



New Languages for the History: Transformations Mediated by the Digital Technology

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ABSTRACT :

Based on the 15 years long analysis on the investigation about the relationship between Research and Knowledge in History and the Development of Digital Technology for the teaching and research in this knowledge area, comes up an interpretation of the new contributions that the digital technologies are bringing for the knowledge in History, from the innovations on the content and the interpretations, up to the several innovations on the way that the knowledge in History starts to interact with the several subjects potentially interested parties: researchers, teachers, students, citizens of several origins and interests. The technologies of the information - TI are starting, it seems to, a new stage of the dialogue among this knowledge field and others, but also with the potentially interested subjects, which start to get closer and with more critical potential of the knowledge in History.

Keywords: History Methods, New Languages, Education Technology, Information Technology, History Teaching.

1. INTRODUCTION :

This study is dedicated to the analysis of the impact that the coming of the digital technologies is provoking in the field of History knowledge, in particular, relating it with the emerging most general alterations in the Humanities,

and even in the wider human knowledge. At first we elaborated the analyses with focus in what was stipulated as "new languages" of the History, but believing that the concept of new languages doesn't bring us the dimension of what is at stake, we took a risk at the end to navigate in the direction of a discussion of a more

historiographic stamp and of interpretation of what is History and Knowledge in History, considering the deep transformations in course, not only in this knowledge field, but in the whole group of the human knowledge, affected by the network society that seems to emerge with the digital technologies.

The study is based on the analysis of years of research and production about the relationship between History and the Digital Technologies. Since 1991, we are working with this link because it was when we participated actively in the creation and encounters of the Sociedade Brasileira de História e Computação – SBHC, (Brazilian Society of History and Computation) (Aguiar, 2016). Besides, since 2001, we have participation in publications, generating registrations of education digital systems belonging to the extent of the relation between History and Digital Technologies. This experience along with the fact of being guiding or to have guided a considerable number of works of post-degree in this field, gave us condition and to use a methodology of exploratory raising enriched with examples and interpretations, about how the development of the digital technologies are moving forward and influencing the History.

We started examining the first contacts and pioneering studies about the relationship of the History with the Digital Technologies, for later to invest in the exam of several relationships between the History and the Digital Technologies, in way to approach subjects as:

- History and Databases;
- Computation Techniques and its influence in History research;
- GPS and its use in History research
- Virtual museums, 3D modelling and other modellings, and the knowledge in History;
- Development of Education Digital Games and the knowledge in History;

- WEB Pages, Hypertextuality and History studies;

- Open Education resources and the History study;

- Ancestry, Ancestral History Mapping and community;

- Innovations in the conception and interpretation of History.

The article will operate in that room between the presentation and interpretation of innovations in the form of writing and researching History, and also in the form as it is understood and accomplished the own knowledge in History and the performance of those entitled as historians or historiographers.

2. THE APPROXIMATION BETWEEN HISTORY AND DIGITAL TECHNOLOGIES

The dialogue of the History with other fields has been leading the field gradually to positions of larger complexity and depth, producing new forms of understanding the History. It was like this with the so-called auxiliary sciences of the history, such as paleography, chronology, numismatic, still in the XIX century, expanded the criticality and the erudition to the History studies (Glénisson, 1979). During the XIX and XX centuries influences of the economy, the arrival of the perspective marxian, the growing dialogue with quantification and with psychology, they have added to the field a larger complexity and understanding on the demographic, economical and social history (Cardoso & Brognoti, 1983).

With the proximity of the XXI century more interdisciplinarity will join to the History. It is from 1997 the excellent work organized by Ciro Flamarion Cardoso and Ronaldo Vainfas, named *Domínios da História* (Cardoso & Vainfas, 1997), in which several authors do show all the progress diversity and discussion of the History, which evidenced influences of the Linguistics, new psychology influences, of the

sciences of the communication, of the anthropology, of the philosophy, of the semiotics, of the sexuality, of the religions, among other progresses that were being welcomed by the historians that enlarged and turned it even more attractive and close to all the knowledge of the History.

The XXI century increased interdisciplinary influences: History was becoming in my opinion, a field of studies more and more interdisciplinary. François Dosse and his *História em Migalhas* (Dosse, 1992), as well as also the excellent work *In Defense of History* from Ellen Wood and John Foster (1997) and his skilled updating and recovery of the best marxians traditions given to the XXI century, or still José Carlos Reis (2003) work, that starting from the analysis of the post-modernity, and also Dosse's study, deepens concepts of temporality and historicism.

To this past of development is added the transformations in course, due to the dialogue between History and the Technologies of Information amid all force of the digital means, in the last thirty years.

