# WHAT ABOUT THE TRANSITION FROM DIGITAL ERA TO GUTENBERG GALAXY?

**Ioana LEUCEA**

Social Sciences Department, "Mihai Viteazul" National Intelligence Academy, Bucharest, Romania

***Abstract:*** *The cultural turn the humanity is experiencing by consuming information using internet of things has profound influences on people's mind. The patterns of behavior since smartphones have become an omnipresent device are investigated by social scientists, questioning issues like virtual identities or cyber-psychology, in order to determine fundamental changes people manifest in the new digital era. In this article we aim to discuss not the changes the new media of communication determine, but to explore the ideas highlighted by theorists of communication when speaking about major changes the Gutenberg galaxy has produced and try to figure out a strategy to maintain the benefits of that era for the digital natives. How pupils should be educated in order to cultivate certain behaviors and abilities which might be in danger in the current contexts of overconsumption of digital content? To answer that question, we aim to discuss the major patterns of behavior the Gutenberg era has produced and how to uphold and prevent the degradation of those valuable models.*

***Keywords****: Gutenberg galaxy; digital era; virtual identities; patterns of behavior*

## 1. INTRODUCTION

*The defining feature of the Gutenberg Galaxy is the making of the typographic man.* The above affirmation was expressed by Marshall McLuhan in his book published in 1962. Starting from the ideas presented in his book, we intend to revisit the concepts proposed by the author when describing the effects the printing press had on culture and on human consciousness in order to compare them with the apparent specificities of the electronic/digital age.

It is assumed that the typographic man or the Gutenberg man had a certain type of consciousness as he used preponderant written words and texts, while the new electronic era is producing a different kind of perception of reality as it has brought into the foreground the visual, the images, replacing the words as main signs for communication with the images.

McLuhan identified four historical epochs when referring to preponderant means of communication: oral-tribe culture, manuscript culture, Gutenberg galaxy, and electronic age. Taking as indicators of the big social changes the main means of communication, McLuhan (1997) discusses as well the cultural turns the humanity has experienced since the electronic era has started to manifest on the global scene. The author highlights that the humanity has been changing the doors of perception of reality by changing the predominant means of communication.

Taking into consideration the above-mentioned aspects, we assume that the definitional characteristic of the new era rests on the hypertrophy of the visual, as code of communications, placing words (written or spoken) on an inferior position. The consequences of that transposition have been discussed by diverse specialists, yet the implications for the world society are not fully understood or anticipated. We believe that it would be important that the academic world to seriously reflect upon educating young generations, the digital natives, taking into the consideration the achievements of the Gutenberg galaxy. As the new media of communication has changed dramatically since cinema entered on the social scene or since the common use of smartphones occurred in the late 2010s, the features of the written culture are less and less present as "the ubiquity of smartphones" (Metcalf 2021) becomes the new feature of the communicational environment.

For instance, the recent released in Romania of the legal interdiction (MEC, 2025) for using smartphones in schools, during the class hours, represents an indicator that the devices generate behaviors that severely interfere with the traditional educational models, whether we speak about distracting the attention of pupils from classes or about the subtle influences not yet detected when speaking about mental or cognitive maps of the pupils.

In this article we assume that the major difference between previous era of communication and the current digital environment consists in the differentiation between the culture of words and the culture of images, be them images in motion, and we intend to reveal some elements highlighted by scholars when trying to comprehend the major changes that have been produced by the prevalent means of communications on human consciousness.

## 2. THE CULTURE OF WORDS AND THE CULTURE OF THE IMAGES

The culture of words and the culture of the visual/the image are the themes the theorists of communications discuss and analyze when trying to understand the profound implications of such a change. By using words as prevalent signs of significance, the value of national languages increased during the Gutenberg era.

The changes from an era to another, specifically from the oral and the manuscript culture to the typographic culture, was not an easy process, and even understanding the changes was a difficult enterprise. McLuhan (1962:11) reveals, for instance, that even

> the map was a novelty in the sixteenth century […] Columbus had been a cartographer before he was a navigator […] The map brings forward at once a principal theme of King Lear, namely the isolation of the visual sense as a kind of blindness.

