



The Intersection between Real and Virtual in Contemporaneity through 3D modeling for the São João da Bahia Theater in Brazil

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ABSTRACT :

This article is the result of the experience as a teacher and historian, and especially of the doctoral thesis, defended in the year 2017, through the Graduate Program in Education and Contemporaneity at the State University of Bahia, construction of a 3D modeling solution for the São João da Bahia Theater, considered as a pole and reflection of the praxis of the Savior of the Nineteenth and Twentieth centuries. The conception was developed from the problem of the inexistence of a modeling in the socio-constructivist perspective for the São João da Bahia Theater. In this way, the research aimed at possibilities for the subject, understood here as intellectual in the Gramscian perspective, to be a historian of oneself (subject subject), to build new knowledge (metacognition) through meaningful learning, mediated by the practice of visitation and interaction with the museum proposed.

Keywords: 3d Modelling, Cognitivism, Dialogism, History, Museum, Polyphony, Simulation, Socio-constructivism

INTRODUCTION :

For this, the thesis was built in a transdisciplinary context, that is, the field of History, Education, and diverse areas, such as Architecture, Music, Art, Geography, Design and Digital Information and Communication Technologies, spoken and written press, diverse collections as vast iconographies. Thus emerged from this research contexts that reported a Savior and a São João theater, rich and rich in their dynamics, and which, therefore, gave "rule and compass" to follow with the authentications, the construction of the Virtual Museum of TSBA and solution and applications practices.

With these perspectives, this socioconstructivist modeling solution took as its epistemological principles Praxiologia in Antonio Gramsci, which made us understand that man is not a static, idealized and imagined being, but a concrete subject that exists from the reality it establishes with its peers and, consequently, its relations of existence. Dialogism and Polyphony (Bakhtin, 2010), in which every man emerges from interaction with the other, since man only makes sense if he relies on another man, that is, we can only be through the collectivity. Thus, it brings us here one of the central principles that permeate this thesis and, in turn, the Virtual Museum, that is, the other as key points in the dialogical reality.

The immediate development zone (ZPD) in Lev Vygotski, contemporary of Jean Piaget, does not rule out the process of language acquisition, but different from Jean Piaget's constructivism, he focuses his theoretical approach from the social for the individual. For Vygotsky, methodologically, understanding man is understanding context through a materialistic, dialectical, and historical approach. For this author, learning and development become possible only when the previous knowledge that the subject brings with it is worked, listened to and contextualized independently of the learning environment in which it is.

DESIGN BASED RESEARCH

Vygotski (2009), in his studies on the construction of Thought and Language, states that the individual can not mediate outside his context, outside his reality. It is through the collaborative system that this individual constructs his autonomy, and this autonomy is the starting point, if not the most important, between the threshold of learning and, consequently, the development of this subject and the Historical Thinking in Robert Martineau, which brings at the heart of the thesis is that, without any problem, there is no history. Since for the individual to develop historical reasoning, it is necessary to raise questions from the present to answer the questions of the past and not as established until then, respond to the present.

Concomitant to these epistemes, the research was engendered by the DBR (Design Based Research) methodology, which is characterized by cycles, practical and applied solutions. The cycles are the dialogues with the subjects that emerge not only from this text and contexts, but also from the collection itself, which resulted in the Virtual Museum, São João da Bahia Theater. Authentications are, in turn, the returns that these subjects give us in relation to the established cycles. Thus, also in the DBR methodological approach, the subject Philosopher is part of a whole,

as the subjects that dialogue in equality in the emergence and draw of this thesis, in the consultation and authentication before the community, that materializes with the mediation of this subject active in history. It is a methodological approach that is effective not only in practical solutions, but also in its applications and endorsements, which try at all times to be meaningful for this dialectical subject in history, according to socioconstructivist solutions, through the TSJBA Virtual Museum, which, for the moment, this thesis aimed to make effective. The Basic Research Design Methodology consists of steps, steps like any other, but it has a great differential in relation to other methodological proposals that are the search for solutions (among all involved) and that has at its apex the practice and application of these solutions through authentication, cycles and their interactions.