Since 1987 I could participate in the growing digitization and presence of the information technologies in the transformations of the History field of knowledge. The doctorate in the Universidade Federal da Bahia - UFBA with one year of studies in Université Laval, Canada, was an important point in which was studied the relationship among the hypertexts, the hypertextuality multimedia, and their relationship with the teaching-learning and with the concepts of the History. In this work I became aware on the thought of Martineau (1997) on Historical Thinking, social-constructivist concept that interprets the human being as not just historical subject, but potentially historian and endowed with a thinking and interpretation of the history about his own existence. According to our studies this perspective articulates well with the progresses of the History coming from the dialogue with the information technologies,

aiding in the accomplishment of the potential of engagement of the subjects in their own interpretation process and construction of the history that positions and contextualizes them (Matta, 2006).

It is based in these presuppositions that we present the following relationships and transformations of the History with respect to the new languages coming from the progresses of the network society (Castells, 2013).

3.USE AND EVOLUTION OF THE DATABASES IN HISTORY

Data banks or databases are repositories of indexed information that are already used for support, organization, articulation and interpretation of studies in History since the middle of the XX century. Already in the 90's got attention pioneering and gigantic bases of such data as the Medieval and Early Modern Data Bank - MEMDB, that already had online access and they were built by Rutgers University, of New Jersey, among others (Figueiredo, 1997).

Nowadays we think that is no longer possible the progress of knowledge in History, without the contribution of the databases. The computers and system servers of historical data make possible immediate online access to every series of data, documents and information, allowing that more and more complex researches can be accomplished. Thanks to its presence the original ones in paper, precious relics that demand the best conservation, need no more handling because the digitization of the documents has become current (Manning, 2013).

In fact solutions of virtual museums and virtual archives are being produced more and more capable to supply the rarest and sophisticated support to the historiographic studies and interpretations (Reimer & Calley, 2004).

Excellent and attended virtual museums are common now. Van Gogh Museum of Amsterdam, for instance, offers several exhibitions of the author's work, interpretations of the same, documentation about the life of the genius of painting and still the orientation for the consultation and for presential visit. One of the features of the virtual museum is to proceed precious service, and nevertheless to be a very important strategy to provoke the presential visit (VAN GOGH MUSEUM, 2018). We could present many examples, the most important however is to notice that the virtual museums build simulations and new relationships among subjects without formation in history and the knowledges in History, aiding to develop new relationships of the knowledge in History with the general public. Many other virtual museums are appointed by WIKIPEDIA(2018) and its visitation may indicate the force of the development of the approach.

Examples of information and document bases such as the Arquivo Nacional da Torre do Tombo (2018) or the Arquivo Nacional (MINISTÉRIO DA JUSTIÇA, 2018), or still the Fundação Biblioteca Nacional – FBN (2018), they maintain WEB pages with excellent documentation collections and information of public access, and some outstanding collections that offer precious services of consultation and study. The documents turn to be accessible to many interested people and without the limits of distance, since accessed virtually.

I complete this reference to the databases and their uses for the History development presenting an example that shows how archive and virtual museum projects based on information database in History are welcome, relatively of low cost and simple of accomplishing. It is the digitalized collection of O Malho, magazine of the beginning of the XX century that has been presented by the Fundação Casa de Rui Barbosa's WEB page. A relatively simple and high value project, capable nowadays to dispose this valuable document to the Brazilians (FUNDAÇÃO CASA DE RUI BARBOSA, 2018).

The Instituto Histórico Geográfico Brasileiro was also one of the pioneers in this field, since it maintains the possibility of digital consultation of its important and secular magazine (IHGB, 2018).

COMPUTATION TECHNIQUES, MINING AND OF MODELLING OF SYSTEMS AND THE RESEARCH IN HISTORY

The influence of the information technologies in the history certainly has the oldest partnership in the ingenious and effective ways that the computer science organizes the information that are the food of the investigation in History. From that comes the importance already examined of the archives, virtual museums and databases, but there is also the most recent tendency of using the processing and the modelling of the systems itself and the computing operations on the information, an innovative part and without antecedents for the historical studies.

It is in that sense that here we will explore, although shortly, the work techniques on complex networks, on the system ontology perspectives and about the mining of data:

One of these approaches has been moving forward a lot when considering work techniques on complex networks for the understanding of social relationships of the past. The ontologies and historical cross-checking of data are used and this way it is possible that if it turns visible, for instance, inter-regional relationships, complex intertemporals, connectivity relationships, as well as complex exploration of databases of historical interest. They are study types that are beginning and they inaugurate a new dimension of the investigation works in History. It is possible, for instance, to find relationship of distribution of products or of enslaved, from the registrations of movements of ports of the XVII century, data of the ports of Salvador, Lisbon, Havana, Macau, Luanda, Quebec, York, Alexandria or other, looking for from elaborated keys, as situation descriptors,

objects, people circulation, relationships that could never be discovered without the support of the systems (Brughmans, Collar & Coward, 2014).

