

# The Elderly, Digital Technologies and the Breakdown of Social Ties: Risks of Exclusion or Lures of Inclusion?

Personnes âgées, technologies numériques et rupture du lien social: risques de l'exclusion ou leurres de l'inclusion? (FR: 59-77)

Philippe Pitaud\*

l'Institut de Gérontologie Sociale, France

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## ABSTRACT

When you are old in France in 2019, you do not have to be living on the street to be excluded or even feel excluded from a society that is increasingly turning its back on some of its members, because of the digital revolution imposed on citizens. In fact, faced with the excessive digitization advocated by governing bodies and other technocrats, which is rising speedily like a Tsunami, the elderly, often single women and/or widows belonging to underprivileged categories of society, generally with little or no education, and even less awareness in terms of management of minimal IT practices, are already or will soon find themselves on the sidelines of this type of modernization, which has nothing inclusive about it. A few local actors in the social and medico-social field and rights activists are already sounding the alarm and raising the voices of anguish in defense of these elderly people who no longer know how to cope with the dehumanization of public services: *"I am 78 years old, I have a very small pension, no computer and anyway, I do not know how to do anything. So, it is annoying now because I have to get help and I do not know people who can help me. I am going to have to go there. It is a long way from home, I have to wait a long time and I am tired. And then you must be sure that there will be someone there!":* Aware of this dynamic of exclusion that is currently taking place and because we have been collecting the signs of this disarray for

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\* Director of Institut de Gérontologie Sociale, Marseille (France). Director of the research team of Institut de Gérontologie Sociale "Vieillessement et champ social," honorary professor, Université d'Aix Marseille.  
E-mail : pitaudphilippe@gmail.com

months, aggravated by isolation and loneliness, our action-research approach aims in the long run to implement counter-actions that aim to offset the harmful effects induced by the digital transition on the social life of the elderly, while seeking to free them from the negative confinement into which their inability to manage this transition by themselves has insidiously led them. It is these changes in the aspects of the most fragile of human existences that are at the heart of our approach as researchers-practitioners, as well as of our actions; acting like a mild buffer against the inhumanity of the system that is inexorably set up when a robot signals to you: “You have exceeded the deadline [note that this word contains the word ‘dead’] for the submission of your file on the lambda portal and therefore the administration can no longer do anything for you.” There is no doubt that this is an immediate field of action for public policies, particularly in the fight against the digital exclusion of older citizens. For the time being, as always, in France, associations and humanitarian actors compensate for this absence of public authority with their limited means, but such a situation cannot last without in the long term seriously affecting societal balance and the moral principles of social justice, such as access to rights for all.

## RÉSUMÉ

Quand on est âgé, en France en 2019, il ne suffit pas d’être dans la rue pour être exclu voire se sentir exclu d’une société qui, avec sa révolution numérique imposée aux citoyens, tourne de plus en plus le dos à certaines composante du corps social. En effet, face à la numérisation à outrance prônée par les instances dirigeantes et autres technocrates qui se propage à la vitesse d’un Tsunami, les personnes âgées, souvent des femmes seules et/ou veuves appartenant aux catégories défavorisées de la société, généralement peu ou pas instruites et encore moins au fait de la gestion des pratiques informatiques minimales, se retrouvent déjà ou vont se retrouver sous peu, abandonnées sur le bord du chemin de ce type de modernisation qui n’a rien d’inclusive. Quelques acteurs de proximité du champ social et médico-social, le défenseur des Droits tirent déjà la sonnette d’alarme et font remonter les discours d’angoisse de ces personnes âgées qui ne savent plus comment faire face à la déshumanisation des services publics : « moi, j’ai 78 ans, j’ai une tout petite retraite, pas d’ordinateur et de toutes façons, je sais pas faire. Alors c’est embêtant maintenant parce que je dois me faire aider et je ne connais pas de gens qui peuvent m’aider. Il va falloir que je me rende sur place. C’est loin de chez moi, il faut attendre longtemps et je suis fatiguée. Et puis faut être certaine qu’il y aura quelqu’un ! ». Conscient de cette dynamique d’exclusion en marche et parce que nous recueillons depuis des mois les signes de ce désarroi qu’aggravent l’isolement et la solitude, notre démarche de recherche-action vise à terme à mettre en oeuvre des contre-actions dont le but est de contrecarrer les effets néfastes induits de la transition numérique sur la vie sociale des personnes âgées tout en cherchant à les libérer de l’enfermement négatif dans lequel leur incapacité à gérer pour elles-mêmes cette transition les a conduits insidieusement. C’est cette altération des existences humaines des plus fragiles qui se trouvent au cœur de notre démarche de chercheurs-praticiens comme de nos actions; ceci tel un faible rempart contre l’inhumanité du système qui se met en place inexorablement lorsqu’un robot vous signale : «vous avez dépassé la date critique (deadline en anglais et dans ce mot, il y a le mot « mort ») de dépôt de votre dossier sur le portail lambda, l’administration ne peut plus rien pour vous ». Il y a là, n’en doutons pas, un champ d’action immédiat pour les politiques publiques notamment en matière de lutte contre l’exclusion numérique des citoyens âgés. Pour

le moment et comme toujours, en France, les opérateurs associatifs et humanitaires pallient avec leurs faibles moyens, à cette absence des pouvoirs publics mais une telle situation ne saurait durer sans affecter à terme, gravement l'équilibre sociétal et les principes moraux de justice sociale comme l'accès aux droits pour tous.

