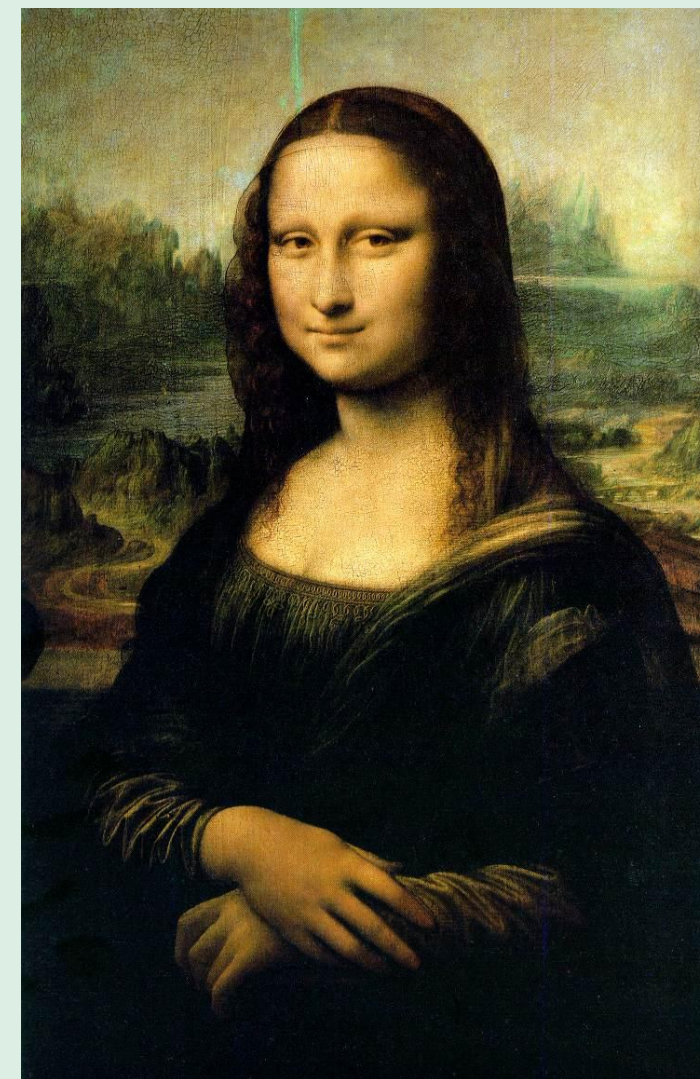


# Sketch and Learn

A sketch-based game to study images

Rajinder Wasson, David Mould, Robert Biddle

## Difficulty in Studying Images

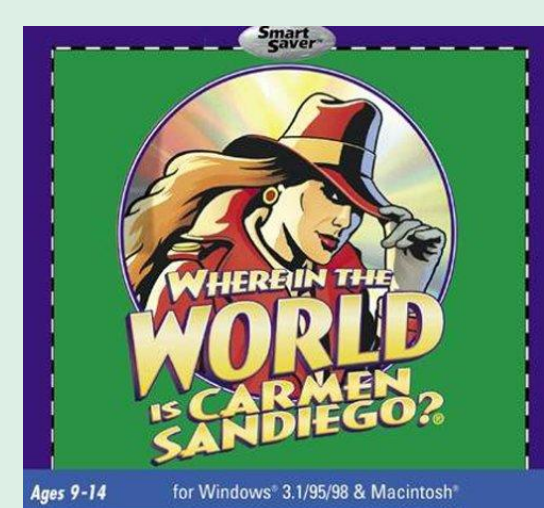


- Studying images takes time
- Must know important details and facts about each image
- People don't want to spend the time as they get bored or distracted

How to use technology to get users to spend more time learning about images?