Another innovation for the historians is that one which refers to the establishment of the ontologies. The system theories work with concepts and with construction of concepts for the data or for the data groups that so start to have new forms of structured reading. So that we call it ontology the capacity to build models of data organizing, concepts of categories, or qualities in the data, that are capable of redefine the information and allowing more and other interpretations. As a consequence of the digital progresses it is possible today to reformat the historical source, reappoint to new organization parameters and interpretation, already in the moment that it is organized and also their access keys (Abbas, 2010). An example of that was the ontology created in Korea aimed for elaborating a concept of "historical architecture". Such ontology gathered temples, towers, spaces and famous places and several constructions. To designate the concept it was created an ontology that understands the historical construction as being composed of a) name of the construction, b) style architecture, c) associated artifacts, d) associated events, e) associated facts, f) histories and associated legends, g) subjects and involved people and h) medias about the construction. This way was built not only an organization to the historical buildings but a concept that attributes its historicity, according to the accomplished understanding (Falquet, Métral, Teller & Tweed, 2011). The ontologies are associated to the mining techniques of data capable to accomplish deep articulations, complex and innovative to the data, depending on the organization and ontology established (Alves, 2018).

The practical example that I think deserves greater emphasis comes from the Universidade de Coimbra effort. Joaquim Ramos de Carvalho and Saul António Gomes developed a research on approximately 17 thousand sources from the parochial and notarial registrations of the Óbidos municipality, Portugal.

Took place the organization of the ontology of what would be the data registrations, it was built from mining procedures and articulation of data, a complex and enormous network that linked the inhabitants of the municipality, their descendants, ascendancies and several cross-checkings so that all of the families and their members of the Óbidos municipality, are understood and organized in their life history and in principles of ancestry understanding, from the XVI century to the XIX, what allows to people of the present, all over the world, to look for, if they have, their past references in the municipality. Works such as this are pioneering and precursors of the revolution that is about to come (Carvalho & Gomes, 2018).

This progress can be verified in two WEB pages that I highlight:

- 1) <http://www.geneall.net/P/> (Geneall, 2018).
- 2) <http://www.rede.cm-obidos.pt/Home/UI/HomeUI.aspx>

4. THE GPS PROGRESS AND ITS CONSEQUENCES FOR THE HISTORY

One of the most important revolutions that information sciences are accomplishing in the human society is exactly the detailed mapping in space and time of the whole terrestrial surface, geographical accidents, oceans, urbanities, climatic zonings, human geography distribution, highways, roads and other elements that characterize the primordial environment of our lives, the planet Earth.

In fact georeferencing became one of the most promising contributions to research in History. From the use of GPS instruments for the exact location of trails and reference places in History (Gregory, Kemp & Mostern, 2001).

Many examples are available. We intended to present a work on which I was involved in as co-advisor. Fernando (2014) has resulted in a doctorate thesis defended at UNIFACS, guided by Edivaldo Boaventura and co-guided by this author.

The researcher developed several aspects linked to the community of Canudos, a small city of the Bahia's northeast, right inside of the drought perimeter, where by the end of the XIX century there was a violent war among countryside men and the Brazilian army, the Guerra de Canudos (Mello, 2014). Figueiredo used georeferencing to travel the roads of the war, translating it into precise positions all of the routes and relative positions to the historical movement.

5. THE 3D MODELLING AND THE DEVELOPMENT OF SIMULATIONS AND SOLUTIONS OF PAST livingness

The computing graphic modelling of 3rd dimension, known as 3D Modelling, it is just one of many ways that are presently being produced aiming the construction of Virtual Museums. We are highlighting instead of others because we think that such a modality, that presupposes the simulation constructions of space and linkings of the past, in several levels seems that when well applied to the study of the history, it can represent innovative articulations to this knowledge field. The simulation constructions of realities, situations and historical contexts, also situation simulations, it happens so that today we can simulate to "participate" in the history, and in case we adopt the Bakhtin's perspective and dialogical of the polyphonic sharing of statements, even we can be in a certain way returning to the past.

In this modality of Virtual Museum we are building, or better, rebuilding some simulations of concrete situations existent in the past.

In this way we developed two 3D models with visitation and presentation of historical information and dialogue possibility with historical characters, on the Quilombo do Cabula in the year of 1807, about slave capture in colonial Brazil, and more one about an ancient theater in Salvador city.