## 1. Introduction

When you are old in France in 2019, you do not have to be living on the street to be excluded or even feel excluded from a society that is increasingly turning its back on some of its members because of the digital revolution imposed on citizens.

In fact, faced with the excessive digitization advocated by governing bodies and other technocrats, which is rising speedily like a Tsunami, the elderly, often single women and/or widows belonging to underprivileged categories of society, generally with little or no education, and even less awareness in terms of management of minimal IT practices, are already or will soon find themselves on the sidelines of this type of modernization, which has nothing inclusive about it.

A few local actors in the social and medico-social field and rights activists are already sounding the alarm and raising the voices of anguish in defense of these elderly people who no longer know how to cope with the dehumanization of public services:

I am 78 years old, I have a very small pension, no computer and anyway, I do not know how to do anything. So, it is annoying now because I have to get help and I do not know people who can help me. I am going to have to go there. It is a long way from home, I have to wait a long time and I am tired. And then you have to be sure that there will be someone there!

Aware of this dynamic of exclusion that is currently taking place and because we have been collecting the signs of this disarray for months, aggravated by isolation and loneliness, our action-research approach aims in the long run to implement counter-actions that aim to offset the harmful effects induced by the digital transition on the social life of the elderly, while seeking to free them from the negative confinement into which their inability to manage this transition by themselves has insidiously led them.

In order to do this, we are planning to create an experimental mediation unit within the *Institut de Gérontologie Sociale* (Institute of Social Gerontology), which will receive elderly people in distress and provide them with a place where they can resolve their difficulties in this area, as part of a process of support and learning.

Nevertheless, as had previously been done within the framework of a scientific approach of action-research, we wanted to explore this emerging field of knowledge.

Similarly, we recall that digital technologies have invaded our daily spaces and naturally that of the elderly, whether they are at home (filing digital declarations, using computer, a cell phone, using a digital parking meter with complicated instructions, disappearance of bank branches replaced by impersonal machines, etc.) or at institutions, with some EHPAD (new name of retirement homes) using robots (Zora, the robotic solution for seniors). Measuring a mere 58 centimeters, this small Franco-Belgian robot is increasingly used by health institutions to help the elderly (see [lemonde.fr](http://lemonde.fr) of 21.04.2015), as well as using other resources derived from robotics.

All this raises the question of the social bond, of the pluses and minuses introduced by this revolution in practices that some older people perceive as violence perpetuated against them.

At the same time, for some of them, we see an intergenerational dynamic appearing in reverse with the help of small children to operate a computer, a cell phone or simply to carry out an increasingly dematerialized administrative process.

We are at a turning point in this movement, perhaps even this revolution which, like all revolutions, will leave a certain number of people behind.

As Meyer (2017) notes:

Who still remembers that the remote control—that common everyday object—was first designed for people with disabilities? No one really masters all its functionalities, but everyone uses it today. The same goes for the computer and the cell phone, which are already indispensable to us, all the more so as they connect us to the whole world through the mother of all webs, i.e., the internet.

For a French person in 2016, the average daily time used on these devices is 4 hours and 48 minutes (3 hours and 40 minutes on a computer and 1 hour and 8 minutes on a cell phone (*JND Statista*). To understand such an evolution in the use of these technologies, we must necessarily “take its pulse” (Vidal, 2012) and in de facto terms analyze the daily life of each person, the manner in which these uses make sense for each person differently. However, according to Maffesoli (2015):

Understanding is much more complex. As close as possible to its etymology, this consists of looking at all the elements of reality (from the most insignificant to those deemed important) and does not consist of applying, or trying to apply, pre-established theories. It

involves adjusting to what is, and not deciding, peremptorily, what the individual, the society, the social must be [...].

This is the bias we have taken with these words of Maffesoli to address the issue of digital technologies for the benefit/service of people in vulnerable and/or disabled situations. A bias, but a difficult wager, given that this digital “transition” today affects all spheres of our existence with a vocabulary (a *newspeak*) that we must also understand and take seriously.

Thus, from the “Silicolonization of the world as irrepressible digital liberalism” (Sadin, 2016) to the birth of a “*Homo Mobiquitus*,” a communicator opening a “mobiquitary” digital era. Doing everything from everywhere with a smartphone (Miranda, 2016), through the “datafication of our society” (Ibekwe SanJuan, 2016) allowing for an increasing and almost instantaneous interconnection (Big Data) of the information that we produce on a daily basis... we no longer count the neologisms as the substituted—and often still misunderstood—expressions to qualify this digital revolution in the 21st century.

The development of new technologies (here digital) by and for humans can be found in all civilizations and throughout all eras. Based on this principle, people who were one hundred years old in 2017, were nine years old when television was invented, experienced the first Z1 calculator in 1937 and the invention of the MRI by Isidor Isaac Rabi in 1938. The adaptability of humans has made it possible to exploit and use these technologies on a daily basis, some of which are now considered commonplace by some people. The issue of the adaptability of individuals, which can diminish with age, then becomes central.

