

Proposal for a software demonstration at DH Benelux 2026

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Academic storytelling with enriched hypertext – a demonstration of the StoryScript engine

Hypertext, meaning digital text that allows non-linear navigation between predefined elements, is key to the web and knowledge sharing through digital archives, wikis, and interactive research papers. In fiction, hypertext has gained popularity for interconnected and user-driven narratives, many of which have now evolved into text-based adventure and role-playing games that also include images, audio, and animations. In our demonstration, we showcase the scholarly and educational potential of the JavaScript / TypeScript storytelling engine **StoryScript** (<https://storyscript.nl>), which was originally developed for entertainment purposes. We highlight how to integrate scholarly primary sources into hypertext narratives and explore using the engine to make contested or alternative readings of events transparent. Co-presented by the engine's developer Rutger Schurgers, an IT professional, and Monika Barget, a digital historian, the demonstration invites discussion about the opportunities and limitations of web-native formats, gamification, and creative collaborations beyond academia.

StoryScript was initially created to build web-based text adventures inspired by the live-action role-playing (LARP) community in the Netherlands.¹ It was later tested to transform the fantasy adventure board game *Veils of Verdandi* (created by Fabian Schurgers, see fig. 1) into a fully digital format that could be run in browsers or on desktops (using Electron).² Features like audio narration, images, and interactive maps make it equally useful for scholarly and educational content, particularly in literary studies, history, and cultural heritage.

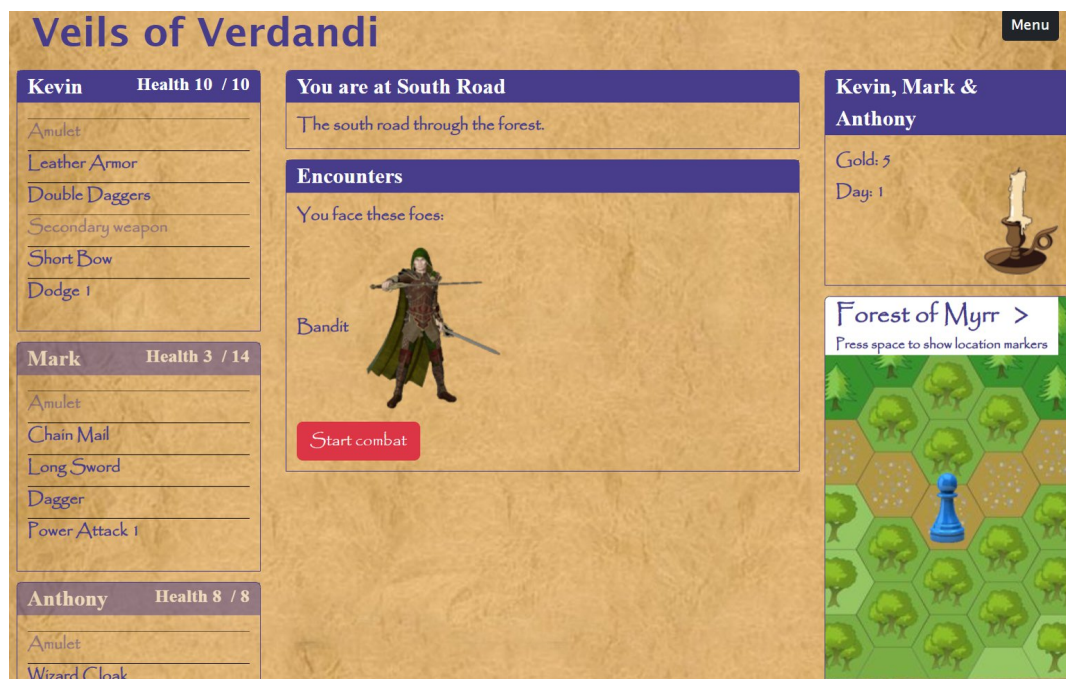


Figure 1: Interface of the *Veils of Verdandi* fantasy game, in which players manage three characters representing different skills. Based on a board game by Fabian Schurgers, *Veils of Verdandi* also

¹ See the Dangerous Cave interactive story created by Rutger Schurgers and Sanne Jense:

<https://storyscript.nl/games/dangerouscave/index.html>

² *Veils of Verdandi* is the most extensive game developed with StoryScript so far and includes a map for orientation as well as audio narration recorded by Fabian Schurgers: <https://storyscript.nl/games/veilsofverdandi/index.html>

includes enemy encounters. The map on the right-hand side is directly based on the physical game board.