What kind of blindness the visual culture might have involved? McLuhan (1962:17) captures the change writing that

> by 1709, Bishop Berkeley in his *New Theory of Vision* was denouncing the absurdity of Newtonian visual space as a mere abstract illusion severed from the sense of touch. (McLuhan, 1962:17)

Saying that the "medium is the message", McLuhan (1997) not necessarily simplified understanding the changes or his concept of the one-dimensional man. By citing Bertrand Russell, who wrote in 1925 *ABC of Relativity*, the author suggests that

> what is demanded is a change in our imaginative picture of the world... The same sort of change was demanded by Copernicus, when he thought that the earth is not stationary . . . To us now there is no difficulty in this idea, because we learned it before our mental habits had become fixed. Einstein's ideas, similarly, will seem easier to generations

> which grow up with them; but for us a certain effort of imaginative reconstruction is unavoidable. (McLuhan, 1962:41)

McLuhan tried to explain why print culture confers on man a language of thought which leaves him quite unready to face the language of his own electro-magnetic technology. The idea the author upholds, that schizophrenia may be a necessary consequence of literacy or the fact that the basic aspect of any literate audience is its profound acceptance of a passive consumer role in the presence of book or film are just a few observations related to typographic personality.

The observations McLuhan makes seems random ones, without using certain categories for classification. A few examples show that diverse areas of human experience are involved:

> The invention of the alphabet...reduced the use of all the senses at once, which is oral speech, to a merely visual code.

> The alphabet is an aggressive and militant absorber and transformer of cultures.

> The discovery that the representation of *natural appearances* is quite abnormal and also quite imperceptible as such to non-literate peoples, has created some disturbance of mind nowadays. That is to say, single plan lineal, visual, and sequential codification of experience is quite conventional and limited. (McLuhan, 1962: 45-53)

The entire spectrum of the transformations the digital era determine is hard to anticipate, yet we may presume that the visual code will be the prevalent code for communication. Regarding the perception of reality, when speaking about images as signs, the idea that there is no obvious cultural correlation between visual and reality as it happens in the case of the correlation that exists between words and reality may produce the false impression of an immediate access to truths. The fake idea that the visual represents the reality and not a language might confuse the audience who might not interpret that the content may still be the human psyche. When we learn to speak, we learn much more than simple words, notices Hartley (1999). Speaking also involves selection and organization of experiences. The same happens to images in motions. The movies hardly respect the principles of objectivity, wrote Bela (1957). The order of the images involves a composition, even when the director's desire is just to be clear and intelligible. What is to be seen in movies? What is to be seen, replies Bela (1957) existed before the

montage was made, even before the images were selected. The director photographs the reality, but the meaning results from montage. Neutrality is impossible. When the spectator recognizes himself on the screen then the star is born, evokes Barna (1972). In movies you cannot find reality, but realities, wrote Bazin (1969). Every era has its own realism and cinema just leaves the impression that it is a language that everybody understands, but it's not true. Cinema is an art similar to literature whose raw material is a preexisting and autonomous reality. It's about the language of objects, which is inherently elusive. There are many situations when the director thought that he had expressed an idea perfectly clear, without possibilities for digression, but the spectator might find a lot of concrete details, others than those selected by the stage director. The thinking of concrete is preferred to the detriment of the abstract thinking. Bazin (1969) asks the question what the public see? And noticed that the content of the images was not the same for the stage director and for the spectator. The difference most of the time favours the concrete to the detriment of the abstract and the paradox of the cinema is that it expresses the abstract ideas by using the very concrete representation of reality. And that's its power and its perdition. Bazin (1969) signalized that under the shield of the innate realism of images an entire system of abstractions fraudulently sneaks. Apparently, the events are cropped according to a natural anatomy of nature, but actually the reality is subordinated in integrality to the meaning of the actions and is transformed without signaling into a series of abstract marks.

The isolated images may represent the nature, but the montage may reveal the truth or the lie. The images in motion have a great influence at emotional level (Giovannini, 1989). The public has the tendency, for instance, to vote/support the candidate for emotional reasons, even if they not agree with his views.

Speaking about the humanist culture, Abraham Moles (1977) considered that humanity experienced a stage during its evolution when a doctrine of knowledge was created. The doctrine assumed the existence of major themes for thought contrasting to those of minor importance.

The humanist culture had proposed a hierarchy, an order for the concepts, involving the existence of some general integrating ones. One's perception of reality was "educated" to make certain connections with a network of concepts, to make references to a cultural screen having predefined routes. The cultural texture was composed of main ideas/routes, secondary, tertiary...and so on. The cognitive map was one constructed by coherent notions and concepts, a network of important thoughts, having certain themes functioning like intersections. The educated screen of knowledge on which the new perceptions were projected had the design of a canvas or of a spider web.

