# Inclusão ou Exclusão Digital

Eliane de Oliveira Farah &  Patrícia Maria Magalhães Saavedra

## INTRODUCTION

According to the Brahmana of the hundred ways, once upon a time there was dispute between gods and demons. One day the demons said: "to whom could we present our offer"? Then proceeded to pour every offering in their own mouths. The gods, however, poured theirs into each others'. Then Pradshapati, the Primordial spirit, gave itself to the gods. (Buber, 2009, p.79)

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## I. INTRODUCTION

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From the steam engine of the 18th century, through the post-world war 2 technological transformations to the development of digital electronics, the Industrial Revolution and its phases brought deep changes in the world's social and economic sectors.

While in the first phase the splurge was about the substitution of human manual labor by the machines, in the current phase, the splurging is about the proximation of every person in every corner of the world, realizing McLuhan's Global Village idea to whom the TV, maybe a preview of the Internet, would be the paradigm.

If on the one hand this revolution has brought unquestionable betterment of the people's quality of life, like advances in the field of medicine, transport and telecommunications, the rise in the production and consuming capabilities, on the other, has also brought unquestionable loss, such as the negative impact on the environment and the fact that it is not only not enough to eradicate hunger and poverty, but it frequently contributes to the perpetration of both.

Pioneering the study in cultural and social transformation created by the technological revolution, MacLuhan discourses about how Information technology historically affects people's cognitive organization.

What stands out in regards to this paper, in the book The Gutenberg galaxy (1962), is the fact that MacLuhan presents the idea that the alphabet advent altered not only the culture and the social relations but also human's own physiology. In a way, we could say the alphabet shapes the way we "see" reality.

An interesting study, presented in the aforementioned work, shows an african tribe's habitant's literal impossibility to seeing images of people and objects that appeared in a movie about teaching hygiene habits. The conclusion in that study points to the fact that illiterate people perceive reality differently from literate individuals.

Even more interesting is the affirmative that the illiterate utilize their own cognitive organization system, which does not mean being incompetent by principle, but incapable of comprehending a different system. According to MacLuhan, it is quite the contrary.

*The written word, so to speak, transformed the dialogue: from the common exchange of ideas and purposes to trading packaged information, a mobile and portable production asset (1962, p.205)*

Another aspect of McLuhan's work that contributes to our argumentation is presented in the book Understanding Media: the extensions of man (1964), in which he coins the phrase: the media is message, which relates to the fact that the media affects the society in which it plays a role in not by the contents it convey,. but by the media's characteristics in itself.

In the referred book, the author indicates the human need to extend beyond its own physical limits as the source to the development of all technology, which paradoxically diminishes the

individual's importance once technology creates its own environment.

*The electrical speed mixes prehistoric cultures with the debris of industrial marketers, the illiterate with the semi literate and the post-literate. Nervous and mental exhaustion crises in the most variable degrees, constitute the very common result of the detachment and flooding provoked by the new information and the new and endless informational structures (p. 24 e 25).*

From what has been shown so far and paraphrasing MacLuhan we ask the following questions: Once the technology media creates the environment, who is inside and who is outside the Global Village? Is this environment made of people or objects?

We are living in full Digital revolution in which many of us live like the Jetsons, a TV animated series from the sixties in which a family enjoyed great technological advances while others lived in the stone age like the Flintstones, another animated series from the same time in which the characters lived in a prehistoric modernity.

The production of fake news, named nowadays "disinformation", indicates serious distortions on the power of communication networks, not forgetting the existence of the illiterate or the functionally illiterate.

It's obvious that the Industrial Revolution, today in its digital phase, brought great benefits, but only the incorrigible romantics still believe it aimed quality of life as a priority. Nonetheless, it's obvious that the people's well being is a side effect of production and profit.

In the wake of the digital advances we have a movement to computerize official files as well as all the access to official departments. Websites and apps now replace the public service's service counters. Registrations, information, requisitions and complaints should be done by computers or mobile phones. A simple and agile flux of information, weren't the issue of the final beneficiary previously mentioned.