To demonstrate its academic potential, Monika Barget has created a brief historical demo based on an 18th-century map of the so-called *imperial circles* of the Holy Roman Empire (1495-1806). In early modern *Germany* (as contemporaries also called the Empire), the imperial circles were larger administrative units which ensured collaboration between the temporal princes, imperial knights, ecclesiastical rulers, and imperial cities in a specific region. Learning about their contributions to joint defense, currency control, migration management, or trade regulation in the early modern period can give users a better understanding of the federal structures of the Holy Roman Empire, which past historiography has often misrepresented as a dysfunctional “patchwork carpet”. (For a positive re-evaluation see Bretschneider & Duhamelle, 2016.) In our demonstration exploring the imperial circles, user navigation is predominantly geography-driven as different regions can be selected from a *destinations* box. The imperial eagle icon then moves to the selected region and re-centres the map, while a description of the selected region with suggestions for further reading is shown in the text panel (fig. 2). We are already working on a full-fledged version of this map-based narrative, including more interactive aspects such as *conversations* with historical characters, based on original early modern sources. Furthermore, Monika Barget is working on a theme-driven interactive history of the imperial circles that places even more emphasis on early modern text sources from archives such as the Bavarian State Library.

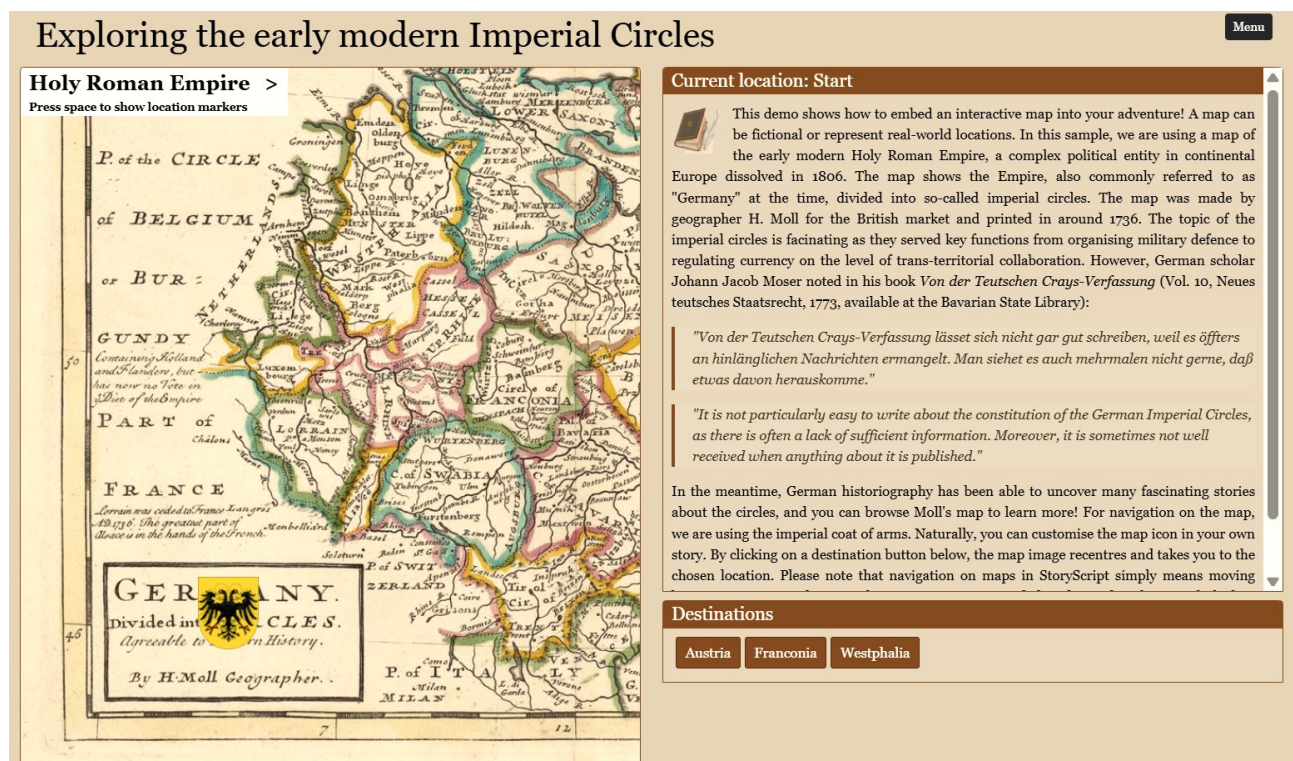


Figure 2: Map-based narrative allowing users to interactively select destinations and explore the imperial circles of the Holy Roman Empire in their own time and order. Personal progress can be saved via the "menu" in the top right corner.

Our engine demonstration invites DH Benelux participants to explore both the historical sample and existing entertainment content. We aim to start conversations about how enriched hypertext narratives could benefit their projects and what additional features might enhance its utility. The goal is to initiate collaborations and critically reflect on the engine's current creator-centredness. While users can already explore (hi)stories from multiple perspectives, future iterations could even incorporate

traceable user input and classifications. This would align hypertext more closely with the semantic web, as already envisioned by Schraefel et al. in 2004.