## Games as Motivation

- Repetitive simple tasks
- Keep players focused for long periods of time
- Addictive and competitive
- Able to teach skills



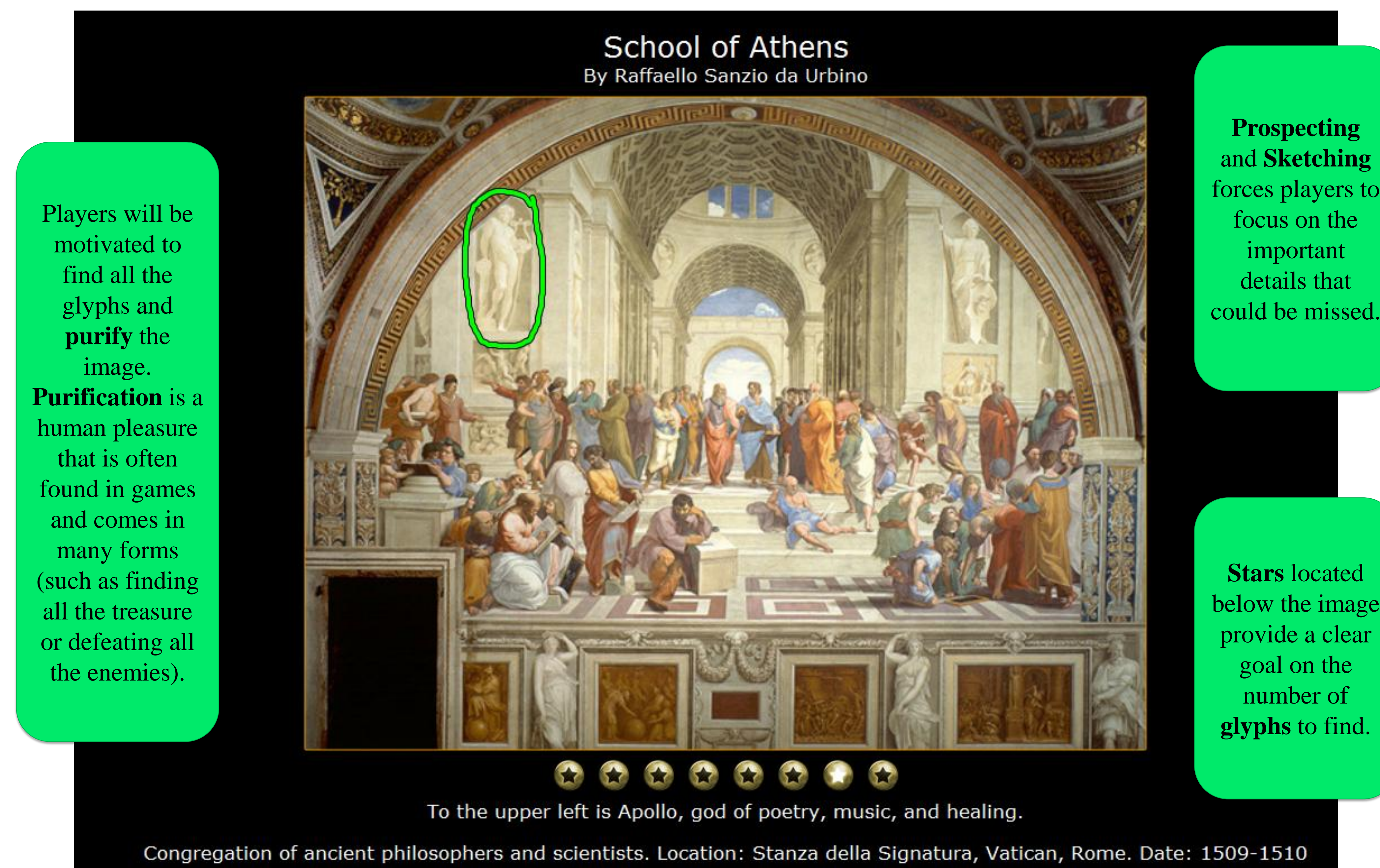
## Sketching - Memory Aid

- Sketching helps to remember images and significant features
- Target key areas of the image
- Helps to remember facts