Thus, the thesis was proven through the application cycles that occurred between the period from March 13 to April 7, 1st cycle of application, and from April 8 to May 12, 2017, 2nd cycle of application, totaling 61 days. In order to do so, 5,972 views of the TSJBA Virtual Museum site were recorded, of 2,357 actions carried out by the 2,235,000 subjects and users directly to the TSBA Virtual Museum, in addition to the forums that were formed in social networks, partnerships, of the collaborative networks of the Virtual Museum, of its presence in many media outlets, not only in Bahia but also in some media out of Brazil, and access in all continents in 4 countries, in 21 states Brazilians and in the many cities of Bahia, Brazil and the World. In the 3rd cycle, 3rd application, until the closing of the writing of the thesis, June 15, 2017, and that, for didactic and scientific reasons, not deepened in its analyzes, have already registered the access of more than 300 users and 661 views of pages, 172 in Brazil and 489 in the world. And, as the Virtual Museum proved itself, dialogic, polyphonic and socioconstructivist,

it continues in constant transformations, moving towards cycles of interaction and intermittent interactivity, for the present and future generations, when contextualizing ancestry, habits, customs, history and the memory of the City of Salvador and Bahia.

THE SÃO JOÃO DA BAHIA THEATER

The São João da Bahia Theater (TSJBA), a landmark and reflection of the dynamics of social relations in the City of Salvador, began its operations in 1806, inaugurated in 1812, in the stately Salvador, ended in a fire, to date not very well explained, occurred in 1923, and was definitively demolished that same year. Today, the absence of the TSJBA is felt, not only as physical patrimony, but also as immaterial patrimony. Therefore, in order to analyze and understand this absence and to contextualize the importance of TSJBA in Salvador in the nineteenth and twentieth centuries as the radiating pole of our culture, it is necessary to investigate, apply, share not only the theater physically but also its legacy to the contemporaneity. Thus, the problem that guided the thesis was constructed: the lack of a Virtual Museum Dialogical Model for the Old TSJBA and with a socio-constructivist approach; model in the sense that it can be put in evidence and mediated, capable of solving the current absence of this institution, so important for the city in its time and that reverberates in the present time.

This problem led us to an applied research directed to the construction of an educational environment, a software Virtual Museum of the São João da Bahia Theater, within a socioconstructivist approach as a parameter of accomplishment of this learning environment and that is drawn in the interactive condition of a digital museum. Thus, in order for these contexts to materialize in a virtual learning environment (AVA), mediator and in

constant transformation, it was necessary to approach, methodology and method that anchored and made possible our dialectical thinking, which implied, among other possibilities, the solution and applied practices. With this purpose, we adopt the epistemological strands found in Gramsci (1989), a) the subject philosopher of self (self-knowledge); (b) the elaboration of this knowledge and (c) contradictions (contradiction in coexistence), that is, the praxiological, because we believe that man is a reflection of his actions, autonomous in the construction of his knowledge, nothing is suppressed and denied, but coexisted in an imbrication of opposites. And yet, there are no hierarchies in knowledge and, in contrast, there are accumulations and transformations of these knowledge. As a research approach and method and methodology, we chose Design Basic Research (DBR), which, in addition to interacting with and integrating with the praxiological nexuses, allows us to intermittently feedback the context investigated and, a) the exchange of autonomy of the subjects involved in this scientific search; b) from collaboration, interventions, exchange of experiences and the solution applied through a cognitive design, enabling its continuities and simultaneities; c) and, because it anchored in the overcoming of the qualitative and quantitative duality and also in the epistemological encounter of these praxis, the understanding that nothing can be denied, despised, but everything is being dialogued through the Digital Information and Communication Technologies that the contemporaneity offers, therefore, without them, it would not be technically possible to simulate this AVA. The new languages are found in the life of man and, in particular, in the educational and educational environment. Tangenciando for the human sciences, in this case History and Education, History constitutes as a form of approaches, as a means of investigating the context in

question, and education as a field that surpasses not only for the already constructed, but also for the potentiality to constitute through human relationships.

METHODOLOGY

In order to arrive at close results in response to these contemporary questionings, we set out to investigate the tradition that was bequeathed to us by supporting the characters that emerged from the contexts investigated and which we consider as the first validators and authenticators of the thesis, through of the perceptions of the travelers of the time and of the productions referenced in History of Bahia and Brazil, for example, in primary sources, local periodicals, and not primary, current and current surveys, written in physical means and available in digital), sequencing in an ample research related to the iconography, images of the São João da Bahia theater, as well as to an extensive bibliographical reference.