These technologies boast a daily life of the immediate where waiting is banned (digital parking meters, ATMs, checkout counters, etc.) under the banner of always trying to save more time, which is of little interest to older people, whose relationship with time is not the same as that of the younger generations.

These everyday arrangements influence the relationship with others (bank branches closing, cashiers laid off) and it appears that computer technologies do not necessarily facilitate sociability, but become a *sine qua non* of social bonding (computers, “smart” cell phones, etc.). Scardigli (1992) already highlighted his fear of seeing the elderly “excluded from a computer world whose language they will no longer speak.”

Within this iconoclastic context, vulnerable populations, and in particular the elderly, are at the center of these preoccupations in the face of the perverse effects which, as things stand, can only tend to isolate and marginalize them a little more each day. All this immediately raises the question of the relationship between social ties and digital technologies.

The question of the social bond, as well as that relating to the underlying orders of this concept (love, friendship, sexual-emotional understanding, closeness, social isolation, exclusion, etc.), is recurrent today in the type of fragmented society in which we live.

It has certainly always been so in all human societies because its central nature determines our relationship with others and concentrates the close relationship we have with our fellow human beings when it does not define our way of living in the world. (Pitaud, 2010).

In conviviality, Illich having already introduced the paradigm of this disorder that incidentally is merely the product of sentimental disorder, a disorder that commonly affects the simple affective-sexual unions of the social individuals that we are first and foremost (*homo sociabilis*), leads us towards this central nature, thereby posing the question of the exchanges that make us beings in perpetual search of restitution. Mendras, in “*Eléments de sociologie*” (1984), emphasizes that all social life is made of exchanges. The demand for reciprocity in social acts is strongly felt by individuals in all societies and civilizations, and most of the rules and institutions aim to codify and organize exchanges.

The social bond question is at the center of social life, a social life that is nourished by convivial relationships as a determining ethical value in the spontaneity of the gift (Illich, 1975).

In this dynamic, thinking about exclusion means first of all defining the phenomenon of exclusion. Two elements are important to note. Exclusion constitutes a phase in an individual’s life, with a variable time period (Beck, 1992), whether short, long term or recurrent. It is therefore not a state, but a stage that is more or less well managed through the policies implemented and the individual’s resources, and capacities to cope. Exclusion is therefore neither obligatory nor irreversible. We should also note the multidimensional nature of the phenomenon, which is made up of economic (living conditions, housing conditions, economic situation), social (entourage, social ties) and political (institutional programs) indicators.

Exclusion is thus a multifaceted phenomenon that can arise at any age, in any society. Its approach therefore requires taking into account the space in which it develops. Indeed, an excluded individual finds himself away from a world of reference, or even from a micro-society, such as education, family or work.

On this subject and regarding an article (Pitaud et al. 2017) published in the special 2017 issue of the *Creai paca et Corse* magazine, we had already raised the alarm about the risks of exclusion resulting from the all-digital approach announced by the government for 2020.

Indeed, it seemed to us, given our daily involvement in the field, that such an approach would produce exclusion for certain populations, including our elders, and that many of them would run the real risk of remaining on the sidelines of the digital transition.

Since then, others, including *Les petits frères des pauvres* (Little Brothers of the Poor), have taken up this theme, notably with the study carried out by the CSA (*Les petits frères des pauvres*, 2018).

This study focuses on the social alienation that is inevitably accompanied by phenomena of desocialization, such as the loss of social, friendly and family ties, particularly among the aging population. It reveals that more than a quarter of people aged 60 and over are still in a situation of digital exclusion, an exclusion that particularly affects the over 80s and the most precarious people.

The office of the *Défenseur des droits* (Defender of Rights), in an article published by the newspaper *Le Monde* states as follows:

[...] alerts us to this digital divide, indicating in its report that in addition to a territorial divide, there is also a social divide, stressing that 19% of French people do not have a home computer and 27% do not have a smartphone, not to mention those who do not have a scanner, an essential piece of equipment for sending supporting documents [...]. There is an unsustainable paradox here, namely that dematerialization, which is an added value for society, is contributing to widening the number of those left behind.

We have therefore seen the rise of digital illiteracy, which affects six out of ten people when they are over 70 years old. In fact, it is among this population that we find a large proportion of “quitters,” i.e., people who have had to give up certain administrative procedures because they feel out of step and find them too complicated to use. This is also what is denounced in a report published in September 2018 by *Valeurs Mutualistes* magazine published by MGEN, “*L’illelectronisme, la nouvelle exclusion sociale*” (MGEN, 2018), while this same mutual insurance company has recently multiplied access and digital barriers to its services and its interlocutors. MGEN continues to contradict itself by writing on page 10 of its journal: “haro sur le fossé numérique” (a rallying cry against the digital divide).

This divide is taken up by the authors of an excellent article also published in *Le Monde* (2018) entitled “Les oubliés de la ‘start-up nation’” in which actors in the field express themselves on this subject; “Online procedures have all the makings of a foreign language for some [...] If RSA beneficiaries do not have a computer or do not know how to connect, they do not have access to it.” To quote Jean-Marie Besse, Professor of Psychology (Université Lumière-Lyon-II): “The different kinds of discomfort felt in the face of the digital world should, moreover, challenge ser-



vice providers on their own inadequacies rather than implicitly remaining on the idea that it is “too bad for those who do not follow.”

