The Penn & Slavery Project Augmented Reality Tour

Dr. Kathleen Brown[1], Dr. Alexis Broderick[2], VanJessica Gladney[1],
Meaghan Moody[3], Dallas Taylor[1], Matt Tidridge[4]

[1]University of Pennsylvania, [2]University of New Hampshire, [3]University of Rochester, [4]Dream Syndicate XR

In 2017, a group of Penn undergraduates founded the Penn & Slavery Project (PSP) to investigate Penn's historical connections to slavery and scientific racism. The student researchers uncovered many aspects of Penn's history that had been forgotten or intentionally obscured. For example, many 18th century Penn professors and trustees were enslavers, and Penn's medical school taught racial theories that were used to justify slavery and racism. Penn's story is a national story, and one of great importance to our ongoing efforts to come to terms with our nation's history of slavery.

In thinking about how best to communicate their research findings to a broad audience, PSP members decided to design an augmented reality (AR) tour of Penn's campus.
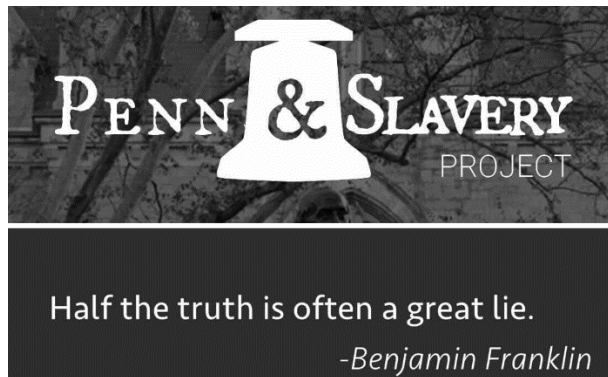

Fig. 1.   *Screenshots from application user interface*

I.   OVERVIEW

Created to expose visitors to Penn's history in an immersive and visually engaging way, the AR tour was never intended to serve as a "solution" to the institution's complicity in slavery but rather as a digital interruption that fosters conversation and engages audiences critically in thinking about Penn's legacy and future reparative actions.

Developed by a collaborative, interdisciplinary team, the PSP application will be freely available this fall on both the App Store and Google Play Store. The app integrates historical methods and content, graphic design, 3D asset creation, programming and interaction, and application design. The tour consists of six AR experiences related to Penn's history, such as a portrait that comes to life with an actor portraying a man named Caesar, who was enslaved by an early Penn professor and labored in Penn's first dormitory for thirteen years. Other topics include buildings named after enslavers and the role Penn's medical school played in training and certifying doctors who practiced "plantation medicine." The AR content can also be experienced from any location to make this history widely accessible.

This AR tour is the first of its kind among peer institutions that are investigating their university's historic ties to slavery. This initiative engages the history of slavery on college campuses, a timely issue that has ramifications that extend nationally. Universities around the country are confronting their historic ties to slavery and grappling with how best to reckon with these aspects of their schools' pasts. This tour will have an impact on communities both on and off campus and engage a broader public in the findings and value of this student-driven research project.

Fig. 2.   *3D-Scanned quilt with embedded videos from one AR experience*

II.   CONCLUSION

In this talk, we will discuss the creation of the PSP AR tour app by an interdisciplinary team of historians, librarians, developers, and designers. We will provide an overview of its history, the inspiration for the tour, and the critical questions that surfaced and lessons learned. We will also discuss the project's implementation by a team of students in collaboration with the Philadelphia-based extended reality (XR) development firm, Dream Syndicat