We also exchange knowledge with related areas such as Music and Architecture, for approaching the contexts investigated. In this way, we need a co-orientation of the Musicist Lucas Robatto, PhD in Music, by the Federal University of Bahia (UFBA), who has long been a student of TSJBA art and routine and other multidisciplinary teams such as design, architects and software programmers. Then, paths were trodden in Salvador: in the Public Archive of the State of Bahia (APEB); in the Municipal Historical Archive of Salvador (AHMS); in the Public Library of the State of Bahia (BPEB); in the Geographic Institute and History of Bahia (IGHB); in the libraries of the Institutions of Education: UFBA, State University of Bahia (UNEB); in foundations and their private collections; in the Institute of Artistic and Cultural Heritage of Bahia (IPAC); and, in Rio de Janeiro: in the National Library (BN); in the National Historical Museum (MHN); in the National Archives (AN); at the Historical and Geographical Institute of Rio de Janeiro (IHGRJ); in the National

Historical and Artistic Heritage Institute (IPHAN). Extensive research was also carried out in libraries through digital media - electronic addresses - such as the Torre do Tombo Archive, Portugal, the National Library of France, and various portals, local, national and international journals.

All these spaces that safeguard the sources of research have returned us unparalleled possibilities to dialogue with the now completed thesis. In this sense, through its collections, we sometimes perceive, in a broad way, at other times, in a more restricted way, to hypothesize on what was and how the TSJBA dynamics and its context occurred. We saw the hypothetical TSJBA as a grand house of spectacles, which began in 1806, to be a medium that almost always modified the customs, habits and tradition in the Savior of the nineteenth and twentieth centuries and was in line with them, in addition to which this institution became the reflection of Bahia. At this intersection, the TSJBA has revealed to us not only various nuances of a Savior that has not yet been studied, but also how praxis overlap, even when those who think to dominate culture, tradition, try to deny them. We researched a TSJBA still alive, with its conflicts and tensions. We live in a Theater that slides in the political issues of the time, in its national and international Dramatic Companies, its actors and actresses, its censures, its routine. It was therefore necessary to construct the Simulation of this institution so that the present and future generations can interact with this patrimony that physically was so sorely taken away in 1923, which justified the development of this research. Therefore, this research, with adherence to line 1 - Cultural Plurality and Civilization Processes, of the Graduate Program in Education and Contemporaneity of UNEB, had as its theme, the Virtual Museum of the São João da Bahia Theater, through a socioconstructivist approach.

THE INTERSECTION BETWEEN THE REAL AND THE VIRTUAL IN CONTEMPORANEITY

Virtual comes from the Latin *virtualis*, *virtuale*, which means strength, permanence, power. From the spread of TDICs, it became popular as a process that is created, as opposed to physical presence. We can say that, from the perspective of human vision or human reach, real is the true and the non imaginary. Pierre Lévy (1996), one of the great scholars of the area of communication and new forms of approaches in Information and Communication Technologies, brings us a vision that is also pertinent to the virtual. Let us consider that the subject exists from the mediation with the other, object and subjects do not separate. This same author gives us a context about deterritorialization and the virtual as the central focus of cyberculture, being for him the virtuality, one of the propulsive springs of collective intelligence, at the same time that we have always been constructed from the virtuality, the simulations without necessarily depend on current technologies.

Already considering real and virtual in the fields of simulation and cognition, fields that we work on the thesis, we also contextualize the counterpoint of Frawley (2000), regarding the virtual machine and the real machine. It brings us the properties of which virtuality and reality are dimensions, different conceptions, because the former works from the reality of the second, but both are based on true cycles, since virtuality is an integral part of reality, and so on. So to register the question of virtuality is to understand that virtual is all that man produces, which goes beyond the extension of his body, which he intervenes, transforms and concretizes. In this case, the chipped stone produced by our ancestors millions of years ago is virtuality; the bow and arrow produced by the Tupinambás in Bahia 700 years ago, also constitute virtuality.

Thus, the proposed Modeling Solution for the TSJBA collection, through a socioconstructivist approach, is obviously also virtual, but with a differentiated load of interaction, interaction and speed in its propagation, because we can say that, if before we were just we now have the possibility of being digital as well. Therefore, in conjunction of these two words, museum and virtual, we have an environment that goes from its physical, territorial form - the museum, to the online, virtual form, so it is also considered here as a democratic space, because anyone around of the connected world can visit it, as it ran during the application and interactions of the Virtual Museum through which, for example, people from Russia, India, Canada, and Japan not only visited the Museum of the São João da Bahia Theater, as they dialogued with the characters contained in it, thus enabling mediation, creation of zones of development and learning.