The two works can be visited in the WEB pages below:

-Quilombo Cabula 1807 -

<http://www.museudocabula.com.br/>

-Teatro São João, século XIX -

http://teatrosaojoaodabahia.net.br/download_s.html

It is undeniable that the progress in the direction of the virtual museum and simulations leads the history to new dialogues linked to the historiography and the meaning of the History as knowledge field. Besides that, it favors the complex and full of information historical knowledge, diverse and plural, to be accessible to portions ever larger of interested parties and to populations whose citizenship will be better presented if could dialogue and participate in the production of the History sense from the dialogue with what be simulated.

From these experiences and improving the concepts and representation forms, two studies now: go further, one on the 3D modelling the old Quilombo do Cabula; a camp of Salvador city's outskirts, that became a resistance center of former-enslaved released, and of their cultural manifestations, as well as other one with the modelling and conception of Virtual Museum on the Teatro São João, first theater Salvador city, important center of culture of the XIX century, demolished since the 1930 decade.

6. EDUCATIONAL GAMES AND THE STUDY OF HISTORY - WILL THEY ACTUALLY BE GAMES?

The digital games initially were considered as one more entertainment field and in peculiar, the digital entertainment, considered then a branch of the called electronic games. Later there was a progress when being considered that, the digital games could be useful in education including there the teaching-learning of History.

A little more resistance was found, and in fact it is still, when we assert that the digital games work for the study, discussion, and for progress of the historiographic knowledge.

In fact the games are being used to provide in digital language the historiographic dialogue, even quite sophisticated ones. It is the case of the excellent software Portugal 1111, an educational game that reproduces in the form of involving digital game what there is of more recent interpretation about the called Wars of Reconquest of the Iberian Peninsula, at that time of the Islamic invasion. The game creates the situation of expansion of the areas of influence of Christians or Islamic lords, in direct correlation with the expansion of the populations and structures of base of each stronghold. The game discusses the subject amid the practice of the simulation of what happened, amid the game (Vila De Soure, 2018).

In another perspective, with the game concept that we called RPGAD, we built a simulation of events of the history and we made possible that the player "participates" in a simulation of the history and he can from this simulation, live the pertinent issues and historical processes. It is in this way that we produced the campaigns Independência da Bahia and Abolição so to be played with the RPGAD (Matta, 2018).

What we did from Independência da Bahia and Abolição made possible that graduation students in History, therefore specialized students in the knowledge field, leaned over in the exam of the anthropology, and main historiographic debates about the themes, through the experimentation of a simulation on the context and the historical events, as interpreted by the historiographic lines that we considered to simulate the study (Vidal, 2013).

We present here WEB pages which hold examples of games used for the teaching of the History.

1) English WEB page with digital games about History:

<http://www.history.co.uk/games>

2) WEB page about the portuguese game Portugal 1111:

<http://www.portugal1111.com/>

3) WEB page with game about the Independência da Bahia and Abolição of our authorship:
<http://rpgad.soterotech.net/login>

7. WEB PAGES, HYPERTEXTUALITY AND STUDY OF THE HISTORY

The Internet became popular and of common use between 1995 and 1996. Ever since its influence in all fields of the human activity only grows every day (UFPA, 2014).

The practice of giving diffusion destiny to the historiographic knowledge through WEB is so big and widespread now that we think is unnecessary more deepening, considering it has become a true common sense.

In the vanguard of the transformations and possibilities that this article lists is this knowledge diffusion in History through the WEB pages and the consequent popularization of the History knowledge, more and more accessible. In fact a good argument about the need for the professional Historians penetrate in the knowledge of the digital means and its possibilities for the Historian, it is exactly in the need to be in person guiding and dialoguing with a society more and more historicist and without doubt, thanks to the Internet access.

Following, some examples of History development in several WEB pages:

<https://www.gov.uk/research-family-history>

<http://www.history.com/>

<http://www.ahm.nl/>

<http://www.dhm.de/>

<http://digital.nls.uk/broadsides/>

<http://newspaperarchive.com/>

<http://www.historyandreenacting.com/>

<http://users.erols.com/mwhite28/20centry.htm>

<http://www.otsf.org/>

<http://stephenambrosetours.com/>

<http://www.tours-international.com/>

<http://www.politicalgraphics.org/home.html>

<http://www.authentichistory.com/>

8. OPEN EDUCATION RESOURCES - NEW DIMENSIONS FOR HISTORY LEARNING

Digital alternatives are developing faster the historical thinking in people, be them basic teaching students, be interested adults. The education software, many of them of free distribution, free software, take History and the way of thinking historically anywhere to all the interested parties much easier. Unlike informing that as a positive fact, it has potential of being harmful. History left at once the situation of erudite knowledge and it becomes popular. For that to be positive it will demand a new profile of the history professional, of the History teacher who now will have to assume a more flexible communication capacity and mediation.

