



“Tales of Peso da Régua: The Enigma of the Ancient Vines” Connection between Peso da Régua and Bento Gonçalves through an Immersive Experience in Cibricity

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Abstract. This work presents the practice of an Immersive Experience in Cibricity (IEC), titled “Tales of Peso da Régua: The Enigma of the Ancient Vines”, that was developed in the context of an international event, which happened in a hybrid format, mixing activities in the physical face-to-face space, in the city of Peso da Régua, in Portugal, and in digital environments. In this sense, the following question emerged: How did IEC enable participants of Bento Gonçalves to get to know different aspects of the Portuguese city of Peso da Régua, as well as establish cultural connections with their own city in Brazil? This immersive experience hybridized physical spaces with digital spaces co-created in the Spatial Metaverse, through an engaging gamified narrative with the presence of historical and fictional characters who led participants throughout the missions. The research utilizes the rEConnective cartographic research-intervention method, which emphasizes that knowledge production is not solely a human activity but involves an ecology connecting humans and non-humans. As results, the work points out clues that can inspire other possible immersive pedagogical practices in cibricity, highlighting a new way of teaching and learning in the present time.

Keywords: Immersive Experience, Cibricity, Connection, Inventive Practice Pedagogical.

1 Introduction

The third millennium brought with it countless transformations, including new ways of living, coexisting, teaching and learning. Nowadays, people no longer only inhabit traditional physical spaces, geographically located, because different digital spaces, such as *websites*, applications and platforms, also become living environments, configuring new possible inhabitations.

In this context, a new world literally emerges, where the impossible becomes possible. Through platforms like the metaverse, new immersive virtual realities emerge where you can be whoever you want to be, building experiences that go beyond the limits of imagination. It is at this moment that it becomes evident that the way we understand the city, institutions, including schools, needs to be reinvented.

The openness to the possibilities that the present time has to offer leads us to problematize the school, as well as the spaces and ways of teaching and learning, since both are in dissonance with the characteristics that affect the third millennium. Therefore, based on the assumption that digital technologies have a habitable condition, the Immersive Experience in Cibricity - IEC is configured. This experience hybridized spaces (physical and digital), times (synchronous and asynchronous), technologies (analog and digital), languages (human and artificial), human presences (physical and digital - avatar), non-human presences (U.V.A), and cultures (Brazilian and Portuguese), providing opportunities to connect the physical and digital world.

IEC's objective was to provide event participants, both physically and digitally present, with an immersive experience in the city of Peso da Régua (Portugal) hybridized with digital spaces co-created in the Spatial Metaverse. The connection between the participants took place through puzzles, challenges and missions that led to the construction of knowledge about the cultural and historical aspects of the physical city, and also provided the opportunity to establish relations with the city of Bento Gonçalves, in Brazil, which constituted the majority of digital participants.

In this sense, the following question emerged: How did IEC enable digital participants to get to know different aspects of the Portuguese city of Peso da Régua, as well as establish cultural connections with their own city in Brazil? Therefore, based on the rEONecctive Cartographic Research-Intervention Method, the objective of this work is to highlight how the Immersive Experience in Cibricity allowed Bento-Gonçalvense digital participants to get to know different aspects of the Portuguese city of Peso da Régua, as well as establish cultural approaches with your own city in Brazil.

This immersive experience hybridized physical spaces with digital spaces co-created in the Spatial Metaverse, through an engaging gamified narrative with the presence of historical and fictional characters who led participants throughout the missions. Using the rEONecctive Cartographic Research-intervention Method, we seek to show how pedagogical practices like this broaden the horizon for new ways of teaching and learning.

2 Methodology

This research uses the “rEONectivo Cartographic Research-Intervention Method” [1] for its development. The choice of this method is justified by understanding that the production of knowledge is not exclusively human, but rather the product of an ecology that connects humans and non-humans in a network. This method is composed of: 1) elements present in the Cartographic Research-Intervention Method, proposed by Passos, Kastrup and Escóssia [2] and Passos, Kastrup and Tedesco [3]; 2) concept of Living Labs, created by William J. Mitchell at the Massachusetts Institute of Technology, in the 90s; 3) perspective of research in reticular contexts, developed by Felice, Torres and Yanaze [4].

This approach distances itself from other methods focused exclusively on collecting and processing information, since the researcher-cartographer's objective is precisely to map a territory uninhabited by him until then. In this sense, the method proposes network research, which constitutes connectivity between humans and non-humans, producing, from the perspective of co-creation, data in a research context that is intervention. In other words, know that in this case, “it is not just about representing the object or detailing information about an already constituted conceived world, but it presupposes getting involved with the world, committing to its production” [5].

