

Next-gen learning: historical accuracy and contributions to archaeology. The case of 'Monte Grappa' map in *Battlefield 1*

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Introduction

For years, the (video)gaming industry has been including historical themes and settings in its releases, making increasing reference of real historical sources and historical-archaeological specialists. The result of this trend can be seen in the accurate graphic renderings of landscapes, objects and monuments. Examples of games in which the setting is clearly historical based on real historical-archaeological sources, are numerous (*Historical videogames*; (MacCallum-Stewart and Parsler 2007) such as *Assassin's Creed*, *Call of Duty: World at War*, *A Plague Tale: Innocence*, just to name a few. For many developers it is becoming more and more common to work with archaeological-historical professionals in order to create the historical virtual world more coherent with ancient sources. In recent years, thanks to continuous innovations in the field of technology, museums and cultural associations have started to include a virtual gamification component in their educational offerings with the aim of increasing audience involvement. These are the so-called '*Serious games*' whose main purpose is to broaden the users' knowledge through play (Mortara and others 2014). Alongside these productions, the international game industry is increasingly developing videogames for the mainstream users that base their narrative on historical and archaeological themes. These games, with millions of players, are developed by teams of professionals who, thanks to substantial funding, work to meet the public's demand for a greater realism within the game environment. The demand is satisfied by working not only on the realism of the scene with increasingly accurate renderings, but also by implementing structures, objects, characters, and contexts coherent with the

historical period of the game's scenario. These details, in fact, increase the player's feeling of immersion in a more accurately reproduced past. Nowadays the player who approaches 'historical' videogames expects to passively see and learn about events and curiosities of the ancient world. The risk that follows is the possibility of confusing fictional events, functional to the videogame plot, with real historical events. To tackle this risk, the most diligent publishers point out the presence of fictitious events within the plot through dedicated disclaimers, but this is often not enough.

The case study of Battlefield 1: Monte Grappa or too much "grappa"?

This contribution explores the fifth chapter of one of the most played *FPS* (first-person shooter) sagas. The video game Battlefield 1 developed by DICE and published by Electronic Arts in 2016, offers a storyline set during the First World War with the possibility to play the single campaign or the online mode with other players. Thanks to the development of online thematic forums, thousands of players from all over the world can interact and discuss game topics. In forums dedicated to Battlefield 1, the topics that are discussed are mainly related to the seasonal game updates, new packages aimed at improving the gaming experience, bugs resolutions and curiosities related to the First World War that stimulate players in the research for historical information (<https://answers.ea.com/t5/Battlefield-1/bd-p/battlefield-1-technical-issues-en>).

The aim of this case study is to analyse the game map called "Monte Grappa" included in the Battlefield 1 campaigns. The name of the map refers to a massif in the Venetian Pre-Alps, administratively divided between the provinces of Belluno, Vicenza and Treviso. This mountainous region was the theatre of heavy fighting between the troops of the Royal Italian Army - who fiercely defended themselves here following the retreat due to the events of Caporetto (October-November 1917) until the end of the war (4 November 1918) - and the soldiers of the Austrian-Hungarian Empire. Today, at Cima Grappa, the main peak of the massif (1776 m asl), there is an important military shrine in memory of the fallen soldiers (approximately 30000 remains are preserved there; Fig. 1). In addition, it is possible to visit one of the most important military fortifications of the Italian front, the 'Vittorio Emanuele III' tunnel, which runs for a total of approximately 5 km with numerous machine-gun and artillery positions along the whole tunnel.

Although the geographical context of Monte Grappa is one of the best known along the Italian front, the area reproduced in the 'Avanti Savoia!' Italian campaign setting is not the geographical area of Monte Grappa, but rather the area of the Falzarego Pass and the Valparola Pass (75 km away) in the Dolomites (province of Belluno), which connect the Ampezzo basin and the upper Agordino area with Badia Valley (Fig. 2). In these places, between 1915 and 1917, the peaks of Sass de Stria (2477 m asl), Lagazuoi (2752 m asl) and the Tofane (di Rozes 3225 m asl; di Mezzo 3244 m asl; di Dentro 3238 m asl), were bitterly disputed, also through the construction of tunnels dug into the rock, which were subsequently filled with explosives and detonated (hence the so-called 'mine war'). In this case study, there was a geographical inconsistency represented by the name of the map Monte Grappa and the place where the game actually takes place, but also an inconsistency from a temporal and, consequently, historical point of view: in fact, the war events related to the game landscape took place in the first years of the war, between May 1915 and November 1917, when the Italian 4th Army had to retreat due to the Austro-German breakthrough at Caporetto. The retreat carried out right up to the Grappa massif, which, therefore, was only involved in the war events from the end of 1917

until the last victorious Italian offensive started at the end of October 1918 (*L'esercito italiano nella Grande Guerra 1915-1918, 1927*).