This is what Meyer (2018), Professor of Information and Communication Sciences (Université Nice-Sophia-Antipolis), is emphasizing when he states in an interview published in the magazine *ASH* (2018):

Digital inclusion is the buzzword of the moment. Either there is going to be an increase in inequalities because the people supported will be increasingly marginalized by digital devices, or, on the contrary, we are going to move towards a kind of equality, in the sense that everyone will be permanently overwhelmed (Meyer, 2018).

Faced both with the progressive aging of their populations and, to some extent, with the limits of the political and economic model of the consumer society, our liberal societies are looking for new levers to both maintain economic growth and preserve pension systems, particularly those based on pay-as-you-go frameworks. At a time when discourses advocating living together are trying to assert themselves, the sociological phenomenon of the rise of individualism, far from diminishing, is increasingly weakening the social bond, and particularly the place of our elders among their fellow human beings. It is in this delicate context that the question arises regarding the contribution of new technologies (NT) as a response to the problems of social integration of the elderly, particularly those who are weakened by loneliness or loss of autonomy.

Given France’s aging population, new technologies have entered the field of gerontology, contributing to the development of a new economic sector: The Silver economy. Gerontechnologies are therefore occupying a growing place among the concerns of medical and social professionals in particular. How do the elderly welcome all these changes?

Caron, an economic historian and specialist of the industrial world, puts forward, like others, the hypothesis that “since the 1960s, we have entered a third industrial revolution, dominated by biotechnologies, ‘new materials,’ electronics and information technologies. The internet is the most spectacular outcome, just as the railway was the outcome of the first industrial revolution” (Caron, 2000).

## **2. Exclusion, stigma and dehumanization**

The NT are said to be accessible to all categories of people; however, new forms of exclusion have emerged since the advent of these technologies, especially for the poor, illiterate or undereducated. This is why social workers were advised to allow the most destitute or needy people access to NT (Fusaro and Arsenault, 2008). Digital exclusion then appears and is in fact a proven reality among the elderly, as shown by the *Les petits frères des pauvres* organization (2018) according to a study



by the CSA mentioned above. Thus, out of all the people over 60 years of age interviewed, the study reveals that 41% of women suffer this digital exclusion, compared with 20% of men. Thus, in the age of digital technology, the gap is widening, penalizing a growing number of people, especially in the administrative procedures of daily life that are now done online. Twenty-eight percent of people aged 60 and over are concerned about loneliness and isolation. Almost 66% of those over 85 never use the internet compared to 20% of those aged 60/74. After the age of 60, the older we get, the less inclined we are to use the internet. According to the same study, 69% of those surveyed believe that in order to fight loneliness and isolation, access to the internet and social networks must be facilitated; but 90% believe above all, that it is necessary to maintain local shops and services, and 89% add that it is necessary to develop adapted transportation solutions and provide information on financial aid and allowances (CSA, 2017).

Numerous studies have shown that a business is a place for creating social ties. According to Bernard Cova (2000), “The bond matters more than the product,” especially for senior citizens. Moreover, pleasure is not only derived from the act of consumption in itself, but above all from the experience lived at that moment. It is therefore not the accumulation of goods that counts, but the richness of the experience. Senior citizens attach importance to the atmosphere of commerce and the moment well lived (Gallouj et al., 2010).

While seniors’ disabilities should make them the primary users of NT, in reality their incapacities do not allow them to access NT. The adaptation of future generations to NT is compromised because of the very rapid evolution of innovations (Bobillier-Chaumon and Ciobanu, 2009). The generational digital divide is defined by inequality in accessing and appropriating technologies, with reference to age. It is both the usefulness of the technology and the ability to adopt it that can lead to a feeling of being overwhelmed, particularly in the face of technological complexity increased tenfold by an overly complex interface and non-existent records. Technology is perceived as playful or, on the contrary, imposed, causing a feeling of being overwhelmed, especially for “complex” technologies, such as cell phones and networks, despite the help provided to the elderly by the family. While technologies and the problems that can ensue from them are an integral part of communication for juniors, they take on greater importance for seniors (Dutot and Safraou, 2012). The digital divide is fostered by the lack of access to the internet, but also the lack of knowledge and know-how to master the technologies. It causes a division in society, on the one hand one generation benefits and appropriates the technologies and their benefits; while on the other hand, another generation finds itself excluded due to lack of access to information (Rizza, 2006).

After 70 years, the digital divide becomes all the more important; indeed, it doesn't seem natural to use tablets, readers, and connected TVs, since these devices did not exist when people were young. Therefore, it is not just a question of a person's budget. Sociologist Mermet (2017) explains it as follows:

The purchasing power of seniors is high because they often no longer have debt, so the cost of their household is reduced. They benefit from a stable and regular income, and above all, they are available for consumption. They spend an average of 20 hours a day at home. Those over 75 years old watch TV at least four hours a day.