From this perspective, the digital museum was developed as a virtual environment for a collection that no longer exists physically but could be reconstructed through the devices that current technologies offer, that is, 2D and 3D simulation programs. Considering that immersion is the action that is established when the subject creates a relationship with the machine, the manipulable reality, which can be characterized in different ways, for we can not say, for example, that a child of 10 years will have the same "reading of the world" than a 20-year-old. The interaction would be the relationship that is manipulable reality can achieve, because, for there to be interaction, it is necessary to have the minimum of interacting components, that is, the interface between the subject and this manipulable reality. Interactivity, in our case, would be the range of immersion and interaction that the manipulative reality, Virtual Museum of the São João da Bahia Theater, can offer. In this sense, for the construction of the Virtual Museum of the São João da Bahia Theater

to achieve immersion, interaction and interactivity, this subject of the XXI century needed support, mainly, in the cognitivist bases in L. Vygotsky and in the praxiological basis in A. Gramsci . In this way, it aims at a better understanding of the world.

In this work, the author also defines how Virtual Museums can be classified according to their innumerable specificities. Thus, they are classified as to content, as to interaction, as to duration, as to communication, as to the level of immersion, as to the form of distribution, as to scope and as to sustainability. Therefore, the Modeling Solution built here for the TSJBA can be classified, within the parameters above, as: a) as to the content: Historical Museum; b) regarding mediation: interactive, interactive and interactive virtual museum; c) as to duration: permanent, temporary, and intermittent; d) regarding communication: direct and indirect (narrative / descriptive, dialogic, polyphonic); e) immersion: highly immersive;

f) regarding sustainability: open source, free software, availability on any platform that supports the software used, and can be used in real time; g) in scope: educational / educational and research.

To the thesis was added another item, the question of deterritorialization as a democratic space, because there are Virtual Museums that carry through the virtual environments, collections of spaces that exist physically and spaces that no longer exist (Figure 1). Examples of those simulating collections of historical contexts that exist physically and give us a spectacular 3D view, is the case of the Vatican's direct Sistine Chapel. And the case of historical contexts that no longer exist physically, for example, the simulation of the primitive nucleus of Salvador (Gomes, 2011), that was formed during the beginning of the XVI century, in which the internaut interacts with personages of the time and, at the same time, at the same time, creates links with our heritage, tradition, customs and customs.

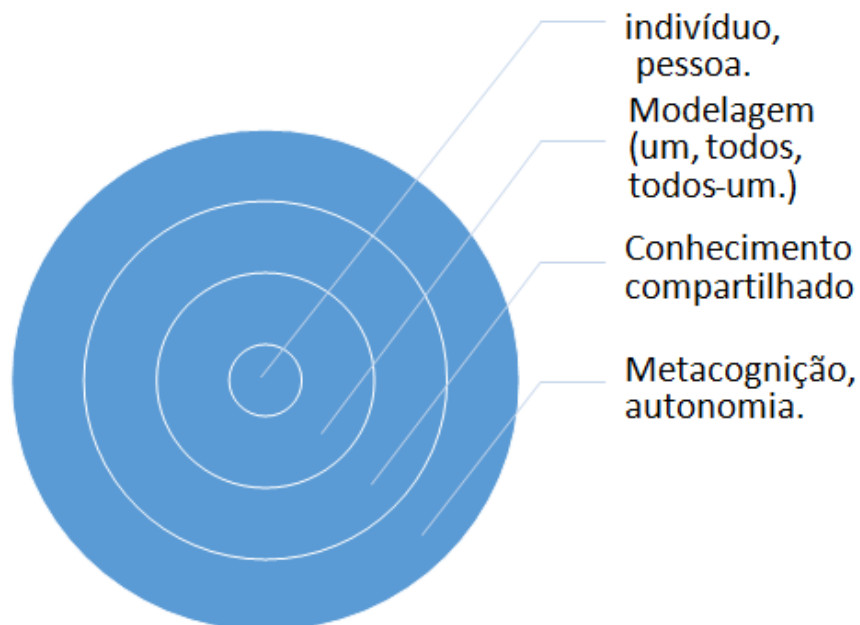


Figure 1: Collaborative system (Source: Gomes, 2017)