From the perspective of the rEONectivo Cartographic Research-Intervention Method, the research problem emerges in the connection between the researcher-cartographer and non-human entities (technologies, digital platforms, among others). In this context, the problem of this work emerged during the inhabit of the Immersive Experience in Cibricity (IEC), which took place during the V International Congress of RIEOnLIFE and the IX International Festival *We, Learning with Cibricity*, with participants in the online modality. Based on the problem, the research developed inhabiting the research territories that were configured along the way.

The first territory is made up of theoretical intercessors who provide clues to analyze the device and, thus, better understand the research problem. The second territory is constituted by the device, in the field of this research, the IEC application process. For Foucault [6], a device is a combination of practices, power relations and knowledge that operate together. Deleuze [7], however, expands this concept, stating that devices are “machines that make us see and speak”. The data produced in this second territory are analyzed and interpreted based on elements present in the first territory, which is the basis for the research.

3 Theoretical Intercessors

To better understand the process of inhabiting the IEC, and how it allowed digital participants to get to know different aspects of the Portuguese city of Peso da Régua, as well as establish cultural connections with their own city in Brazil, some theoretical intercessors are necessary. Therefore, concepts such as immersion, cibricity, mesh and hyperhistory are necessary.

Murray [8] defines immersion as the feeling of being transported to a simulated environment, where the feeling of involvement and engagement are the user's highlight during the experience. On the other hand, for Schlemmer, Lopes, Carolei and Thomazzoni [9] immersion can also be “the sensation of making us feel part of a certain environment, as if we were 'inside', 'immersed', 'inserted' in that universe, this being the feeling of belonging to a reality”[10].

Related to the concept of experience, the concept of cibricity is presented, which refers to immersion not only in the physical, geographically located space of cities, or in digital spaces, but in a context that hybridizes geographically located spaces in the city, with other spaces produced by produced using different technologies and digital platforms, in order to expand the geographic city; in other words, it is about tradition in cibricity.

The term cibricity, brought by Ribeiro [11], is understood as a product of the connection between physical-urban space and cyberspace. Cibricity, according to Schlemmer [12], is constituted by the co-engendering of the following dimensions: physical-geographic, digital, informational, interactional, pervasive and ubiquitous. In this study, cibricity is exemplified by the hybridization of Peso da Régua's physical spaces and the digital environments used for learning in Bento Gonçalves. In this sense, we can understand cibricity as this city, which from the physical-geographical space, expands to the digital network through digitality and connectivity, thus configuring itself as a hybrid city. Still, the understanding of inhabit atopic, proposed by Di Felice [13] has to contribute. Elaborated by the author in the book *Post-Urban Landscapes: the end of the urban experience and the communicative forms of dwelling*, atopic dwelling, where atopos, comes from the Greek and refers to a "strange place", "the place out of place". Therefore, atopy would be a habitable condition in continuous transformation, which results from the connection and interaction between subject, technology, information and territory; for example, even when traveling through a limited physical space, when we are connected with smartphones, other spatialities can be reached at the same time, resulting in complex and reticular living.

The concept of cibricity, combined with atopic living, highlights the complexity of the relationships that are established when physical and digital spaces hybridize. It is in this context that understanding mesh is necessary. The concept of mesh, proposed by Morton [14], represents "the interconnection of all living and non-living things". Each mesh point is both the center and the edge of a point system; therefore, there is no absolute center or edge. Thinking big like this makes us know more, but at the same time, it also makes us lose touch with reality as we thought we knew it. We are human beings inevitably connected with other beings (whether living or non-living). We inhabit some spaces, just as we are also inhabited. The analyzed device highlights exactly this, since being the result of co-creation between humans and non-humans (no one learns or creates alone), it demonstrates new ways of living in the world.

Cibricity can be better understood from the concept of mesh. The IEC constitutes the mesh, being one of the connection points between humans and non-humans that together constitute an atopic habitation. Furthermore, this complexity is translated from the concept of hyper history, proposed by Luciano Floridi.

Floridi [15] proposes in his book "The 4th Revolution: How the Infosphere is Reshaping Human Reality" the concept of hyperhistory. For him, "prehistory and history work like adverbs: they tell us how people live, not when or where they live. From this perspective, human societies currently stretch across three ages, as ways of living". This subdivision provides us with the following perspective: 1) Prehistory: society without ICTs; 2) History: individual and social well-being related to ICTs; 3) Hyperhistory: individual and social well-being dependent on ICTs. The era of hyper-history is highlighted at IEC, as it demonstrates how much ICTs are part of our lives and can enhance spaces and learning.