Our game mechanics will get users to spend time learning about images and facts

## Interface and Mechanics for Learning Images



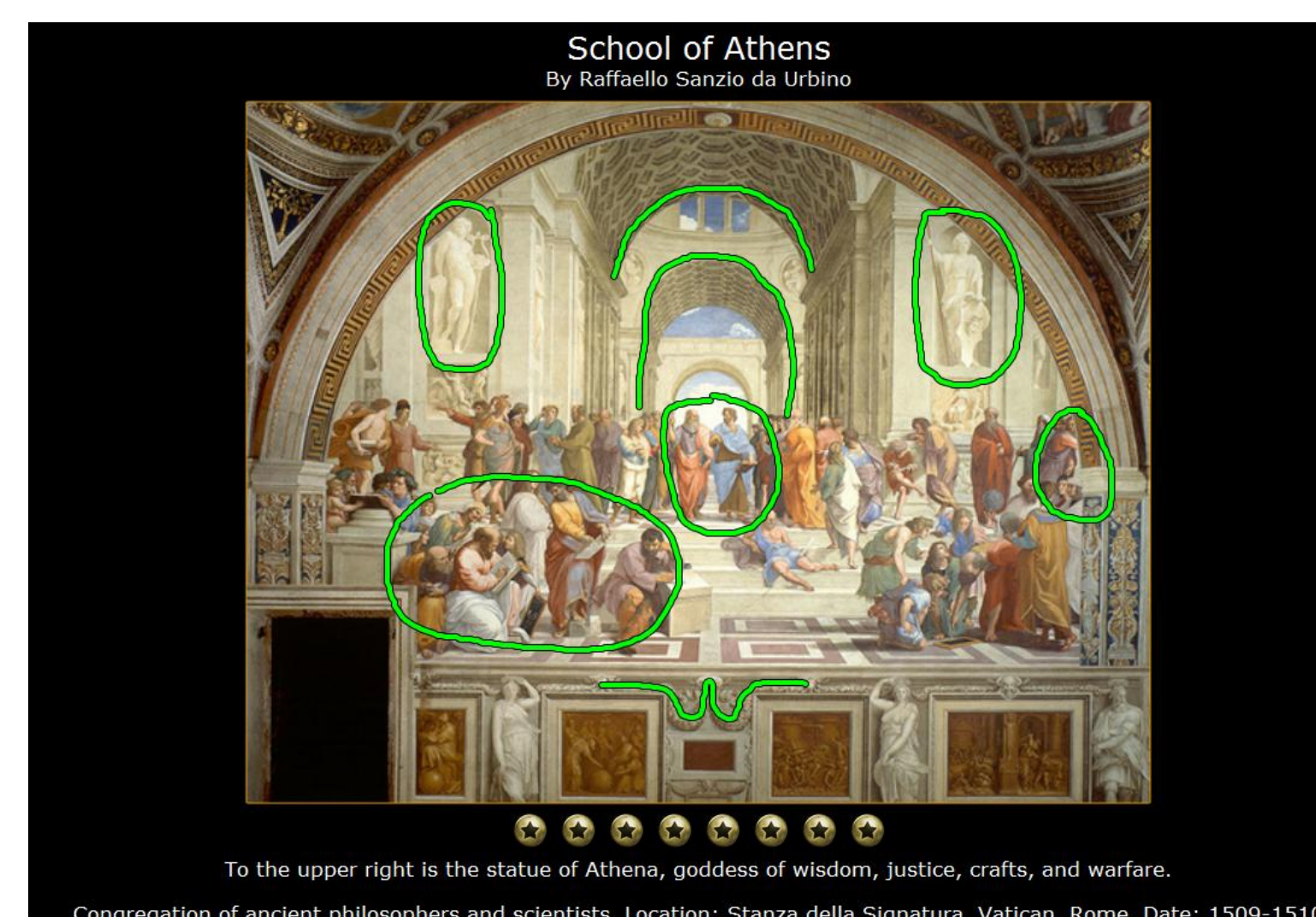
### Prospecting

- Players search for important areas
- Click to find glyphs in image