The question would be now how the mantal map is configured in the digital age? To have a clue about its design, we have searched for specialists, like Abraham Moles (1977), who wrote about the visual culture. He used the phrase 'mosaic culture' in order to describe the mental map of a person living in a visual environment. He evokes that the cognitive map is not organized in a similar way the culture of words organizes. In a mosaic one, the world is discovered by chance, using the proximity relations between things or events. Replacing the words with the images, people perceive reality by juxtaposing things, objects, colors etc. The challenge signaled by scholars (Berger 1978) would be the images to be kept under the explanatory power of the words, because the autonomy of the human beings from nature was permitted by literacy and it started with the word usage. The progress of humanity was made possible by the humanist culture, by the language, the alphabet, the words, and the cognitive map they produced. The images communicate to senses. The variability of the features of things speaks to senses, while the absence of things affords thinking. Rene Berger (1978) defined the new cultural media the "kinetic amalgam". The world of representations is full of signs and the universe becomes the Great Amalgam: that's the world of images, the new words.

Berger (1978) wrote about the mutation of the signs and about the new conceptions of time and space, the essential concepts of the consciousness. The great cultural mutation generated by bringing the images at the center of social life and by replacing the words as main codes of communication modified the general feeling that the reality had an essence, visible or invisible, exact or approximate, true or apparent and the belief that in a way or another the reality could be identified and defined.

Yet in the digital age we discover that visible are the things which deserve to be seen. To identify the visible items involves as well to qualify them.

The hypertrophy of the images to the detriment of words favors the sensitivity to the detriment of the intellect and spontaneity to the detriment of

critical thinking. The image is meant to be seen, not to be understood. The image is not an allegory to provide food for thought, but a signifier which can make you happy or sad, having no other consequence. Having no significance, the signifier degrades until becomes just a signal for sensitivity.

It's true, the excess of rationality has generated the excess of irrationality and of affectivism. Attracted by the movements of images, people leave mostly of the time outside them. The interiority needs words, meditation and dialogue. Knowledge has evolved during time as long as the verbal significant was produced, by abstraction and generalization. Intellectual and theoretical significances were not supposed to be seen, the abstract thinking was placed beyond the sensitive appearances of things and phenomena.

For instance, when speaking about images in motion, the movie language, it seems that its language definitively satisfies people's obsession for realism. Because the movie language looks like concrete reality, it benefits by the favorable bias of objectivity. Other arts cannot hide the codes used to communicate (words, shapes, sounds) in order to capture understanding and the sensitivity. For instance, TV shows are mainly seen, but less heard. The demonstrations or the allegations generate impressions, rather than thoughts. At the TV debates the public mainly react saying that a certain person inspires or not confidence and the feedback is less expressed by saying that the argument is or not convincing. The images are suggestive, less logical. For instance, the assumed objectivity of a photography provides the message with credibility, but a painting has no such an attribute. The photography benefits from a transfer of reality and movies seems to be the perfection of that transfer.

The visual culture benefits as well by the optimist perspective that the new cultural climate has recovered the faculties lost during Gutenberg period. Communicating preponderantly using words, notions or abstract concepts, peoples lost the feeling of proximate reality. The new digital era modified the perception of reality and the structure of the human consciousness has been tribalized.

Because of the printing materials, especially books and press, it was assumed that the schism between though and action, reason and sensibility, visual and audited was institutionalized.

Knowledge was perceived in terms of positivity, fragmentary, segmented, and forged to a certain rhythm unspecific for real life experience and living. As words constructed the one-dimensional man, the images were believed to reconstruct the multi-dimensional man. It was assumed that the Gutenberg technologies produced the fragmentation of human personality and the knowledge produced the analytical man, a cold and a detached personality. By naming, the objects were extracted from nature's anonymity and placed as objects to be observed by man. By providing the possibility to refer to an absent reality, to an invisible one, the words inaugurated the autonomy of the interior life from the exterior one. The anthropomorphism was no longer perceived as an isolating screen, but the greatest way to the essence of reality (Berger 1978).

The visual culture is a non-conceptual one, more concrete and more accessible than the notional communication. The images possess ambiguity and give no explanation, yet the public searches for meanings in images, that's why the commentaries are essential. When communicating through images the mind follows the eyes and not the eyes follow the mind like in everyday life situations.

