PRINTED
BONES

≈

By

Almudena Martínez

&

Manuel Cruz

Entry name: "**Printed Bones**"

Entry Type: **Video Game**

Authors:

❖ **Almudena Martínez**

Roles: Design and Research.

Bio: Historian specialized in heritage, historical libraries, and ancient books.

Links: independent.academia.edu/AlmudenaMartinez3

❖ **Manuel Cruz**

Roles: Design and Programming.

Bio: Historian and Educator, doing experiments with video games.

Links: @ManuACruz

(Version 1.0. Runs on PC.

Requires a computer and a computer mouse to be played)

Installation and set up:

- Download, Unzip, and Open the folder "PrintedBones(ver1.0) - HeritageJam2017".
- Open the file "PrintedBones(ver1.0).exe". A new window will appear.
  - If necessary, you can change the display and input settings on this window. We recommend playing on the default settings.
- Hit the "Play!" button on the lower right corner and the game should start.

Instructions to play:

- Use a computer mouse to move the cursor through the screen.
- Click and drag to interact with the different elements.
- To exit the game, simply press the escape key at any given point.

Paradata

When approaching the theme for The Heritage Jam 2017, we debated about the connection between *bones* and *the past*, and how we create history from these remains. After a long historiographical debate, we decided we wanted to make a video game that will highlight the narrative process behind making history and archeology. And we thought that using printed bones, made of ink, and inviting players to dig inside a book, creating their own narratives from what they will find, was a good way to do it.

In "Printed Bones" players are presented with a digital interactive book full of paper cutouts. Players can drag these cutouts around and uncover new ones that lie underneath. These pieces contain illustrations of bones and lines of selected poems. Players can unveil these cutouts at their own pace and order, creating a different experience in every game.

There are three different settings that are chosen randomly every time the game starts. Each setting was carefully designed and contains one of the poems, which have been selected for their references to bones and to the past: George Byron's poem deals with the uses we can give to bones; Emily Dickinson's with reviving what is

long gone; and Alec Hope's with the persistency of the past. We felt these poems were in line with our historiographical debates, and we expect their rearrangement will encourage players to think about the uses we give to bones, the histories we create from them, and our relation with the past.

Together with the poems, we selected a variety of illustrations of human and animal bones from anatomical treatises (from the 16th century onwards). We used several online data bases for ancient books and historical libraries to find appealing illustrations that are also public domain marked. We edit these images in different ways to create scenes that will relate to the content of the poems and will arouse player's imagination.

We were trying to end up with a piece that could be shared within a museum exhibition, so we took several decisions in the design. The game is very short in length, so it can be played in a couple minutes as an added experience to the exhibition. The random multiple levels allow for re-playability so each experience will be different. We wanted the game to be accessible to a wide range of users regardless of their experience with video games, so we try using the mouse cursor as our main input, avoiding the use of external controllers or arrangements of keys. We initially wanted to make this game available for android devices and iPads. But due to time and skills constrains, we could not sort that aspect out. While the initial concept was designed for touch input, we think using the cursor as in the current version

still holds up for our vision of the game. We also payed attention to visual and sound indications to guide player's interactions and ran several play-test sessions to ensure a certain quality.

Overall, we are very happy with the results. This is our first historical game jam, and we were very excited to engage with this creative process. The theme was very thought provoking, and we were immediately absorbed into designing the game. We think we managed to tap into our different expertise and interests to bring together something fun, intriguing, and compelling. And we wish it will encourage players to think about the past we create from bones.

We hope you will enjoy playing this game as we enjoyed making it.

Almudena and Manuel.

Acknowledgements

All images used are available online as Public Domain Marked images.

The poems are included under fair use as part of a re-mixed artistic piece and as educational material (serious game).

Images:

BIDLOO, Govard. *Anatomia humani corporis centum & quinque tabulis, per art. G. de Lairesse ad vivum delineatis...* Amstelodami, Sumptibus viduae Joannis à Someren, 1685. NETHERLANDS. Rijksmuseum.

HEADLEY, F. W. *The structure and life of birds*. London and New York, Macmillan and co.,1895. UNITED STATES OF AMERICA. Boston College Libraries.

The Gordon African Collection: Quadrupeds. NETHERLANDS. Rijksmuseum.

VESALIUS, Andreas. *Anatomia Viri in hoc Genere Princip. Andreae Vesalii Bruxellensis...* Amsterdam, 1617. GERMANY. Universität Heidelberg, Institut für Geschichte der Medizin.

VALVERDE, Juan de. *Anatomia del corpo humano.* Rome, 1560. GERMANY. Universität Heidelberg, Institut für Geschichte der Medizin.

Poems:

BYRON, George "Lines Inscribed upon a Cup Formed from a Skull" in *American Poetry: A Miscellany.* Harcourt, Brace and company: New York; 1922. Accessed Online at:
https://www.poets.org/poetsorg/poem/lines-inscribed-upon-cup-formed-skull

DICKINSON, Emily. "Part One: Life. CXXVII. The bone that has no marrow" in *The Complete Poems of Emily Dickinson.* Martin Secker: London; 1924. Accessed Online at:
http://www.bartleby.com/113/1127.html

HOPE, Alec Derwent "Meditation on a Bone" in *A.D. Hope*. Angus & Robertson: Sydney; 1963. Accessed Online at:

https://www.poetrylibrary.edu.au/poets/hope-a-d/meditation-on-a-bone-0559002