Today in Brazil there's much talk about digital inclusion, which says that everyone has to have access to digital media. While we still don't have official data from the 2022 demographic census, two years late on account of the Covid 19 pandemic and budget cuts by the government at the time, we can predict that the illiteracy index and that of residencies with no electric energy is still significantly high.

There is no question that digital inclusion is a fundamental necessity in a connected world. However two critical questions should emerge: who has the basic conditions to be included and what happens to the excluded when they can't access these computerized public departments?

The answers to such questions demand the integration of lots of knowledge and mainly of what we call "political will" which unfortunately, as pointed out before, historically, puts the individual in last on the chain of interests.

Countless concepts can be applied to the discussion of these questions in the attempt to shed some light in such a nebulous issue.

In what's been said in this article, up until now, two concepts present themselves very relevant for consideration. The first is Martin Buber's Dialogic Relation and the second is Fritjof Capra's systemic conception.

In 1923, Martin Buber, in the book I and Thou, describes relationships between people as being of two kinds: the I-Thou or subject-subject relationship and the I-It or subject-object relationship.

The I-Thou relationship refers to the intersubjectivity, that is, to the human capacity for interrelationship, for recognition of our peers as our similars and the responsibility of both in what happens to each one, what Buber calls dialogue and turning toward another. The human relationship seen as otherness, as reciprocity.

The I-It relationship is not characterized by any of the aspects present in the I-Thou relationship, there's no dialogue, not even relations, seeing as what is imposed is an objective approach in which

at least one of the parts addresses the other as a means to an end.

The sine qua non condition for the dialogue is that there exists a dialogical approach between both parties, without which there's no relationship.

Going back to McLuhan's Global Village idea, we can question if the flux of global information runs towards another or to an object.

Addressing the other as an equal implies a genuine concern with what happens to them, while addressing the other as media means using them with the goal to get to an objective, in this case production and consumption.

*Buber 1965ᵃ, apud Hycner (1995), states:*

The inclusion occurs when the person, "without neglecting any aspect of the perceived reality in the activity, at the same time lives the common event from the other's point of view"

Buber (2009), indicates that in principle, there's no notion that the I-Thou relationship is ideal and the I-It relationship is inadequate, both are appropriate to a plethora of situations in life. While the I-It relationship is more objectifying and, therefore, better applied to the business world, the I-Thou relationship is more subjectifying and better applied to intimate relationships. Thus there's no prevalence in the I-Thou relationship over the I-It relationship, since each one involves a distinct purpose.

For example: the parents' attitude toward their children is commonly a dialogical approach, and it should be suspended many times so that the position of authority, necessary for the condition of person responsible to be fulfilled. On the other hand a businessperson that treats their employees as spare parts is doomed to have some kind of loss.

The problems arise when there's prevalence of one approach over the other, which means there's a disagreement between an approach and the declared purpose.

Our questioning, in this case, involves the use of the term INCLUSION for the fact that when the

use of the media does not involve an immediate concern with the person's conditions of access, there's no true dialogical approach.

And with all the gravity of the truth, listen: *man cannot live without the It, but he who lives only with the It is no man.* (Buber, 2009 P.63)

Back to the Global Village subject, we can review Capra's (1982) perspective about the systemic conception which sees the world in terms of relationship and system interdependence. Social, ecological and economic systems are all living and interdependent systems.

Still according to Capra, in the same work: *the undifferentiated growth tends to walk hand in hand with fragmentation, confusion and general collapse of communication* (1982 p.387), comparing the process to cancer, whose excessive growth ends up destroying the organism.

This means that when economic interests don't include concerns with the people and the environment's health, they sacrifice people and eliminate themselves.

The author describes the economic problems as systemic in nature and resulting from the dissociation of economy from the ecological context.

*The undifferentiated economic, technological and institutional growth is still seen by the majority of economists as a sign of a "healthy" economy, although it's been causing ecological disasters, generalized corporate crime, social disintegration and the ever-growing probability of nuclear war.* (p.380).

The systemic conception proposes a change in the linear, simplistic and unrealistic theoretical model of the conventional economists to a circular interdependence perspective of the systems.