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ANALYTICS FOR VIRTUAL 3D MUSEUM OF THE SÃO JOÃO DA BAHIA THEATER

Cycles, applications and authentications were registered for educational and scientific purposes through google analytics,

(free program in which the user is allowed to register and mark their data through possible tools available in their environment), which, in turn, generated the graphs that gave us parameters for analysis from the visits and interactions of the subjects and internauts to the São João da Bahia virtual museum,



Screenshot 1: Virtual Museum, São João da Bahia Theater, screenshot, external environment. (Source: Gomes, 2017)

as well as a database, specifically constructed for research / thesis that coordinated all the interactions of the subjects / users and Internet users.

Therefore, when opening this first application, for analysis and authentication of the Virtual Museum São João da Bahia Theater already modeled (Screenshot 1 & 2).



Screenshot 2: Virtual Museum, São João da Bahia Theater, screenshot, internal ambience. (Source: Gomes, 2017)

Through data registered by the Google analytics software, we have an overview of

how the interactions in the 1st cycle, 1st application, and subsequent authentication (Figure 2).



Figure 2: Overview, period from March 13 to April 7, 2017. (1st application, 3rd cycle) (Source: Gomes, 2017 & Google analytics)

The period from March 13 to April 7, 2017 (1st application, 1st cycle), we had 2,357 sessions, 1,997 subjects users, 5,079 page views, 84,73 new users, with peaks of interaction between the 28 March 2017 and April 4, 2017, remaining stable over the following days, with a 48.98% rejection rate, which we interpreted as users visited the page and for some reason did not want to interact or failed to download and interact for operational reasons. Through these registries and those that followed, we can perceive, in a general way, the encounter of all the variables in the interactional process between the Virtual Museum and the interacting subjects, mainly encompassed by the collaborative networks / webs that were constructed throughout the process.

Graphs were constructed to give us parameters and measurements for scientific analysis and results. These graphs, Figure 3, mirrored, in a macro manner, as the Museum in 2, and 3D became, showed and demonstrated dialogic, polyphonic, mediator, philosopher of self, interconnecting subjects / users in time and between the

times, not only in this contemporaneity, but between different centuries, that is, the variables and subvariables contained in the indicative table, not reported here, and in the variables table, verified in practice through the exchange of the knowledge of these subjects and respective meetings through Virtual Museum, which, when interacting, dialog, for example, with characters such as Castro Alves, Emperor Pedro II, Xisto Bahia, and visited the external environment, Salvador of the 19th century, simulated in the virtual museum, concretized the actions we call validation and or authentication. The thesis here deals with the Virtual Museum, São João da Bahia Theater, with a socioconstructivist approach. And, for this first application and authentication / validation an average of 84.7% of new user subjects, during the first application of cycle 3.

It means to say that the Virtual Museum has been fed back all the time. The 2nd application, 2nd cycle, that took place from April 8, 2017 to May 12, 2017, is the result of the collaborations of the 1st

application, 1st cycle. In this second application, the Virtual Museum obtained an average of 775 page views with 38 users, some of which accessed 2 or 3 times, totaling 222 users and 351 interactions and actions, and 44.7% users / new subjects and 55.3% return of users / subjects. The 3rd cycle, 3rd application, was the improvements / improvements coming from the collaborations and

partnerships of the 1st and 2nd applications, since we work with practical solutions and cycles (processes) in which we will always be giving feedback. So, for the 3rd cycle, 3rd application, which, for reasons of didactics and science, has not been deepened here in its analyzes, we already have the access of 340 users, with 975 page views, 296 in Brazil and 628 outside it (Figure 3).



Figure 3: Overview, period from March 13 to May 12, 2017. (Overview all cycles, application) (Source: Gomes, 2017 & Google analytics)

However, from the data recorded in our database and generated by the Google Analytics program, until the closing of the writing and contextualization of this thesis, May 25, 2017, we have obtained the following data: in terms of the number of users, we had an average of 2,235; to the number of pages viewed, 5,972, with 80.5% of users returning to the Museum and 19.5% of new users / subjects and Internet users. We also recorded an average of 217 visits from countries that visited the site and / or the museum virtual. And, we are in more than 50 countries, as we can see through the data (Figure 4).