Software environments, some bearers of innovative concepts on organization and storage, as well as information recovery, they inhabit the world network.

Only under the condition of repositories of education software for History, we mention the following examples:

<http://www.algonquincollege.com/oer/repositories/>
<http://www.open.edu/openlearn/history-the-arts>
<http://teachinghistory.org/>
<http://besthistorysites.net/art-history/>
<http://arthistoryresources.net/ARTHLinks.html>
<https://www.khanacademy.org/humanities/art-history-basics/beginners-art-history/a/cave-painting-contemporary-art-and-everything-in-between>

More innovator is a software of the WIKI type that develops knowledge networks and links among knowledges, already often used by historians. The Qedoc, whose link is below.

[http://www.qedoc.org/index.php?title=Main Page](http://www.qedoc.org/index.php?title=Main_Page)

We believe that new ways of learning History implicate in new ways of thinking the History, which means not to despise the innovations in course.

9. IN SEARCH OF THE ANCESTRY - MAPPING AND COLLABORATION WITH THE COMMUNITY HISTORY

In 2014 we accomplished a research on São Braz's community, a camp part of the municipality of Santo Amaro da Purificação, city whose history remounts back to XVI century, in Bahia's bay area. The research grew to understand the ancestry of the community (OLIVEIRA, 2007).

In this study, building a study on the community's ancestry, we accomplished an intervention and it collaborated with the research in history in a way to generate a collective writing, managed and mediated by the historian Aline Assis, who took care of the references and of academic format of the study, as well as of the validation exercise and text constructions that translated the interpretations, and also participated with the community on the text constructions and understandings that the community kept building of itself through the interdisciplinary research on its past and ancestry, thus working at what we prefer to name as community conscience, and a founded systematized version of its history and of the community's interpretation.

This possibility of collective writing and of a history in fact organized by the communities, accompanied by a composition and systemization of results mediated by professionals of History, it is an innovation potentiated by the development of the digital technologies. Such a study is registered in what we think was the first investigation accomplished with Brazil's DBR methodology (Santos, 2014).

10. INNOVATIONS IN THE CONCEPTION OF HISTORY

In fact, we can verify that the development of the digital technologies, besides the influences in what refers to sources, and to presentation forms and insertion of History in new languages, it is beginning to

participate in the discussions on history and the historiography and producing new important and intriguing roads in what refers to the interpretation of the History.

To understand the effects that the advent of digital technologies is provoking in the history, we take as important to accomplish the discussion that already happens, for instance, in the works of Roy Rosenzweig e Daniel Cohen (2015), Edward Ayers (1999), Orville Burton (2002), Willians Thomas and many other (2015).

We agreed with the authors that advocate we are living in a network society, more and more interconnected (CASTELLS, 2013). The field of history knowledge passes then to be considered more and more interdisciplinary. The History, enriched by the digital networks and by the constant and continuous hyper-connection, it is treated more and more and with larger naturalness, well integrated with the Geography, with the Anthropology, with the Education, with the Psychology, with the Law, and in fact with so many others fields so that there are indications that the humanities became a hybrid field, in which users of several origins interact and recreate associations and relationships between information and knowledge coming from the humanities, mainly, but not only from them.

On the other hand, the sources, so much traditional digitalized, as in digital records, they are more and more available and in network, corroborating with the understanding that an interdependent and collaborative society is becoming viable and more and more strong, thanks to the database networks and to the several ways, literally infinite, of new accesses and new forms of questioning the data, in general with almost instant answer. An organization dimension, readiness, and capacity of systematized answer that never a historian of 30 or up to 20 years old could ever imagine to be possible, or he would ever be the aware that possibility, even remote.

This situation is making history starts to "leak". It is impossible not to recognize the great amount of new publications, tending to a countless number with the most several historical interpretations that are appearing

thanks to the easiness of the internet publication. This way it is more and more common to see some History professional, recognized researcher, complaining over great amount of poorly done researches, or unauthorized ones, that are published in the world network. That only reveals that history is becoming popular. Writing, lively, in the video or audio form, texts that interpret the history are bubbling everywhere. The formation historian needs today to live together with that and to rethink his role. It doesn't seem us that "sensing" the productions and interpretations of history by the people in in some way should be implanted, especially because it would have little chance of success in a world more and more computerized. This way we are before such a serious questioning on the history and the historiography, that we needed even rethinking which the historian's paper. Would the historians be prone to be mediators of collectivities or sections that want to interpret the history? Something similar to the journalists that are responsible for newspapers that publish ideas and news of a certain group? It is early to reach a conclusion, but certainly it is not early to put that in the agenda.