It's interesting the fact that Capra indicates an idea from Bateson that is very similar to the conclusions from the study on african tribes stated by MacLuhan and commented previously on this article.

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The linear relationships of cause and effect only occur very rarely in these ecosystems, and the linear models are no very useful to describe the functional interdependence of the social and economic systems inserted in them and their technologies. The acknowledgement of the non-linear nature of every system dynamics is the very essence of ecological conscience, the essence of "systemic wisdom", as Bateson calls. This kind of wisdom is characteristic of the traditional, non-literate cultures, but sadly it's been neglected in our super-rational and mechanistic society.

Therefore, the digital inclusion or exclusion approach goes through the analysis of a set of barriers that surpass the absence of electronic equipment or the lack of comprehension in handling the digital language.

Digital exclusion presents itself as one of the biggest challenges of our time and it constitutes one more side of social inequality, thus the importance of democratizing access to the internet and to the new information tools.

Thatiane Menezes da Rocha Pinto (2023), in a recent dissertation about access to justice focusing in homeless people, in her law post-grad, clarifies that there is exclusion by specific socioeconomic issues, predictable in a country with extreme social inequality like Brazil. It is a barrier that "comes with the absence of other more elementar rights and services like the right to health, housing, education, nourishment and basic sanitation."

It's important to highlight that the postmodernity reveals itself as a phenomenon in which the current society is immersed and it's related to the "acceleration of living", in other words, paradigms do not survive for long the creation of other paradigms, turning human life into a broth of uncertainty, insecurity and new demands at every moment, product of the flooding of information brought by the technological advances, especially the internet and the social media advent as the preponderant mass relationship tool.

It should be emphasized that it's a culture facing the increase of individualism, where even tho there are many options to choose from, there's also the loss in critical view about the assets and values that surround us. Lipovetsky (2005) highlights the "culture of personality", of total individualism and, therefore, "the postmodern society is that in which indifference of the masses reigns, in which the feeling of repetition and stagnation dominates, in which the particular autonomy advances by its own, where the new is accepted the same way as the old..." (Lipovetsky, 2005, preface XIX).

Lipovetsky (2005) identifies postmodernity as the "age of emptiness" and highlights the general problem: "the weakening of society, of the way of living, of the contemporary individual from the age of mass consumption, the emergence of a new way of socializing and individualizing, in a rupture from what's been instituted in the 12th and 13th centuries." (2005, prefácio).

José Aparecido Celório e Lúcia Maria Vaz Peres (2013), in their study about existence and imagination, state that we cannot deny science advances and the benefits generated by its discoveries, however, the responsibility for humanity's progress and autonomy of its individuals has been attributed to reason, and "the affective and imaginary dimensions were banished to the basement of our history" (2013, p.377).

Gisele Mara Durigan e Nádina Aparecida (2013) state that the popularization of the internet largely increased the quantity and speed of information, which created an information overload, "with the virtual world significantly interfering with the real world." (2013, p.100).

The information overload to which man is exposed in postmodernity drives him to try and "search and absorb, in as little time as possible, the highest amount of information in his reach, without having the condition to manage the excess in adequate fashion. Thus creating a feeling of physical and mental wearing, fatigue, frustration and, in more serious cases, emotional stress." (2013, p.100).

It's important to remember that in a globalized context, the volume of information available on the web becomes an indicator of the capacity to

influence and position populations in the future of society.

The society in which we live is that of knowledge and according to Elisabeth Gomes (2002), advisor to Anatel's presidency, "in this new society, knowledge is a fundamental driver to increase productivity and global competition." The recent collapse of the telecommunications and technology market, a shrinking of global investment in innovation and a big effort on privatization caused the deprivation of access to the advantages and benefits brought by the new nesta nova sociedade, o conhecimento é um "driver" fundamental para aumentar a produtividade e a competição global." O recente colapso do mercado de telecomunicações e de tecnologia, um encolhimento dos investimentos globais para inovação e um grande esforço nas privatizações provocaram a privação do acesso às vantagens e aos benefícios trazidos pelas novas ICT (Information and communication technology).