Going forward, we also plan to integrate AI, for example in the form of Large Language Models (LLMs), into the writing and coding processes, which could make the engine more accessible to non-technical scholars and institutions like archives and museums. This aligns with recent theoretical shifts in hypertext research, which re-imagines hypertext “as a method of inquiry” and “information retrieval systems”, which are, in the age of AI, “synthesising automation (on the machine's side) and augmentation (on the user's side).” (Atzenbeck et al., 2021) So far, we have experimented with rule-based scripts and widgets in Python to create simple interfaces that can help users uncomfortable with HTML, CSS and TypeScript generate location files and person interactions for their own projects (fig. 3). Embedding these files into a GitHub repository, however, and linking the components correctly, still requires a good understanding of the engine structure and a careful consultation of our tutorials. Here, AI-based reading aids could perhaps lower the technological barrier even further and help with structural challenges of non-linear storytelling. (Also see tool review by Letonsaari, 2019, for low-threshold game development involving adults with low ict skills.)

The image shows a web-based interface for a Python script. It is divided into two main sections: "Step 1: Enter Person Details" and "Step 2: Add Q&A Pairs".

Step 1: Enter Person Details

- Person Name: A text input field containing "Monika Barget".
- Description: A large text area containing "She is a historian." with a small icon in the bottom right corner.
- Next: A button to proceed to the next step.

Step 2: Add Q&A Pairs

- Question: A text input field containing "Enter a question for the person!".
- Answer: A large text area containing "Enter the person's answer (HTML allowed!)" with a small icon in the bottom right corner.
- Buttons: "Add Q&A Pair" and "Done with Q&A".

Added Q&A Pairs:

- 1. Q: Where do you work?
A: I work at Maastricht University?...
- 2. Q: What do you teach?
A: I teach digital sociology and digital humanities m...

Figure 3: Sample output of a Python script using widgets to collect user input for a conversation in Storyscript. The output consists of a .html file with the conversation details and a corresponding .ts file with the person details.

In this context, we must also consider possible accessibility challenges of the final products created with StoryScript. Studies show that students, for instance, struggle with cognitive overload when navigating complex hypertexts, especially on smaller screens like mobile phones or tablets (Takyeddine & Madaoui, 2024). Our demonstration is, therefore, also an attempt to find partners to tackle these issues and further develop the engine’s inclusive potential for research and education.

References:

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