The concepts of immersion, cibricity, mesh and hyperhistory are intrinsic in the Immersive Experience in Cibricity (VIC) "Tales of Peso da Régua: The Enigma of the Ancient Vines", which is configured as the research device, thus composing the second territory of this work.

4 Immersive Experience in Cibricity (IEC)

The Immersive Experience in Cibricity (IEC) "Tales of Peso da Régua: The Enigma of the Ancient Vines", consists of a narrative that hybridizes physical, geographically located spaces and digital spaces co-created in the Spatial Metaverse, Genially and a group created on WhatsApp, which are articulated by different challenges and missions. In terms of physical geography, the territory explored is the city of Peso da Régua, in Portugal. The narrative begins at the Douro Museum where participants set out on a mission full of clues, challenges and enigmas that takes them to discover the city, accompanied by historical and fictional characters. In the context of digital spaces, the territory explored is that of the Spatial metaverse platform, co-engineered with an Escape Room co-created with the Genially platform. Communication between participants who inhabit the spaces, which are articulated by the narrative, is carried out through a group created on Whatsapp.

The narrative begins with a mysterious letter, dating from the 19th century, found in the old archives of the city of Peso da Régua, which mentions an ancestral enigma that, if unraveled, ends up revealing a journey through the landscapes and stories of this Portuguese municipality. This narrative is made up of eight missions, which are (Fig.1.): 1) Douro Museum: whose challenge is to unveil the GPS coordinates of four locations indicated in the mysterious letter (Big Ben, London, UK; Eiffel Tower, Paris, France; Coliseum, Rome, Italy; Christ the Redeemer, Rio de Janeiro, Brazil); 2) Water fountain: where the mystery of the vines is associated, suggesting that the solution to the enigma is linked to the ancestral knowledge of viticulture; 3) Cais da Régua, where participants are immersed in the rich culture and history of Régua candies and have the opportunity to interact with the Rebuçadeiras and uncover the secrets behind this delicacy; 4) Peso da Régua Interactive Tourism Store, a modern and technological space where participants are invited to explore various tourist attractions in the region;

5) João Araújo Correia Statue, where there is an enigma to be revealed about his literary work; 6) Library, where participants are invited to search for historical technical information on grape cultivation and pest control in the Portuguese city; 7) Peso da Régua City Council, where participants learn to recognize the city's coat of arms and the elements that make it up; 8) Peso da Régua Municipal Auditorium, where participants gather to end the game, where they present the items they collected from each mission carried out and reveal, with the help of the digital assistant Ancestral Verification Unit - U.V.A. the enigma of ancient vineyards, which is the culmination of VIC.

The U.V.A. It is also responsible for accompanying participants throughout the narrative. The assistant is personified with a stylized grape, modeled in 3D and animated, who has a lot of knowledge about the municipality of Peso da Régua, and therefore accompanies and provides clues to participants along the VIC route, acting as a facilitating element in meeting emissions challenges. However, throughout each of the missions there is an important personality, historical or not, who relates to the VIC narrative, namely: 1) Joseph James Forrester, a well-known English businessman based in Portugal linked to the wine trade Porto at the end of the 19th century; 2) Bacchus, Roman god, nicknamed the god of wine; 3) Rebuçadeiras da Régua, which usually sell the famous “Rebuçados da Régua” (a delicacy with a recipe that is inherited from generation to generation) in different parts of the city, including Cais da Régua (which is one of the VIC points); 4) UVA; 5) João de Araújo Correia, a doctor much loved by the inhabitants of Peso da Régua and writer of chronicles, stories and novels; 6) D. Antónia Adelaide Ferreira, known affectionately as “Ferreirinha”, whose life was dedicated to viticulture, and to the families of the workers who cultivated the vineyards on her lands; 7) Sebastião José de Carvalho e Melo, Marquês de Pombal and Count of Oeiras, who established the headquarters of the Companhia Geral da Agricultura das Vinhas do Alto Douro in Peso da Régua, the current Douro Museum; 8) Miguel Torga, one of the most important Portuguese poets of the 20th century.

In addition to these characters, in each mission there is a collectible item: 1) Rabelo boat; 2) Bottle of Port Wine; 3) Rebuçados da Régua; 4) Compass; 5) Accordion and Portuguese guitar; 6) Little Vine; 7) Key; 8) Douro Passport.



Fig. 1. Missions of the Immersive Experience in Cibricity (IEC).

