# The battle for Doetinchem

## The possibilities of gamification in archaeological research

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### Introduction

In 2018 archaeological research at a large road reconstruction has been carried out, which revealed large-scale remnants from the early 16<sup>th</sup> century defense system of the Dutch city of Doetinchem. Although the size and nature of the remains were surprising, it was no coincidence that they were found at this location. The possibility that remnants of the Homburger front gate were to be found was already taken into account (Kastelein 2018, 5). During the work at the end of 2018, the wall of a casemate with three artillery openings (Kastelein 2018, 7), a retaining wall and the entrance to the front gate were found (Wemerman 2019, 4). The casemate, in which cannons (falconets) may have been used in combination with firearms, such as arquebuses and muskets, is unique for the city and as a military structure extremely rare in the Netherlands. Simultaneously with the excavation, the discussion about the preservation of the remains started. At his point it was decided to at least document the remains found through photogrammetry in order to create a 3D model.

The casemate and the excavation were in the spotlights again in 2022 as part of the project "The Birth of the Netherlands". This project, organized by the Omgevingsdienst Achterhoek focused on the archeology of the Eighty Years' War (1568 – 1648) in the Achterhoek region. The project included a traveling exhibition, in which a number of 3D scans and models of archaeological finds and historical buildings were made for all participating municipalities. The municipality of Doetinchem requested a reconstruction of the Homburgerpoort for the 3D model, incorporating the scans of the casemate as made in 2019. This 3D reconstruction was later used in another project which aimed to create an interactive experience of the Homburgerpoort for a large audience. Ultimately, this resulted in a VR game where players must defend the city of Doetinchem as if it were 1572.

#### Research

For the realization of the game, two aspects were extensively researched and had to be accurate: the narrative and the visual environment. Adding a truthful narrative that appeals to the player ensures a better understanding and connection to the heritage (Van den Hoek, 2017). By setting up a non-linear narrative, it is possible to create a unique experience for every visitor (McCall, 2017).

Developing a realistic reconstruction based on archaeological finds, always requires a certain amount of research and/or making educated assumptions as there are always 'gaps' in the data. Reconstructing a narrative raises even more, and different, research questions. It forces the gamemaker and the archaeologists to review the research. As a result of that it turned out that some of the previous conclusions turned out to be incorrect or at least inaccurate. In this paper we take a closer look at how gamifcation and adding narrative of archaeological sites provides new insights compared to an orthodox archaeological research.

### References

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