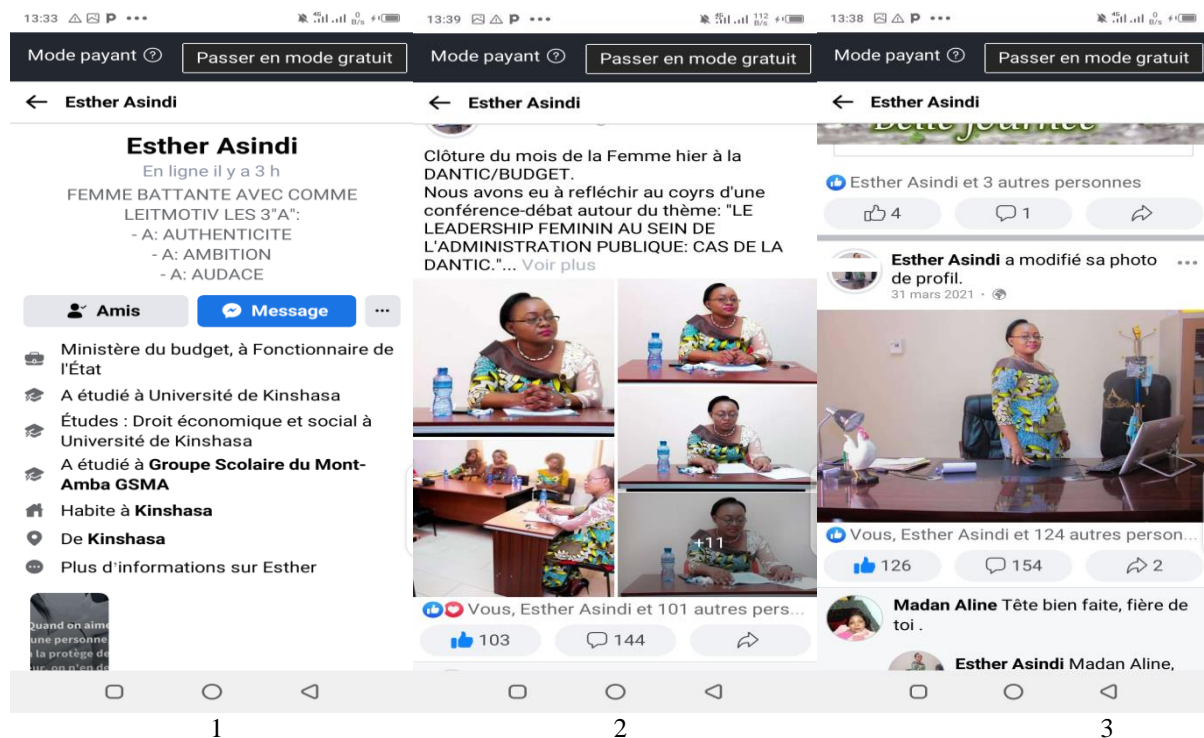
Source: our captures, with certified authorization of the victims

Above we have two different images:

- The first image shows the indignant reaction of Mrs. Esther ASINDI to her identity theft, issuing a warning to all her friends of the risk of money swindle that they risk by the usurper.

- The second image shows us, by an individual tinkering, the modification of the protection parameters against this usurpation by reducing the number of seen of the friends to his publications. The victim directs his publications to a small group.

SEQUENCE C



Source : nos captures, avec autorisation certifiée des victimes

Above we have three images:

- The first image in its upper part shows the updating and publication of the victim's private data after the theft of his digital identity.
- The second image illustrates the continuation of the publications of the daily activities of the victim, while experiencing the satisfaction of using the digital social network Facebook.
- The third image shows the victim's publication keeping a smile and finding pleasure in using Facebook.

C. Analysis of textual and pictorial contents

➤ Series A: commission and disclosure of the crime

In the first series of images presented above, the first image shows us the presence of two accounts of the same person, which allows us to detect identity theft by creating an account identical to the victim's, but parallel in terms of the objectives pursued.

In the second image, we see the identity theft made with a pecuniary purpose, precisely that of swindling money from the friends of the victim of identity theft. Moreover, we notice two kinds of victims, the one whose account is stolen and the one whose account content is oriented.

In the third image, we note the indignation of the two victims on the one hand, and the unworthy appropriation of Facebook by the usurper on the other. In addition to this, there is the indignation of other friends observing the fact, such as Marie MAFU, who is worried about the usurpation and at the same time, she is sounding the alarm against the swindlers.

As for the text, we note that we are in front of three categories of interlocutors: the impersonator, the owner of the impersonated account (first victim) and her friends (second victims). In the first sequence of the communication, the impersonator enters in relation with the friends of the first victim considered here as a third person not yet acted in the Transmitter-Receiver relation. In the second sequence of communication, the evolution of the communicative act puts the victim in relation with friends, but also with the cyber public by the informative and warning game. The common denominator triggering this process is the criminal act of the usurper. The communication here goes from the relation to the evolutionary systemic process, which puts in movement the interlocutors that participate in the functioning of the processual and global digital system.