The photographic image represents the zero level of intelligibility, an infrasemantic level and less meaningful. The level of denotation is relevant anyway as it upholds the second level of interpretation, the connotation. (Barthes 2007)

The subjectivity of the events is glorified within the visual culture. Every carving of events is determined by the a priori conception of the "director" and the worldview of the photographer becomes the object of reality in itself. It involves not only a dramatic choice, affective or ethical, but a taking of a position towards the reality.

What exactly drives the photographer in choosing the significant images? It is an option taken in that moment or there is a program derived from an artistic conception? Bauret (1997) believes that the second option represents the honest one as long as the public becomes aware about the selection and the criteria that reflects the photographer's preferences.

In order to express the cultural differences between people living in different countries, McLuhan (1962: 19) notices that "whereas for Europeans, in general, *seeing is believing*, for rural Africans reality seems to reside far more in what is heard and what is said."

## 3. FAKE-NEWS AND THE POST-TRUTH SOCIETY THE DIGITAL AGE

The transformation of the culture of words into the visual culture meant as well losing the obsession and the preoccupation with the reality. The truth of an image was no longer contested. The

scientific truths were less prone to be express visually. The images, the chemical structure of elements, for instance, were considered the objective views of a micro reality. As the images satisfied the need for objectivity, we presume people lost interest in imagining the invisible truth.

It is possible that the truth decays the society is experiencing nowadays to be the consequence of visual communication. The truth that cannot be photographed, the invisible truth, has no place within an universe of physical representations. The fake-news phenomenon and the number of studies published in order to teach the audience to identify the disinformation may be the symptom for the disinterest of the general public in the truth. If the truth is hidden by the written text, the public who no longer has patience to read texts may opt to ignore the reality. We assume that the visual and the digital culture deeply transformed the knowledge interest of people. The fact that the blogs have become so dizzyingly infinite may have as a consequence the undermining of our sense of what is true and what is false, what is real and what is imaginary. (Keen 2007:5) The post-truth society or the truth decay have become realities as the search for objectivity is no longer an important issue in people's life.

The fake-news phenomenon might be in the interest of scholars, but not for the majority of people. The majority of people might be interested in expressing their personal subjectivity or consuming information disrespectful to its truth value. Keen (2007:5-7) notices that children can't tell the difference between credible news presented by objective professional journalists and what they read on blogs.

> For these Generation Y Utopians, every posting is just another person's version of the truth; every fiction is just another person's version of the facts. The New York Times reports that 50% of all bloggers blog for the sole purpose of reporting and sharing experiences about their personal lives. The tagline for YouTube is *Broadcast Yourself.*

The cultural shift towards millions of subjectivities undermines the very interest in knowing the truth, the interest in the objective reality or in the scientific truths. Having in mind the conspiracy theories, even scientific truths are relativized and transformed in "relative truths". The paradox that reality exists as long as one perceives it reverse the very essence of knowledge: the observer studies objectively the reality. Within the new cultural environment, the observer becomes in fact the observed object. The observer becomes the selfish observer.

Writing about the cult of the amateur, Keen (2007) highlights the superficiality of the people, who are no longer preoccupied in seriously analyzing realities. The new cultural environment it's about subjectivities, that's why Keen recommends: "let's not be remembered for replacing movies, music, and books with YOU!" (Keen 2007:204) As long as the aggregated behaviors generates the social world, the social becomes mere subjectivities. The same remark makes McBrayer ,

> there's no point in producing misinformation unless there are people to consume it…We regularly consume misinformation for two reasons. Sometimes we don't really want the truth. Other times we want the truth, but the costs of getting it are too high…our participation in the information market is more like a sport than a science: we don't get into the game to carefully figure out what's true (McBrayer, 2021:40-41)

## 4. A NO TO MORE DIGITALISATION OF EDUCATION

Nowadays the recommendation for reading an article often refers to time necessary to read the text: the shorter the time, the better. When speaking about education, it's not only about processing the content, yet it is about patience. Without training and discipline, children are unlikely to have patience in reading and interpreting texts, articles or books, as long as they are used to instant consummation of information, as internet provides.

The second aspect, the more they consume online information, the higher the visual content. "Consuming" less information transmitted through words and more information transmitted through images the effort required for reading and understanding the content transmitted through books most probably will raise. The balance between the two codes of communication should be seriously analyzed in order models of teaching to be designed for implementing learning by reading and writing.

