

The public and science meets in "Gunnlogi's Revenge" - a CRPG based on digital archaeology Session 1

Digital archaeology is a rapidly growing field and is also generating more interest in the public. Previously when museums wanted to have 3d-models from ancient monuments the archaeologists lacked the technical skills to create them. 3d-modelers were hired but lacked the archaeological knowledge. This became a problem in many cases since the archaeological interpretations sometimes was put aside due to making the visualization looking better. Today the situation is different. With an ever increasingly digital world the request from the public to be able to visit and see the human past in 3D is greater than ever before. The public is now being able to visit other countries online so why not visit the past? Archaeologists is today using digital technologies for documentation and interpretation like the use of total stations, GPS, databases, laser scanning and structure from motion. The digital technologies are now making it possible to combine the scientific knowledge of archaeology with the needs for learning and educating the public about the human past. We are now able to more or less directly use the scientific results and material created for archaeological interpretations to educate the public.

As a part of this Archgame Studio was created in 2011 by a group of archaeologists, historians and game designers with the interest of creating games based upon archaeological interpretations and historical sources. The goal was set to create a PC-game that would educate the public being based both on excavations and focusing on using the original source material in the form of artifacts and recorded contexts. When reconstructing an Iron Age village you could by the use of laser scanning and structure from motion use the original objects in your reconstruction instead of modeling it from nothing. That was of course good, the public would be educated with the latest archaeological interpretations and be able to visit ancient environments. But how about the archaeologists and historians couldn't the game be of relevance to them as well? The purpose of the game became two-folded: educate the public but make the scientists able to use it as a research platform. When using structure from motion you could scale the models to correct measurements which meant you could start building databases for artifacts with visualized models that was exact in scale and shape, being able to put them online available for other researchers. Using archaeological drawings several reconstructions of a long-house could be made with the possibility for the scientific community to discuss them, and the public would experience a greater variety of interpretations. Different gameplay mechanics can also bring the two communities together with the aspects of "serious gaming" presenting several theories in the game's storyline such as how did the

Christianization process take place in Scandinavia during the Viking Age? Also “gamification” aspects is possible, reward the public for visiting archaeological sites with unlockable items in the game. Bringing archaeology and the public together is what we hope to achieve with our upcoming “game” *Gunnlogi's Revenge*” from Archgame Studio.