CONCLUSIONS

In this way, we come to the conclusions of the research / thesis, because the Virtual Museum São João da Bahia Theater has become a virtual environment of socio-constructivist learning, with some caveats. The caveats, we would say, would be the transformations that could be put in the Museum due to the mediations that it suffered, but which, due to costs and deadlines, could not be put into practice, for example: carnival, with the masks as a means of mediation, sonorization; a greater number of artistic characters



Figure 4: The Virtual Museum around the world (Source: Gomes, 2017 & Google analytics)

inside the Museum; responses of the characters as devolutive to the interacting subjects; a more practical solution to the plug and play issue; to place all the dialogues of the Virtual Museum (texts) in a second language, preferably in the English language, so that there is a greater interaction and interactivity on the part of the internauts around the world; a better resolution of answers so that operating systems can "run" the Virtual Museum, São João da Bahia Theater, by at least 90%, punctuating the mishaps that discouraged Internet users from downloading and navigating the Museum; the impossibility, at this moment, of the subjects and users to be able to see the course and to create collaborations from the interactions and interactivities within the Virtual Museum itself, that is, a more dynamic collaboration system; and so many other details that could be listed here in this closing analysis.

Building a Virtual Museum from the perspective of the São João da Bahia Theater was not an easy task, because it demanded a meticulous operation in every sense, because, as material and immaterial patrimony, it is great; grandiose in its architectural form, grandiose in its context, grandiose in its way of mirroring a dense, plural, rich culture. Therefore, in this thesis, we try, slowly and within

possibilities, to reflect the importance of the São João da Bahia Theater in the cultural context of the City of Salvador throughout the nineteenth century and its representativity in the present time. To do so, it was necessary to study carefully the contexts of the subjects who, together with this researcher, constructed the design between theory and practice. In this process of sedimentation, the research started from a first and second contexts that, little by little, revealed the City of Salvador-Bahia and the routine of São João Theater, and, for adopting praxis and DBR (Design Basic Research), they needed be authenticated before the external and internal community, so that, in this way, their valuable collections could compose the Virtual Museum of the São João da Bahia Theater.

Thus, this collection showed us a unique Bahia, with its mansions, its commerce, its cuisine, its anonymous subjects and its famous subjects, with its religious plurality, and Salvador as a starting point and arrival for the great international artistic companies, national and local, also showed us the rich dynamics of their social relations. In contexts in which we dialogue with the students of the category of Vygotsky, Bakhtin, Gramsci and many others, we

pinch their mediating poles such as dialogue, polyphony, praxis, immediate development zones, history as a problem, into the Museum Virtual, as they have proved to us how the theory can in fact be reversed in practice. After this context, it was also necessary to have a dialogue about virtual museum, technologies and new languages in History, because to build a research about Virtual Museum without arguing through these assertions, would be illogical. We then perceive how deterritorialization, the democratization of spaces and the new digital technologies can transform a Virtual Museum and how Digital Information Technologies and Communication are fostering new studies for research in the field of History.

IMPLICATIONS

Access to certain collections is much more available to researchers, because consulting the National Library database, without leaving Bahia, is already a reality. Simulating a historical environment and putting the subjects before the praxis of previous centuries in a more real and manipulable way is also possible. Cloud computing, which would make it more agile and light to be accessed by the subjects, users and interactors. In addition, consider that the interface of the Virtual Museum has sometimes become difficult to understand with this subject, user and internet user, and that many people do not like to identify themselves in research, because, to navigate the Virtual Museum, a prior registration was necessary since people would have to agree to be part of the research.

We cannot forget to mention the gap that left the lack of a foreign language version, mainly English, which prevented many netizens from following the interactions inside the Museum, for lack of understanding of what was being said by the characters. We received many complaints about this point, so we believe in the condition of researcher, that such contexts contributed greatly so that many subjects, users and Internet users did not navigate the Museum.