Still in this direction appears the possibility of "dirtying" the authorship. The authors are in fact, today, co-authors. In so far that if it is very easy to inform, to collect a text, a content, linking it to another one, to rework their implications. Be noticed that when a user of the internet finds a text, a video on History, and links it, creating a connection to other text, that makes sense for him, he is already interpreting it and in a certain way, being a co-author. This easiness is hindering the identification of the individual authorship of History studies and it is developing the writing technologies and collective interpretation. The hyper-composition of texts and contents from varied supports can be accomplished with so much easiness now that the notion of individual authorship seems to be totally threatened. With such a threat how the history will be? A idea of a historian who collects evidences, documentation and several sources of "voiceless" sections.

The idea of a bottom sight history as belonging to a historian that looks for the sources, seems to be being substituted by the owners themselves of the subordinate voices that now take the reins in their plans and build their own interpretations.

I interpret that it is a fabulous revolution that it returns to the community the capacity to think itself and build what is conceived as community identity, without passing by a external specialist's sieve, strengthening the lowest levels of individual identification of authorship, instead strengthening the idea the knowledge of collective authorship. The discussion that fits here is the one of the disavowal of thinking in himself, and of having considered and validated the interpretation that each community and social group has of itself, after the arrivals of the universities and institutions of bourgeois researches that little by little, through the formation programs, as well as with the one of research, they went disapproving the non-academic thinking and non-labeled as scientific, on themselves, and on the reading that each group has of its community, culture and history. Be noticed that even the tendency of "bottom sight history" or of the one that conceives "give voice to the excluded and defeated", it has been happening in the measure of the "protection" and scientists' supervision and academics properly authorized.

The current movement is going against this position. I don't want here to position me against the university and nor to simply give a welcome to the spontaneous knowledge of the subjects. But it is undeniable that the movement is happening and not to see it or to fake not to see it, is not a solution. Now it's up to the History professional to interpret that historiographically and, this way, I have a positioning, to notice that in education sciences for instance, the recognition of the expertise and the capacity of building his own pedagogic road, it is recognized today. To all the subjects it didn't reduce the importance of the theoretical and academic studies in education, instead they have been a preparation challenge and new deepening.

The digitization of the society and the wide fomentation situation to publication and authorship that the subjects are receiving, they show that the historians need to position, to interpret the potentialities of the new situation, and finally, to find the roads of the specialized knowledge in History, in the situation that comes up now.

It is well-known that only with the advent of the press, the representation of the ideas started to be predominantly connotative, symbolic, with the prevalence of the interpretation of text of the complex symbolism of the printed argumentations, as the form of representation of the ideas, what would require sophistication and complexity in the reading and writing. We cannot deny advantages and gains with such advent, but it is also true that more direct and image-like, or direct narratives ways of representation are the human beings' spontaneous format and that helps a more simplified understanding and interpretation, a lot more wanted in the place of the complexity of the symbolic interpretation. The digital way of the society and of its communication in contemporaneity, they bring this older and spontaneous form to the condition of dominant. Besides, that is one of the forces that we consider as pertinent to the new generation of subjects, laymen in History, in the sense of never studying the secrets of this knowledge field academically, but active historiographers in the matter that they build huge digital collections of new History interpretations in several and endless WEB pages spread all over the network. In the same line is the return to the synchronous representation. Before the press, the message or presentation of an idea or context, in a theatrical representation, in a drawing, in a practical action, it is synchronically related to what was presented. The usual was the representation or presentation of elements that once worked or interpreted presented the related effects already directly. The advent of the hypermedia as representation form, as well as robotics, it accomplishes the same semiotic procedure, however this time with the aid of the machines,

turning the operation about the synchronous representation possible in this society so automaton and massive. Every time that a hypermedia link actuates, a synchronous event takes place, returning the human being to the predominance of the previous representation, the invention of the press.

Once more we are before events that make us question which is the situation of the professional historiographer and his academic formation, in this new conformation of the information and knowledge, that as seen, they reach in full what is considered to be History, its knowledge field and professionals.

This discussion is well shown in Cohen and Rosenzweig's WEB page (2015).

10. CONCLUSION

The influence of the information technologies in history certainly has the oldest partnership in the ingenious and effective ways that the computer science organizes the information that are the food for the investigation in History. From that comes the already examined importance of the files, virtual museums and databases, however also there is the most recent tendency of using the processing and the own modelling of the systems and of the computing operations on the information, an innovative part and without antecedents for the historical studies.

It seems to us that we are before a revolutionary context and that the influence of the digital technologies in the society, coming from the historical needs of the market society, are today moving forward for non-thought situations, and I dare to say, not controlled by the hegemonic capitalist society.