Upon treating digital inclusion as a living system it's possible to walk towards digital universalization, promoting what is called digital literacy, in other words, as Gomes (2002) clarifies that "capacitate the people in utilizing the numerous media according to their necessities, considering that intellectual capital is increasingly more essential for citizens to be inserted in the job market."

The internet is a means and not an end, and according to Rodrigo Assumpção from Sampa.org. quoted by Gomes (2002): "Digital inclusion is giving the opportunity for communities to be inserted society of information as agents. Knowledge is the key for programs that have been successful."

There are many initiatives for a big part of the society excluded from the digital process to take notice of the resources available, however, according to Gomes (2002) we need to define strategies that integrate state actions so that the needs of the society are met and it is also necessary to know these needs, so as to make

inclusion effective, not only regarding the format of the services, but also their content.

According to Lília Bilati de Almeida and others (2005), the people that live on the margins of computerized society have more difficulty, or even feel prevented from executing tasks made simple by using services based on new technology.

In an age like this one, "digital exclusion has a big impact in the lives of people that for numerous reasons do not utilize such technology. There can be used as an example a simple and usual fact that happens when trying for professional placement and being required to have minimal knowledge in computers."

The impossibility in utilizing the Internet prevents some communities from obtaining more knowledge and exchange of information, which would enrich them culturally, socially and economically.

Thereby, the digital exclusion "can be seen from different angles, both by the fact of not having a computer and not knowing how to use it (be able to read) or even yet by lacking minimal knowledge to manipulate the technology with which we coexist on a daily basis." (Almeida, 2005).

In a more comprehensive way, "people digitally excluded can be considered those that have difficulty to even utilize a mobile phone's functions or set the clock in the VCR, noting that the digital exclusion depends on technology and on the devices utilized." (Almeida, 2005). Digital exclusion can also be conceptualized as a state in which an individual is prevented from utilizing information technologies, whether by insufficiency of access means, or by lacking knowledge or interest.

The socioeconomic exclusion triggers digital exclusion, and at the same time digital exclusion deepens socioeconomic exclusion.

Digital inclusion should be the product of public policy with budget allocation in order for actions to promote inclusion and the equivalence of opportunities to all citizens, as stated by Almeida (2005). Individuals with low education levels, low

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income, physical and age limitations must be taken into consideration.

In this society, a person with no computer knowledge is seen frequently as disqualified for work, seeing as even in small companies or offices, information systems are present. Almeida (2005) states that "consequently low income and unemployment is created and the cycle of poverty and hunger becomes more intense, which leads to the economy cooling down and the consequent shocks before exterior market competitors, not to mention internal aggravating factors, like the proliferation of shanty towns, the increase in violence and market prices."

Social exclusion and digital exclusion are mutually cause and consequence. Citizens that fit in one or more types of social exclusion previously seen can be inhibited from following the technological evolution, becoming members of the digital exclusion, creating what is called "digital apartheid".

Pierre Levy, french philosopher and thinker in the technology and society area, quoted by Gabriela P. Vesce, in an article for Info Escola (Info School) (2023), stated that "every new technology creates its excluded". The statement does not aim to attack technology, but remind "that, for example, before phones there were no people without phones, in the same way that without the alphabet there wouldn't be illiterates."

Thereby, "people that due to illiteracy or low income do not utilize technological tools can be considered digitally excluded. On the other hand people that, despite having a favorable financial condition and school education, are resistant to the changes and don't get involved with new technologies, become outdated and become members of the society of digital exclusion and consequently of the social exclusion, seeing that they begin to have a harder time getting jobs, developing their careers, doing school research, etc. (Almeida, 2005)

The solution to the digital exclusion problem goes beyond the implementation of telecenters and making available terminals of public access. Both digital and social exclusion need to be faced together, "analyzing the social and economic characteristics that impact the process of digital inclusion and being aware that the non-participation of individuals in the technological process affects the country socioeconomically." (Almeida, 2005)

Thus, we understand that true digital inclusion, the true Global Village, can only happen when the economy, the technology and the institutions are treated as living and interdependent systems in which people are not seen only as objects to be utilized for exclusive purposes.

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