After getting to know the architecture of the IEC, we return to the question that gave rise to this work: how the Immersive Experience in Cibricity allowed Bento-Gonçalvense participants to get to know different aspects of the Portuguese city of Peso da Régua, as well as establish cultural connections with their own city in Brazil? We will address this in the following subtopic.

4.1 Results and analysis

The Immersive Experience in Cibricity took place during the V International Congress of RIEOnLIFE and the IX International Festival *We, Learning with Cibricity*, with participants in the online modality in dialogue with participants in the face-to-face-physical modality. The meeting point for the start of the missions was at the Douro Museum (for Portugal) and in the RIEOnLIFE auditorium, built in Spatial (for Brazil) (Fig.2.). While the in-person-physical participants were walking through the streets of the city of Peso da Régua, in order to carry out the missions, the in-person-online participants, living in Spatial and Genially, were unveiling the challenges and providing elements so that the missions could be completed.



Fig. 2. RIEOnLIFE auditorium inside Spatial.

The face-to-face-online participants were fifteen-year-old students from a private school in southern Brazil, located in the municipality of Bento Gonçalves, a city with characteristics similar to those of Peso da Régua. The students worked in pairs and carried out the experience using tablets and cell phones. The codes and collectibles were released via the WhatsApp group, made up of participants and organizers of the experience. Carrying out the eight missions lasted around 1h30min, during which time a teacher monitored the entire process.

- The Bento-Gonçalvense participants, through their avatars, explored and recognized the spaces created in Spatial and established connections between the characteristics of the physical-urban space of Peso da Régua, with aspects of their own municipality. Curiosity arose at various times related to the characters that appeared in the metaverse space, the historical and fictional characters present in the narrative, and the sweets, which they were eager to try.
- The device, therefore, highlighted new ways of inhabiting a world that is hyperconnected. Through non-human entities, Brazilian students had the opportunity to travel digitally and learn about historical and social aspects of the Portuguese city of Peso da Régua. Throughout the experience, some comparative comments emerged, especially regarding aspects of viticulture. In Peso da Régua the vines are mainly found on terraces. In Bento Gonçalves, although this vine training system also exists, the most common is the trellis/pergola system. The participants were curious to learn more about the Portuguese municipality, wishing they could go there one day. The most recurrent comment was “how the landscape is similar to our city”, some showing similarities with the Vale dos Vinhedos district and the Vale do Rio das Antas.
- Furthermore, the character Antónia Adelaide Ferreira, known as “Ferreirinha” was quite striking. Most participants were unaware of its importance in the activity of vineyard cultivation and the production of Port Wine in the Douro region. Most Bento-Gonçalvense wineries also have one or more important and historical characters, and this similarity was soon identified by the students.
- The analysis provides some clues that show that VIC allowed participants from Bento Gonçalves to get to know aspects of the Portuguese city of Peso da Régua and establish connections with their own municipality. It appears that throughout the missions and the narrative itself, students were encouraged to establish connections and comparisons, which occurred spontaneously and authentically. In this sense, VIC appears to be a powerful device to promote learning in this third millennium.

5 Conclusion

The device “Tales of Peso da Régua: The Enigma of the Ancient Vines”, developed as an Immersive Experience in Cibricity during the V International Congress of RIEOnLIFE and the IX International Festival We, Learning with Cibricity, connected human and non-human entities in a context of immersive teaching and learning in cibricity. Through this experience, students from Bento Gonçalves were in contact with participants from Peso da Régua, facilitated by digital platforms. To expand the reach of immersive experiences like IEC, educators could utilize widely available virtual reality tools like Google Expeditions, or platforms like Unity that enable the easy co-creation of virtual environments and immersive learning scenarios for different subject areas.

Returning to the problem that gave rise to this work “How did the IEC allow participants from Bento Gonçalves to get to know different aspects of the Portuguese city of Peso da Régua, as well as establish cultural connections with their own city in Brazil?”, it is possible to say that it allowed these connections to the extent that it aroused in the Bento-Gonçalvense participants, through the narrative and the missions, curiosity and the path for relationships to be established. Through the Spatial and Genially platforms, students had contact with images and videos that enabled simultaneous visual connections. Even digitally, the cultural exchange between the Brazilian and Portuguese cities was significant, highlighting other teaching and learning possibilities for teaching and learning, which go beyond the physical classroom and the student-teacher relationship.

The theoretical understandings of immersion, cibricity, mesh and hyperhistory were fundamental to the development of the research, as they helped us to better understand the Immersive Experience in Cibricity from a more complex and connected perspective, developed in an atopic dwelling. Among the future perspectives of the research is the deepening of the discussion based on other concepts, as well as the construction of other immersive experiences in the educational environment.

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