Our discussion and everything that we presented identifies this situation in what refers to organization, production and distribution of the human knowledge, today extrapolating the condition of social control of the hegemonic classes, at least in relation to what we can notice, and approximating the humanity to the capacity of editing, produce and diffuse knowledge of popular

authorship and with reading validation and acceptance for the readers, that it depends no more on the academies, universities, and institutions classically designated for this validation.

It is inside this group of transformations that we understand to be the History and the knowledge in history. Besides having built storage means, researches, edition, simulation and diffusion without precedent in History, the advent of the digital technologies gave possibility to the autonomous authorship. Communities, people without certification nor graduation, without any recognized formation, today they are in condition of getting up, organize and build their interpretations of History, with their readers' own validation, and that can happen without any dialogue or even in contradiction to the academic studies. It is like that for instance, that we see the Islamic State building its own versions of the historical interpretation and deciding as for the life and people's death, to enter in war, and to base that in their interpretations. Other groups and sections are making the same thing.

That the digital technology altered the way to research and to study history seems today very clear and the historiographers need to recognize and to study more on that. Beyond this aspect, to recognize that History now belongs to the communities and subjects and that they can and they should produce their interpretation of History, in peculiar of that one they are engaged in. However, that takes the professional historiographer, with knowledge of techniques and of validation rigidities, to think as how he will integrate himself to that knowledge avalanche that I call as "apocryphal", of the History, now produced by all and by anyone, even so in the social networks, in an unstoppable and uncontrollable way.

I interpret this tendency as having more positive consequences than negatives, because I am not sympathetic to the control that the academy accomplishes on the production of historical knowledge before our times, but of course we cannot also

allow the knowledge to be validated by the subjects without any criticality or verification proposal of its coherence and articulation with the concrete history. This is the challenge for the Historiography in this beginning XXI century.

REFERENCES :

- Abbas, J. (2010). *Structures for Organizing Knowledge: Exploring Taxonomies, Ontologies, and Other Schema*. Chicago: ALA Neal-Schuman.
- Aguiar, L. (2014). História e Computação: o papel das Associações Nacionais de História e Computação na discussão das novas tecnologias digitais no fazer historiográfico. **XXVI Simpósio Nacional de História**. São Paulo: ANPUH. Available at: <http://www.snh2011.anpuh.org/recursos/anais/14/1300876034_ARQUIVO_Anpuh2011_trabalho_leandrocoelho.pdf>, accessed on March 06, 2016.
- Alves, D. (2014). *Digital methods and tools for historical research*. International Journal of Humanities and Arts Computing. Available at: <<https://www.eupublishing.com/doi/full/10.3366/ijhac.2014.0116>>, accessed on March 01, 2018.
- Ayers, E. L. (1999). *The pasts and futures of digital History*. Charlottesville, University of Virginia Press.
- Arquivo Da Torre Do Tombo. (2014). *Arquivo Nacional da Torre do Tombo*. ARQUIVO DA TORRE DO TOMBO. Available at: <<http://antt.dglab.gov.pt/>>, accessed on March 01, 2018.
- Brughmans, C. & Coward. *The connected past: people, networks and complexity in archaeology and History*. Central Birmingham. Disponível em: <<http://centraltag.wordpress.com/call-for-papers/the-connected-past-people-networks-and-complexity-in-archaeology-and-history/>>, accessed on May 02, 2014.
- Burton, O. (ed.). (2002). *Computing in Social Sciences and Humanities*. Urbana: University of Illinois Press.
- Cardoso, C. & Brognoti, H. (1983). *Os métodos da História*. Rio de Janeiro: GRAAL.
- Cardoso, C. & Vainfas, R. (1987). *Domínios da História*. Rio de Janeiro: CAMPUS.
- Carvalho, J. & Gomes, S. (2005). *Rede de investigação de Óbidos*. CÂMARA MUNICIPAL DE ÓBIDOS. Available at: <<http://www.rede.cm-obidos.pt/Home/UI/HomeUI.aspx>>, accessed on March 01, 2018.
- Castells, M. (2013). *Sociedade em Rede*. Rio de Janeiro: ZAHAR.
- Cohen, D. & Rosenzweig, R. (2015). *Digital History: a guide to gathering, preserving, and presenting the past on WEB*. Available at: <<http://chnm.gmu.edu/digitalhistory/>>, accessed on July 05, 2015.
- Dosse, F. (1992). *A História em migalhas*. São Paulo: Ensaio.
- Falquet, G., Métral, C., Teller, J. & Tweed, C. (2011). *Ontologies in Urban Development Projects*. Berlin: Springer, 2011.
- FBN. *Fundação Biblioteca Nacional*. FUNDAÇÃO BIBLIOTECA NACIONAL, 2017, Available at: <<https://www.bn.gov.br/>>, accessed on March 01, 2018.
- Figueiredo, F. (2014). *Geoprocessamento e Redes Sociais Digitais: uma contribuição para o estudo da comunicação em canudos*. 2014. Tese (Doutorado em Desenvolvimento Regional e Urbano) - UNIFACS. Salvador.
- Figueiredo, L. (1997). História e informática: o uso do computador in CARDOSO, C. e VAINFAS, R.. *Domínios da História*. Rio de Janeiro: CAMPUS.
- FUNDAÇÃO CASA DE RUI BARBOSA. *O Malho*. FUNDAÇÃO CASA DE RUI BARBOSA, 2017. Available at: <<http://www.casaruibarbosa.gov.br/omahlo/?lk=50>>, accessed on March 01, 2018.
- GENEALL. *Geneall, portal de genealogia*. GENEALL, 2017. Available at: <<http://geneall.net/pt/>>, accessed on March 01, 2018.
- Glénisson, J. (1979). *Iniciação aos estudos históricos*. São Paulo: DIFEL.