NT can cause stigmatization of the elderly, accelerating the onset of drifting and loss of autonomy. The risk for the elderly is that these technologies replace the performance of tasks considered more or less elementary, as these tasks no longer create the opportunity to mobilize seniors' resources for cognitive, physical and social activities. There is a paradox in the use of NT: on the one hand, they bring autonomy, but the restriction of activities generated by these tools increases the dependence of the elderly. This makes the elderly unable to fend for themselves. A "mirror effect" can also ensue, i.e., the use of NT, especially those pertaining to assistance, influences the images we have of the elderly. The focus is more on the loss of independence, as opposed to being on what the person is still able to do. The drift would be to end up with a new profile of the elderly person: the "senior citizen with a socio-technical connotation." Even if this drift is unlikely for today's seniors, who are often still very timid with regard to technical devices, it is conceivable for future generations of older people (Bobillier-Chaumon and Ciobanu, 2009).

The use of assistive technology creates "age markers." During the "MNESIS" research program, researchers had observed that the use of NT had made some older people aware of their difficulties and health problems (Bobillier-Chaumon and Dubois, 2007). Moreover, seniors use electronic messaging in order to re-establish social ties that have been severed due to geographical distance. However, sometimes their emails go unanswered, which undeniably increases the feeling of isolation (Bobillier-Chaumon and Ciobanu, 2009). A phenomenon of dehumanization occurs, generated by this loss of meaning, amplified by the loss of the senses.

Barriers to using NT can be physical or mental. The main barriers are sight, tremor, arthritis and memory loss (Santior.fr, 2018). The older we get, the more the acuity of the five senses deteriorates and leads to a loss of autonomy. Eighty-two percent of people over 60 in France have a visual impairment and 33% have a hearing impairment. The main sight-related conditions are cataracts, glaucoma, diabetic retinopathy, eyelid pathologies and age-related macular degeneration (AMD). Sensory and cognitive disorders are interdependent. Indeed, loss of hearing will accelerate the process of cognitive decline, adaptation to the environment,

maintenance of relational and communication networks. The loss of the senses notably increases the feeling of insecurity, withdrawal, and avoidance behaviors (Hugonot-Diener et al. 2017). Hearing and visual loss will affect the older person's ability to communicate, potentially cutting them off from their social and family environment by simply preventing them from participating in conversation.

Digital technology produces an acceleration of information and therefore of communication. This acceleration is often no longer in phase with the biological rhythm of the elderly person, so this phenomenon must be taken into consideration when we expose the elderly to modern technologies. Television still plays an undeniable role in maintaining the social bond of the elderly person; however, watching screens without exchanging with others can lead to new suffering: being closed in on oneself, failing to take into account the individual's own existence (Caradec, 1999).

In a study on "the relationship of the elderly with the NT," in referring to the computer, the interviewees use the pejorative terms "cold object" and "machine," which could even dominate Man. As much as the telephone appears as a "warm object" because it is considered an extension of the hand and the voice, the computer appears as a screen between the person and reality. Moreover, the computer essentially appeals to the sense of sight, almost excluding the other senses or at least clearly diminishing their use, with the exception of touch, which is somewhat solicited. But human beings can only have a decent relationship with the world through their five senses (Collos and Delomier, 2012).

The placing of individuals under surveillance, but also the substitution of technology for human beings, the over-simplification of tasks exposing the elderly to a form of infantilization, or the removal of objects to which people are sometimes attached, considered as obstacles, fall factors, are all examples that show that the beneficiaries of these measures may have a lot to lose. New technologies must remain on the side of "empowerment" of individuals, and lead to an increase in their capacity for action, their hold on the world, and finally their link to others within the framework of free choice. We could conclude on this matter by noting that to be successful, the deployment of these technologies must be complementary and not a replacement for human contact.

### **3. Prospects for improvement**

Numerous improvements are emerging in the field of new technologies to promote social bonding with respect to the elderly; however, in France, access to new technologies in particular is still limited. It would therefore seem interesting for France to consider new initiatives. The aim of this approach would be to make new technologies for the elderly more attractive, accessible and secure. From this

perspective, various actors, such as the State, professionals working in this field and users, especially senior citizens, should be involved and taken into account.

### **3.1 Developments envisaged at the national level**

Access to the internet and mobile networks facilitates social exchanges between people. Indeed, many retirement homes are testing new technologies to encourage the maintenance of social ties among their residents. In addition, it helps people learn and accept these new modes of communication (Cornet and Carré, 2008); however, France still has 170 municipalities without these services. Areas known as “blank zones” are defined as rural territories that do not have cell phone antennas. Inhabitants in these areas are therefore unable to access Wi-Fi, mobile and 3G/4G networks (Belouezzane, 2018).

In 2006, the Centre d'Analyse Stratégique (CSA) focused on the subject of new technologies for the elderly. From this study stems the idea of creating sectors of activity specific to gerontechnology, namely the “geronto-poles.” The mission of the latter is to work on research and training in gerontechnology. The CSA encourages the government to support professionals working in this sector and to create “specific standards” for gerontechnology. In addition, it recommends that the social security office review the funds allocated to NT; for example, those intended to reduce isolation of the elderly or improve their mobility.

### **3.2 Older people at the center of new perspectives**

To boost the development of these new technologies for the aging public, more input from seniors is needed. Indeed, they are not reluctant to use these technologies, but the interest and meaning given to them must be justified. To do this, two mechanisms must be taken into account: to find a positive use in their daily lives, and to draw inspiration from their past, their conception of life and their ideology. These two mechanisms represent and encompass the notion of “stakeholding”. Researchers must then take it into account when designing NT for this audience. This notion thus seems to be at the center of the approach so that older people can equip themselves and use the NT (Caradec, 2001).