➤ Series B: the informative and protective gesture

Firstly, the second series of images has an informative and protective character. The first image illustrates the reaction of the victim, taking care to inform those who do not know yet, that his identity is impersonated, but also warning them that there are impersonators on the social network Facebook.

Second, it is protective. The second image in this B-series reveals that the victim of identity theft reacts by protecting herself. First, she becomes aware of the permanent danger of identity theft, then she resorts to the technique of reducing the spectrum of views of her publications and updating her user settings, to protect her account and her digital privacy.

As for the expressive style, by comparing the expressive style of the first image of sequence B and that of the second image of sequence 1, we find that there are two different styles; that of the victim who writes in good French without spelling mistakes, making us think of an intellectual all well done, and that written by the usurper by mixing two languages, French and Lingala, full of spelling mistakes. This leads one to believe that the victim was facing a poorly educated and not very intellectual thug, hence his immediate detection, without causing enormous damage in a largely continuous time.

➤ *Series C: Recidivist Emotional Pleasure of Use*

In the first image, we reveal the victim's continuous and recurrent pleasure in exposing her private life despite the impersonation of her identity. This can be seen in the updating of her profile, her place of work, her ambitions, her qualities, her date of birth and her address in the section "more information about Esther".

The second and third images advocate the victim's affective function towards the social network Facebook. She sells her daily activities and spells out her smile again in these publications. It is a manifestation of trust towards the digital social network, in spite of the mechanical mistakes she made.

D. The paradox of use

Referring to the three categories of images presented, we reveal a random contradiction between dissatisfaction and satisfaction in the appropriation of the digital social network Facebook both in the facial expression of the victim and in the texts, which creates the paradox of use.

Indeed, there is dissatisfaction with the use of Facebook because of identity theft. This can be seen in the victims' messages if we refer to image 3 of the first sequence and image 1 of the second sequence.

There is satisfaction when we analyze the affection of the victims attached to the digital social network, after the damage caused by the usurper, by exposing himself more. The images of the sequence C are an illustration.

From the above, the paradox exists in the sense that being victims and anxious about the acts of usurpation, the usurper find satisfaction in the offers of the social network and expose themselves more, disclosing and updating their private life at the mercy of these same usurpers. At the same time that their private data is usurped, they expose it further. In the use of the social network, they are presented as "*opportunities and victims*". Opportunities because they offer their data and lives to the mercy of hackers, and victims because they are in relentless prey of these same hackers. In the meantime, they keep exposing and selling themselves.

IV. THE VIRTUES OF THE PARADOX OF USE

In the communication literature, paradoxes can also be used as positive opportunities to push the individual who is subjected to them to choose a way out of the problem as it had been formulated. This illustrates the principle of paradoxical interventions in which the paradox forces a reframing of the perception of the situation. The paradoxical intervention is the specificity of a therapist: the latter provokes a cognitive tension that pushes the individual to make a qualitative leap to reframe. Such a process constitutes a spring of creativity⁴³. In the analysis of the second sequence of images above, we revealed the victim's reaction immediately after becoming aware of his identity theft. This led him to reframe his account, changing not only its content, but also the activation of security applications.

In this same sequence, the creative spring is tested by the victim's tinkering to restrict in his circle of friends, according to his environment, culture and preferences, those who can have access to these data and publications, a form of mania to protect himself from the shelter of the pirates.

Thus, the paradox, by putting the Internet user in a dilemma, leads him to a phase of reflection of the creative techniques of uses, not only for its circumvention, but also for its obviousness and the reduction of its frequency; it is what justifies the creativity of technological use.

V. CONCLUSION

The current boom in information and communication technologies is a major turning point in human civilization. The most obvious illustration is undoubtedly the rise of digital technologies, especially with the appearance of the Internet. In Africa, precisely in DRC, and more particularly in Kinshasa, the passage from analogy to digital technology has profoundly changed the physiognomy of the traditional society which has very quickly been transformed into a precarious society of information, thanks to digital social networks.

From then on, the question of the appropriation of these technologies abounds in the concerns of researchers and their use creates a paradox. Indeed, despite the enormous advantages they bring, the rise of these networks in general and Facebook in particular has led to the appearance of a form of criminality carried by the first glimmers of the Kinshasa information society. The dematerialized space offered by this network is more and more the virtual place of commission of various deplorable acts including digital identity theft.

Through a pictorial case of identity theft analysis, we have arrived at an assertion according to which the social network Facebook, like so many other digital networks, can lead users to live a satisfactory situation of use with the advantages it offers, but also worry them with the existence

⁴³ J.C, KELLER, *op.cit*, p.14.

of drifts that occur on a daily basis. From then on, users can resort to a bricolage to get around this paradox. This is the very reason for the evolutionary spring of use tailored to their wishes, which justifies a form of technological creativity.

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