- Gregory, N., Kemp, K. & Mostern, R. (2001). Geographical Information and Historical Research: Current progress and future directions. *Humanities and Computing in History and Computing*. Volume 13, pp. 7-23.
- IHGB. (2017). *Revista do IHGB*. IHGB. Available at: <<http://www.ihgb.org.br/rihgb.php>>, accessed on March 01, 2018.
- Mello, F. (2014). *A Guerra total de Canudos*. São Paulo: Escrituras, 2014.
- Manning, P. (2013). *Big data in history*. Hampshire: Palgrave Macmillan.
- Martineau, R. (1997). *L'Echec de l'apprentissage de la pensée historique à l'école secondaire. Contribution à l'elaboration de fondaments didatiques pour enseigner l'Histoire*. Tese (Doctorate in Education) - Université Laval. Quebec.
- Matta, A., et ali. (2018). *RPGAD*. Salvador. Available at: <<http://2dejulho.rpgad.net.br/login>>, accessed on April 23, 2018.
- Matta, A. (2006). *Tecnologias de aprendizagem em rede e ensino de História*. Brasília: Liberlivro.
- Ministério Da Justiça. (2017). *Arquivo Nacional*. Arquivo Nacional. Available at: <<http://www.arquivonacional.gov.br/cgi/i/>>, accessed on March 01, 2018.
- Oliveira, E. (2007). *Filosofia da ancestralidade: corpo e mito na filosofia da educação brasileira*. Curitiba: Editora Gráfica Popular.
- Reimer, J. & Calley, B. (2004). *Collaborative Access to Virtual Museum Collection Information: Seeing Through the Walls*. Binghamton: The Haworth Information Press.
- Reis, J. (2003). *História e teoria*. Rio de Janeiro: FGV.
- Santos, A. (2014). *Ancestralidade e História no Recôncavo Baiano: Construção do conhecimento ancestral no povoado de São Braz em Santo Amaro*. 122f. Dissertação (Mestrado em Educação)-Programa de Pós-Graduação em Educação e Contemporaneidade, Universidade do Estado da Bahia, Salvador. 2014.
- Thomas, W. (2007). Writing a digital history journal article from scratch: an account in *History and Computing in Digital History Project*. Available at: <<http://digitalhistory.unl.edu/essays/thomasessay.php>>, accessed on July 05, 2015.
- Van Gogh Museun. *Van Gogh Museum*. VANGOGH MUSEUM, 2017. accessed on <<http://www.vangoghmuseum.nl/vgm/index.jsp?page=98&lang=en>>, accessed on March 01, 2018.
- Vidal E. (2013). *Aplicação do Jogo RPG by Moodle para aprendizagem sobre a guerra de Canudos*. Dissertação de Mestrado (PPGEDUC) - UNEB. Salvador.
- Vila De Soure. (2004). *Portugal 1111, a conquista de Soure*. Vila de Soure. Available at: <<http://www.mobygames.com/game/windows/portugal-1111>>, accessed on April 23, 2018.
- UFPA. (2014). *Computador e Internet: 1990-1999*. UFPA. Available at: <<http://www.ufpa.br/dicas/net1/int-h199.htm>>, accessed on July 06, 2014.
- Wikipedia. (2016). *Virtual Museum*. WIKIPEDIA. Available at: <http://en.wikipedia.org/wiki/Virtual_museum>, accessed on March 01, 2018.
- Wood, E. and Foster, J. (1997). *In defense of History: Marxism and the postmodern agenda*. New York: Monthly Review Press.