

Abstract

While storytelling and narratology have long been the domain of humanists, creating and exploring narratives using a video game platform poses unfamiliar challenges for team coordinators used to working alone with traditional media. Issues to overcome include training collaborators on technology, mutually accessible storage, prevention of data loss, and version control. This poster describes an updated process used to create a dynamic and scalable team for a long-term project using video games to explore medieval culture.

Cultural Interactions in 3D Immersive Environments

Lynn Ramey

Vanderbilt University, Nashville, Tennessee, USA

Personnel & Methods

The project coordinators, Lynn Ramey and Sahar Amer (University of Sydney), developed general guidelines for the project. A STEM and a History professor at Vanderbilt created a class where students learn about VR and create projects in small groups assigned to professors across the university. Ramey is directing the work of a group of four students.

Working group and supervision

Students were assigned by the class professors. One had previous work in Unity and two others were computer science majors or minors. Students were allowed to design what they thought they could accomplish on the project in one semester and split the work up according to interest and ability.

Unity3D | game engine

- Powerful game engine designed for extreme flexibility to aid the independent developer
- Freely available; rapidly becoming an industry standard
- Asset Store allows free market sales of models and characters that can be imported into games
- Constituted the central software in our design studio
- Training required for novices but visual scripting available.

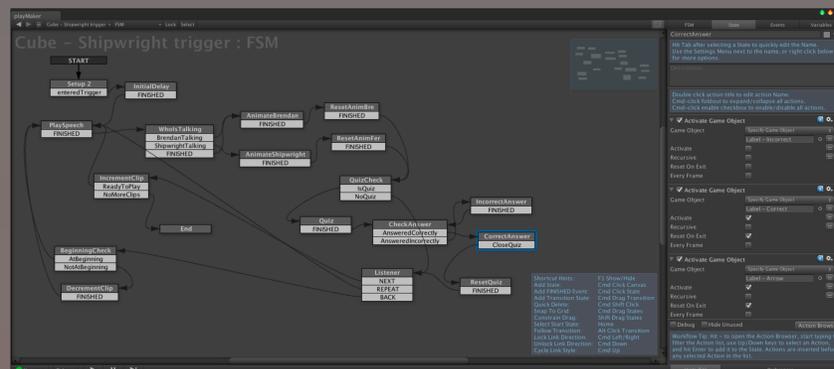


Fig. 2: Visual scripting tools of the PlayMaker plugin.

Students decided to create a game mechanic where users will be able to collect stories line by line by trading with other characters, or earn story lines by successfully telling a story or eavesdropping. The Oculus Rift is being used to create empathy and a fully embodied experience.

Controls include walking, pointing, decision making. Voice acting may be implemented.



Fig. 4: Terrains are sculpted using a variety of brush tools.

Photoshop or GIMP (free alternative) | image editing

- Enables minor modifications of pre-made assets
- Used to make logos & 2D assets such as game map, title screen
- Many students already use the program and have it installed
- Due to prior experience students often need little guidance



Fig. 5: Demons created using Mixamo.

MakeHuman | character creator

- Sadly not as easy to use as Mixamo, now discontinued
- Period appropriate clothing remains an issue.

Subversion | version control

- Unity's suggested methods were found unsatisfactory.
- Pros: this is a professional version control system that is well known and useful for students to learn
- Cons: hard to implement on campus. Set up off-campus server.

articy:draft | scriptwriting

- Familiar task for humanists; rather easy for the team.
- Specialized software could streamline planning of the narrative.
- Only available for Windows OS, which not a single one of our humanities students was using; most also lacked hard drive space for a partition or Parallels.
- Not implemented in time to have an impact on this version of our program; continued evaluation is planned.

Introduction

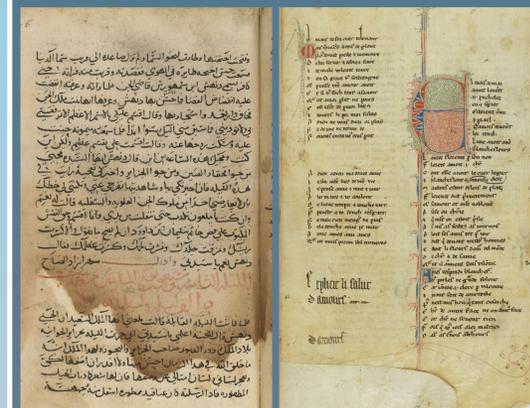
How did texts and ideas circulate within and between societies in the Middle Ages? We know that there were many potential vectors of movement: pilgrimage, crusade, merchant caravans and ships, and itinerant performers, to name a few. However, particularly in societies where transmission was largely oral, scholars usually cannot identify specific moments and locations when stories moved from one culture to the next. For the medieval period, this lack of data has historically been the cause of heated debates as scholars identify stories that share common elements, but due to historical or political reasons scholars are resistant to the notion that one nation's literary tradition is "indebted" to another.



Fig. 1: Medieval textual transmission via pilgrimage—the Canterbury Tales

This project models how elements of a story from the Thousand and One Nights could have circulated between East and West via the Lusignan court at the crusader kingdom of Cyprus circa 1194 in order to create a counter-narrative to the Eurocentric development of national literatures.

Conclusions



Figs. 6 and 7 – BNF Arabe 3611 (The 1001 Nights) and BNF Anc 7192 (Floire and Blanchefleur)

The exact relationship between the story of *Prince Qamar Al Zaman and Princess Boudour* from the 1001 Nights and Old French romances like *Floire et Blanchefleur*, *L'Escoufle*, and *Huon de Bordeaux* will likely never be known. Oral societies do not leave complete written transmission trails. But the striking similarities between the texts and the centuries-long contact between Islamicate and Christian societies in the Crusader kingdoms make it almost certain these stories crossed paths. Modeling textual transmission between cultures, particularly in a VR or immersive environment, allows users to experience first hand the inevitability of exchange during cultural contact.

Working with mixed groups of STEM and humanities students, faculty and staff provides a low cost way forward with the additional advantage of facilitating faculty-student interaction and student learning through production of knowledge.

Bibliography

1. Amer, Sahar. *Crossing Borders: Love Between Women in Medieval French and Arabic Literatures*. Philadelphia: University of Pennsylvania Press, 2008.
2. Lambert, Joe. *Digital Storytelling: Capturing Lives, Creating Community*. Routledge, 2013.
3. Langermann, Y. Tzvi, and Robert G. Morrison, eds. *Texts in Transit in the Medieval Mediterranean*. University Park: Penn State University Press, 2016.
4. Nicolaou-Konnari, Angel, and Chris Schabel, eds. *Cyprus: Society And Culture 1191-1374*. Leiden: Brill, 2005.
5. Ramey, Lynn, and Rebecca Panter. "Collaborative Storytelling in Unity3D." In *Interactive Storytelling*, edited by H. Schoenau-Fog et al., 9445:357-60. Springer-Verlag, 2015.
6. Squire, Kurt, and Henry Jenkins. *Video Games and Learning: Teaching and Participatory Culture in the Digital Age*. New York: Teachers College Press, 2011.

Acknowledgements

This project is currently under development with funding from Mellon and Vanderbilt University. In addition, Vanderbilt University has provided seed funding to set up a training program for humanities students in video game development. Many thanks to Rebecca Panter worked long and hard on an earlier project that led to this one.