To construct a Virtual Museum in fact socioconstructivist, that, even facing certain difficulties in its operationalization, was and is producing meaning, meaningful learning, the practice of theory, the socio-constructivist principles, and made these principles meet through the Virtual Museum and the subject, which brings their life history, interconnecting, for example, subjects through the ages, creating collaborative networks, communities of practices, Immediate Development Zones, and enabling the subject to be historian and philosopher of himself, as well as being seen through his collective. Even if, in the eyes of anyone who sails, it can be a solitary experience with a certain static demand, this is not true, since the characters themselves, the dialogues themselves, the very ambience of the nineteenth-century Savior, constitute the bridge for this subject of contemporaneity. So, it could never be totally solitary in this Virtual Museum, which can be accessed through the address: www.teatrosaojoaodabahia.net.br, built and thought from dialogic and polyphonic subjects in the baktian perspective. This is not to say, however, that these details of greater real-time collaborations cannot happen in the next cycles, since the DBR is this, it feeds back at all times.

From this research, there were scientific results that resulted in the making of an architectural plan for the São João da Bahia Theater, since the existence of the original plan is not known until the present moment, not even if it still exists, as well as in the recomposition of its patrimony material and immaterial, even in a simulated way. Also the "atmosphere" of the City of Salvador was built in the XIX century. The creation of a Virtual Museum, the principles that underpin it and its cycles of application, are links of contributions that can serve as a basis for studies not only for historians but also for musicians, architects, geographers, artists, educators, students, or for scholars in general, and may serve

as a basis for future studies on the question of how new languages in history are being redesigned with the help of Digital Information and Communication Technologies.

Another great contribution that the scientific results presented in this thesis have given us was to understand how the theories of Vygotsky, Bakhtin and Gramsci could be measured when the subjects' interactions in the Virtual Museum theater São João da Bahia, measuring these that are lined with theories and practice to the extent that the subjects of the present day visited, interacted, dialogued, made a passage in time, with and in the Virtual Museum of the São João da Bahia theater. In addition, it is important to register how the Virtual Museum São João da Bahia Theater contributed, by being visited by several people, by several research institutions, to a new way of researching about virtuality and / or to build a Virtual Museum with a socioconstructivist approach , in a collaborative way.

Although subjects and users, when browsing the Museum, can not see and be seen, at least, from the interactions, it provided or made possible interactivity when people, when doing this navigation, transported in time and space, for example , and also interaction when, from this interactivity, the model was modified and built meanings, because, although the subjects could not modify in real time the actions within the Virtual Museum, the ambience itself and the scientific results obtained reported a range of creation of immediate development zones: Vygotsky, dialogue, polyphony, Bakhtin, the subject philosopher in himself, Gramsci, and historian of himself, Martineau, which contemplated the purpose of this thesis - the construction of a Virtual and Socioconstructivist Museum.

Creation of a Virtual Museum that, even though it can not meet all the demands / complaints and requests of the subjects /

users has demonstrated, concretely and effectively, the principles adopted in this thesis. Circumscribing ourselves to the history of academia and the community, especially Bahia, we experience our present with a look back in time, making the Virtual Museum a practical solution (DBR), for the great gap which the São João Theater bequeathed to us physically. Nothing is absolutely dead, the São João Theater will always be in temporality, through a new approach to the concretization of the praxis in Gramsci, of the mediation in Vygotsky, of the polyphony and dialogue in Bakhtin, of the historian subject of himself.

SUGGESTIONS FOR FURTHER RESEARCH

Google analytics assisted in examining the routine of the people who interacted and visited the page of the Theater São João da Bahia and to Salvador of the nineteenth century, the perception of oneself and through a collectivity, either through the forums that were formed in social networks , or from the records of printed and spoken interviews and through the life history of the polyphony that emerged from these characters, who never told us a story, but they answered us as this research progressed. Therefore, we believe that this work has made important contributions to contemporaneity and may help future research, for example, regarding the relation between theory and practice, for new languages in history, for the networked system, even for questions that do not we could answer and / or solve, as the questions with the interface of entry: a) is that, because people need to register and identify, this slowed their contributions and mediations to the Virtual Museum? b) the issues of plug and play and the technological excitement among large corporations created barriers to access to the Virtual Museum?

c) will it be necessary to use an interface without these details so that the Virtual Museum becomes more interactive? Therefore, in this research, now concluded, it only has to thank the partners, initial collaborators, who have remained firm and still are, and the collaborating partners that were formed throughout this thesis, allowing a hug to this study, an endless collaborative web and featuring the best of the São João da Bahia Virtual Theater Museum. And a special thanks to the people of the City of Salvador, those who went and built the history of the São João Theater, making possible a unique collection in the Museum. So, let's go ahead, trying to improve the Virtual Museum of Theater São João da Bahia in future applications, future cycles.

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