The financial argument seems to be equally important to promote the development of gerontechnologies and develop their use. Indeed, the cost of these technological innovations is high in relation to the financial resources of potential users. In France, the social security system supports a certain number of technologies for seniors by offering them reduced rates (Portail national d'information pour l'autonomie des personnes âgées et l'accompagnement de leurs proches, 2017). However, much of the technical aid, such as that with a social purpose, is not

taken into account by the health insurance system, particularly with respect to Alzheimer's disease or related diseases. The financial difficulties encountered by the families of people with severe disabilities preclude the possibility of self-financing this type of aid. It would therefore seem important to update the list of the types of technical aid and to consider partially or totally reimbursing aid for serious illnesses affecting the elderly (Rialle, 2007).

The last argument would be of a more economic and marketing nature, but always with a view to promoting the use and support of older people in the face of new technologies. Bernard (2013) proposes to develop the Silver economy by focusing on so-called "solvent" customers. That is to say, people capable of consuming and investing in the products and projects proposed, in order to encourage the development of funds towards new markets in the Silver economy. This would reassure investors. If these markets develop well, then the less "solvent" or more vulnerable people can be helped in their dependencies by mass marketing. The Silver economy will eventually lead to the development of the industrial sector focused on "robotics, home automation and medical devices" by promoting innovation. Communication is essential here to raise awareness of this approach and guarantee greater transparency and readability for elderly users. The development of new forms of housing is also related to this economy, particularly collective or shared housing.

Some may consider this approach illusory, but in this matter, all avenues to reduce the gap between "haves" and "have-nots" must be explored.

#### **4. The theoretical framework of our action-research**

In his book *Vieillesse, technologie et vie quotidienne* (Aging, technology and daily life), Jobert (1993) has entitled Chapter 2 «*La domotique: les personnes âgées relais de l'innovation?*». Indeed, home automation is a field of innovation that is still being explored in terms of functions to be developed and potential customers.

The markets are still being identified, and distribution is starting with two possible orientations: a very wide distribution corresponding to a banalization of products (products for all) or, on the contrary, a very targeted distribution corresponding to hyper-specialized products.

In such a context, there are many players: manufacturers, producers grouped together (e.g., Chimène) in order to develop products, potential customers (specialized service providers, professionals in the health and social sector), users (individuals, professionals in the field, etc.). "Intermediary organizations" are special players in that they play an interface role or even a "market formatting" role.

What role, what place for the elderly in this context? Are they targeted to be innovation relays, as Jobert (1993) indicates, and which players are targeting them?

The theoretical field of our approach belongs to the school of symbolic interactionism in the sense that, according to Goffman (1968, 1975), we admit that, rather than considering institutions, organizations or, more generally, social facts as factors prior to and external to individuals, the actionist paradigm proposes to analyze the action of individuals on these same facts.

In this dynamic, we are interested in the fact that symbolic interactionism is defined as subject/group interdependence that would lead to the creation of deviant situations for which the subjects would try to find solutions through strategies and games.

On this theme, Maffesoli & Fischer (2016) and many others point out that these strategies reflect, in particular, an identity quest which, for us, would be found in what Flichy (1995) calls the challenge of a sociology of technology, namely “How is the social bond built within and by the machine?”

Such a theoretical field allows us to deal with the relations between intermediary organizations, service providers and users, but also to observe the stabilization process which, in the field of technical innovation, concerns both the operational functioning of the machine and its users; the designers and the users; and the manufacturers and the vendors.

This approach then leads us to question the social construction of the demand, its structuring in the field, the articulation, the meeting of services offered by intermediary organizations, institutions and professionals; this with regard to the expectations of real and potential users.

On this subject, we will recall that the different social worlds will compete for the definition of a question, a professional practice, for instance, or within the framework of our research theme, for the management of such and such a service, as well as its use, in specific instances; what the interactionists call forums (arena). In these forums, “different subjects are debated, negotiated, representatives of different worlds or sub-worlds confront each other, try to manipulate each other” (Strauss, 1978). The concept of the forum is essential in the interactionist approach; it is the place of confrontation and cooperation between social worlds. From this, the development of a compromise or consensus may or may not emerge that can change the relationship between users and service providers.

The role of the users will be significant here insofar as they will be at the heart of the issues and the corresponding negotiations.

They will do so in a non-homogeneous way insofar as we must underline the importance of the generational effect, which feeds on the heterogeneity of elderly users, as well as on their diversity in developing different “operative arts” and which will consist, for them, in acting in a different way than the way defined a

priori by the framework of use. This should then enable us to study the place that these same service users occupy in this interactive dynamic.

In this way, we will join the work of Flichy (1995) who proposes an interactionist sociology of technology that will be interested in the dynamics of interactions within the multiple social worlds concerned by innovation; “social groups will, given their representations, socially construct the technical object through the definition of problems and their resolution.”

Currently, the implication of new technologies, the effects induced by their use in daily life and the actors involved in programming remains a reality that is still partly unknown, which makes it difficult to formulate hypotheses that are built on objective observations and not on the reflection of personal convictions based on subjective apprehension of possible or probable effects.