To establish as goals for the educator's/ teacher's community to be assertive with the new digital generations and to make effort to accommodate teaching methods to the new digital content might not be the best way to maintain the achievements the humanity got during history. "We need to find a way to balance the best of the digital future without destroying the institutions of the past." (Keen, 2007:185)

Even the digital natives might be resilient in keeping their patterns of consuming information, we believe that it would be extremely dangerous that the academic and teacher's communities not to intervene. Even if the behavior of reading books might seem obsolete and boring for the new generations, the teacher's community should find ways in order promote leaning by reading and writing, by using mainly words and not images instead.

## 5. CONCLUSIONS

We believe that the new social realities of the digital natives have not yet manifested the full spectrum of effects generated by the new devices and the new means of communication. The differences between different generations might be easy to be observed. The new paths the digital world invite us to open are brand new. Having no maps for the uncertain digital future, we analyzed in this article the idea of restoring the old cognitive maps in order to scrutinize the future. Instead of running too fast ahead, it might be important to take a look at history and at the evolution stages of humanity, especially when speaking about great changes and achievements that marked different eras of development. As a consequence of the mediated reality by the movies, life seems a pretext for the spectacle. The people's action and words seem to have importance as long as they are transformed and represented on photography… it seems that flesh and blood have less value than the recorded realities (Aristarco 1992).

Understanding the Gutenberg era as a specific period of time which produced scientific advance and cultural progress, it would be prudent no to lose sight of the cognitive maps the Gutenberg era constructed. We believe it's too risky not to cultivate the values generated by the previous generations, the generations educated in the spirit of humanist culture, and repudiate old learning and educational methods which have as fundament reading and writing: the words. Switching too fast to a world built on images and consuming mainly images in motion, the society might risk its existence since truth no longer is valued adequately. Certain truths cannot be relativized. As the scientific truths have inner value, values the humanity strived to achieve during time, it would be important not to abandon the traditional educational values. Making a reference to a specific film procedure, the travelling back may have different hermeneutics. The progressive expansion of the visual field with different speeds allows the director to express multiple meanings: conclusion, psychological detachment, taking distance from present time, accompanying a character, the impression of solitude, discouragement or, helplessness, and so on. (Agel, 1969)

## BIBLIOGRAPHY

1. Agel, H. (1969). *Din tainele cinematografului.* Bucharest: Meridiane.
2. Aristarco, G. (1992). *Utopia cinematografică.* Bucharest: Meridiane.
3. Barna, I (1972) *Lumea filmului.* Bucharest: Meridiane.
4. Barthes, R. (2007). *Imperiul semnelor.* Chișinău: Cartier.
5. Bauret, G. (1997) *Abordarea fotografiei.* Bucharest: All Educațional.
6. Bazin, A. (1969). *Ce este cinematograful?* Bucharest: Meridiane.
7. Bela, B. (1957). *Arta filmului.* Bucharest: Meridiane.
8. Berger, R. (1978), *Mutația semnelor.* Bucharest: Meridiane.
9. Giovannini, G. (1989). *De la silex la siliciu.* Bucharest: Editura Tehnică.
10. Hartley, J. (1999). *Discursul știrilor.* Iași: Polirom.
11. Keen, A. (2007). *The Cult of the Amateur. How Today`s Internet is Killing our Culture.* New York: Doubleday.
12. McBrayer, J. (2021). *Beyond Fake-News. Finding the Truth in a World of Misinformation.* New York and London: Routledge.
13. McLuhan, M (1997). *Mass-media sau mediul invizibil.* Bucharest: Nemira.
14. McLuhan, M. (1962). *The Gutenbergh Galaxy. The Making of the Typographic Man.* Toronto: University of Toronto Press.
15. Metcalf, K.N. (2021). Information Agression – a Battlefield for Smartphones. In M. Holger; V. Sazonov; A. Chochia & T. Kerikmäe (eds.), *The Russian Federation in Global Knowledge Warfare. Influence Operations in Europe and Its Neighbourhood.* Berlin: Springer. 195-212.
16. Ministerul Educației și Cercetării. (2025). Comunicat privind utilizarea telefoanelor mobile în școli și implicarea în activități care interferează cu procesul educațional. *MEC* [online]. URL: https://edu.ro/comunicat_ presa _07_2025_regim_riguros_utilizare_telefoane_ scoli [Accessed on April 26, 2025, 11:28]
17. Moles, A. (1977). *Sociodinamica culturii.* Bucharest: Editura Științifică.