Fig. 1. View from the south of Cima Grappa and the military shrine



Fig. 2. View of Falzarego and Valparola Pass with Mount Lagazuoi on the left a) real view (photo by © Giacomo Pompanin, lagazuoi.it) b) screenshot from the Battlefield 1 videogame

Local players were the first to point out this discrepancy between the name and the geographical context thanks to their game experience and direct knowledge of the landscape. This information was subsequently shared in the forums, increasing players' awareness of the real historical/geographical context (https://www.reddit.com/r/battlefield_one/comments/9r0k6d/passo_falzar-ego_not_monte_grappa_photo_comparison/). This example further highlights the informational potential of videogames both as a mediated source of knowledge and as a means of approaching the historical field, which is often perceived as unattractive. Given the historical references within the game, the intention is going to investigate the level of reliability of the historical reconstruction carried

out and the underlying events with specific focus on the ‘Monte Grappa’ map. References to historical reality and events assign an educational dimension to the game that does not always retain, as seen in the previous example. With this in mind, the informative components of the game and their impact on both players and insiders (historians and archaeologists) will be explored (Fig. 3). Virtual reproductions have in recent years played an increasing role in dissemination in the fields of archaeology, history and art history. The use of high technologies for the dissemination of scientific content in order to make the topics more appealing to the public is an increasingly common practice in television broadcasts, museums and websites. In the case of video games, however, the spectacularisation of the environments and the plot prevails over the scientific and informative aspects, opening up the debate on the real potential of the video game as an informative tool. In this sense, this contribution also wants to emphasise the potential of the videogame as a vehicle for reliable historical information so as to encourage historians and archaeologists to assess its historical-scientific effectiveness, focusing on the role of the videogame as an active communicator of the past.

Conclusion

The aim of this work is to assess the level of reliability of the historical reconstruction and narration through an accurate comparative analysis between the game map of the case study (Monte Grappa), the geographical context, the historical events and material culture reproduced in the virtual world and the historical and archaeological sources. Finally, to evaluate the gaming experience, a questionnaire was shared on dedicated forums, to understand the level of authenticity perceived by the users. These were divided into two categories: the first considered players with experience in the historical-archaeological field to assess their prior knowledge and their judgement on the critical aspects of the reconstructions. The second category concerned players with no experience in the field of archaeology-history in order to understand how much the game influenced their interest in historical subjects through online or bibliographical research and how much the information provided by the game was assessed as accurate to historical reality. In fact, perceived authenticity is quite variable depending on the individual user's knowledge of specific topics such as war events, geography, or knowledge of weaponry. This variability is found not only among non-expert users, but also among archaeologists and historians. The proposed workflow, which employs a comparative analysis between archaeological data and virtual reproductions, and the use of questionnaires, allowed us to define the mismatch between the historical reality and the gameplay narrative, but also to evaluate the efficacy of learning derived from the virtual experience.

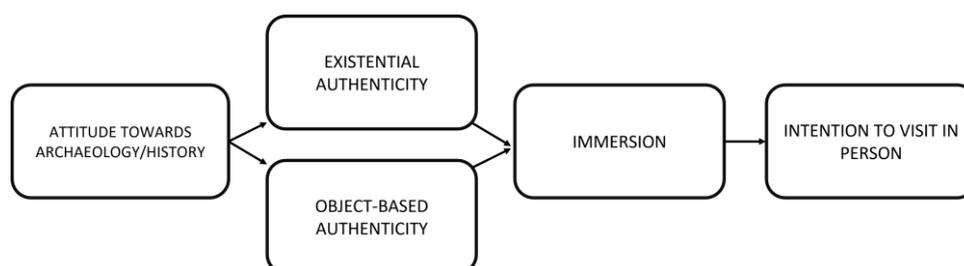


Fig. 3. Theoretical Framework

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