## **5. In conclusion**

The development of NT raises strong social and economic issues, whose interests sometimes feed on each other, but also clash when confronted with the antagonisms inherent in such a diverse population category. Many innovative technologies are indeed increasingly available to support and secure the elderly, improve living conditions and the quality of care, whether at home or in institutions. Their usefulness is now recognized and their continued sophistication makes it ever easier to perceive, communicate and exchange information. They can foster social ties and solidarity between generations, thus enabling the elderly to continue to be involved in their environment; however, their contributions paradoxically have negative effects and give rise to concern, even deep reticence among the elderly themselves, particularly among the most vulnerable. They often perceive the use of technology as the cause of a deterioration in relations with their entourage, resulting in social disaffection, sometimes even great loneliness and depression. Does not the elderly person, whether sick or isolated, particularly need a real and not a virtual presence?

This research has revealed that very often NT are first and foremost reassuring for those around them rather than being reassuring for the elderly themselves because they require, among other things, a certain capacity for adaptation. Perhaps we simply do not take enough account of their feelings and their real expectations? Moreover, one of the major questions that now arises is that of the hyper-connectivity of individuals and machines. Will contemporary society continue to advance in this consubstantial search for efficiency and profitability in which it has long been engaged, and which leaves less and less room for human beings? Or will the NT be an opportunity to raise the ethical question of their purpose and the way of life they promote? The role of ethics would certainly be to offer a frame-



work for reflection for the evaluation and regulation of the benefit/risk ratio linked to innovative technologies and their influence on the question of living together. The challenge would therefore be to consider technological progress according to a vision that not only obeys economic logic, but that refocuses on the interests and well-being of humans, ensuring that technical efficiency does not erase the relational dimension. It is indeed a question of making a societal choice that aims, as Ricoeur (1990) reminds us, at “living well with and for others in just institutions.”

To conclude this reflection, we would like to close with Laurent (2018):

Current institutions (family, work, public services) contribute not to an exacerbation of individual whims, but to a growing isolation of people that undermines the foundations of social cooperation. More than the individualism chosen, it is loneliness that is gaining ground in a number of Western countries, including France.

Thus, also according to Laurent:

Many of the innovations of the digital transition, in line with *nerd* mythology, aim to delegate to machines the very function of social bonding (the algorithms that govern social networks or the deployment of artificial intelligence in customer services are good examples). Cooperation itself is delegated to machines, which are entrusted with the mission of socializing instead of humans (Laurent, 2018).

The same author, in his chapter “*La guerre contre le temps*” tells us the following:

The beginning of the 21st century is characterized by a double temporal crisis, the first of which is the acceleration of the present under the effect of the so-called “digital transition.” The revolutionary character of the latter is often exaggerated, but it is certainly relevant in the public space and in the private life of the incessant innovations that alter human existence in daily life (attention span, quality of sleep) and shake up social organization in depth [...]. The second temporal crisis is rather reminiscent of the end of the 1960s: the future is, as it were, obstructed by ecological crises.

It is this alteration of the most fragile human existences that is at the heart of our project as well as of our actions; acting like a mild buffer against the inhumanity of the system that is inexorably set up when a robot signals to you: “You have passed the deadline [note that this word contains the word ‘dead’] to submit your file on the lambda portal, the administration can no longer do anything for you.”

There is no doubt that this is an immediate field of action for public policies, particularly in the fight against the digital exclusion of older citizens.

For the time being, as always, in France, the associations and humanitarian operators compensate for this absence of public authorities with their limited means, but such a situation cannot last without in the long term seriously affecting the societal balance and the moral principles of social justice, such as access to rights for all.

## References

- Bergeret J. (2014). Petits cailloux témoins des techniques et technologies rencontrés sur le sentier parcouru d'un acteur du travail social. In V. Meyer (dir.), *Les technologies numériques au service de l'usage, au secours du travail social* (139-186). Bordeaux: Éd. LEH.
- Belouezzane S. Les opérateurs téléphoniques devront couvrir les « zones blanches » sous peine d'amende, website updated 22 May 2015.
- Bernard C, Hallal S., Nicolai J.P, Montebourg A & Delaunay M. (2013). Commissariat général à la stratégie et à la prospective. *La Silver Economie, une opportunité de croissance pour la France*. Reports and documents, 9-17.
- Bobillier-Chaumont M-E. & Ciobanu R. (2009). Les nouvelles technologies au service des personnes âgées : Entre promesses et interrogations : une revue de questions. *Psychologie Française*, 54, 271-285.
- Bobillier-Chaumont M-E. & Oprea-Ciobanu R. (2009). Les nouvelles technologies au service des personnes âgées : entre promesses et interrogations - Une revue de questions. *Psychologie Française*, 54, 271-285.
- Bonjour A. & Meyer V. (2011). TIC et prise en charge des personnes handicapées mentales. *Communication et organisation*, 39, 213-228.
- Caradec V. (1999). Communication et personnes âgées. *Réseaux*, (96), 45-95.
- Caradec V. (2001). Générations anciennes et technologies nouvelles. *Gérontologie et Société*, Special issue, 71-91.
- Caron F. (2000). Troisième révolution industrielle et nouvelle économie. *Le Débat*, 5(112), 27-28.
- Collos J-P. & Delomier C. (2012). Usage et non-usage des objets communicants dans le cadre du maintien à domicile. La relation des personnes âgées avec les TIC. *Gérontologie et société*, 35(141), 41-55.
- Cornet G. & Carré M. (2008). Technologies pour le soin, l'autonomie et le lien social des personnes âgées : quoi de neuf ?. *Gérontologie et société*, 31(126), 113-128.
- CSA. (2017). La solitude et l'isolement Chez les personnes de 60 ans et plus. Retrieved from <<https://www.csa.eu/media/1670/csa-pour-les-petits-freres-des-pauvres-rapport.pdf>>
- Cova B. (2000). Au-delà du marché : quand le lien importe plus que le lien. France : éd l'harmattan.

- Diana J.-Fr. & Meyer V., dirs. (2011). *Images troubles, réalités morcelées : Alzheimer, l'incarnation du mal vieillir ?*. Bordeaux: Éd. LEH.
- Fusaro M. & Arsenault M. (2008). Internet, nouvel espace citoyen pour les personnes du troisième âge ?. *Nouvelles pratiques sociales*, 21(1), 68-83.
- Gallouj C, Kaabachi S. & Laïb N. (2010). Seniors, commerce et distribution : une revue de la littérature. *Gérontologie et société*, 33(4), 55-82.
- Goffman E. (1968). *Asiles*. Paris: éd de Minuit.
- Goffman E. (1975). *Stigmates*. Paris: éd de Minuit.
- Hugonot-Diener L, Rossi E, Gauillard J, Hanon C, Guyon F. & Kruczek E. (2017). Retrait et vieillissement. *L'information psychiatrique*, 93(4), 302-309.
- Illich I. (1975). *La convivialité*. Paris: éd du Seuil.
- Jouet J. & Pasquier D. (1999). Les jeunes et la culture de l'écran. *Réseaux*, 17(92), 25-102.
- Laplantine Fr. (1996). *La description ethnographique*. Paris: Nathan Université.
- Les oubliés de la « start-up nation ». (2018, November 2). *le Monde*, p.10.
- Les petits frères des pauvres. (2018, September). L'exclusion numérique des personnes âgées.
- Maffesoli M. & Strohl H. (2015). *Les nouveaux bien-pensants*. Paris: éd. Le Poche du moment.
- Maffesoli M. & Fischer H. (2016). *La postmodernité à l'heure du numérique. Regards croisés sur notre époque*. Paris: François Bourrin.
- MGEN. (2018, September). L'illectronisme, la nouvelle exclusion sociale. *Valeurs Mutualistes* (313).
- Mendras H. (1987). *Le changement social*. Paris: éd. Colin.
- Meyer V. (2004). *Interventions sociales, communication et médias. L'émergence du socio-médiatique*. Paris: éd. L'Harmattan.
- Meyer V. (2006a). *Communication organisationnelle et prise en charge du handicap mental*. Bordeaux: Les Études Hospitalières.
- Meyer V. (2006b). De l'utilité des recherches-actions en SIC. *Communication & Organisation*, 30, 98-108.
- Meyer V., dir. (2014). *Les technologies numériques au service de l'usager, au secours du travail social*. Bordeaux: éd. LEH.
- Meyer V., dir. (2017). *Transition digitale, handicaps et travail social*. Bordeaux: éd. LEH.
- Meyer V. (2017, December). Ils ne savent ni lire, ni écrire, mais savent rédiger des SMS, pp 5-9. In special issue Transition digitale et médiations numériques dans les institutions sociales et médico-sociales. Under the direction of professors Philippe PITAUD (Pr.) and Vincent MEYER (Pr.). *Revue thématique du Creai Paca et Corse*.
- Miranda S. (2014). L'homo mobiquitus. In M. Carmes & J.-M. Noyer (dirs.) *Devenirs Urbains* (pp. 155-176). Territoires Numériques-La Poste-Le Grico Collection. Paris: Presses des Mines.
- Pitaud (Ph) (under the direction of), (2010). *Solitude et isolement des personnes âgées ; l'environnement solidaire*. Pratiques du champ social Collection. Toulouse: éd Eres.

- Pitaud (Ph). (2004). Chapter in *Prévenir l'isolement des personnes âgées ; voisiner au grand âge*. Action sociale Collection. Paris: éd. Dunod.
- Pitaud (Ph) & Deschamps (R.) (December 2017). Vous devez obligatoirement payer par paiement direct en ligne sur [impots.gouv.fr](http://impots.gouv.fr), par Smartphone ou tablette etc.... (Sinon.....) ou l'épopée des « vieux » dans le monde virtuel des technologies, pp 9-13. In special issue Transition digitale et médiations numériques dans les institutions sociales et médico-sociales. *Creai Paca et Corse*.
- Resweber P. (1995). *La recherche-action*. Paris: Presses universitaires de France.
- Rialle V. (2007<sub>A</sub>). *Technologie et Alzheimer : appréciation de la faisabilité de la mise en place de technologies innovantes pour assister les aidants familiaux et pallier les pathologies de type Alzheimer*. Paris 5: Université René Descartes.
- Ricœur P. (1990). *Soi-même comme un autre*. Paris: Le Seuil.
- Rizza C. (2006). La fracture numérique, paradoxe de la génération Internet. *Hermès, La Revue*. 45(2), 25-32.
- Scardigli V. (1992). *Les sens de la technique*. Paris: PUF.