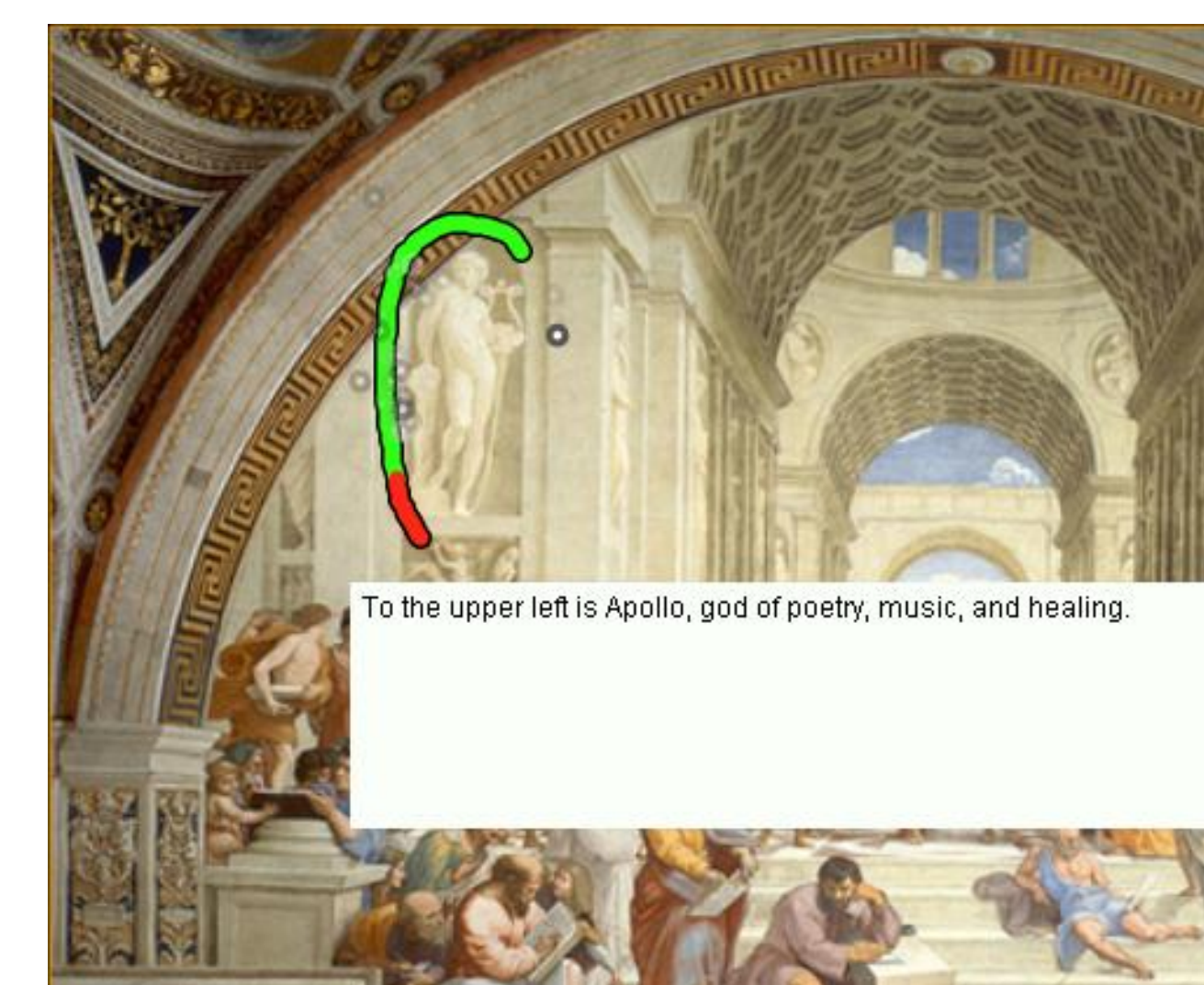
### Glyphs

- Hidden embedded symbols
- Associated details and facts about the image
- Many to find in the image



### Sketching

- Sketch glyphs to unlock information
- Focus and precision challenges the player



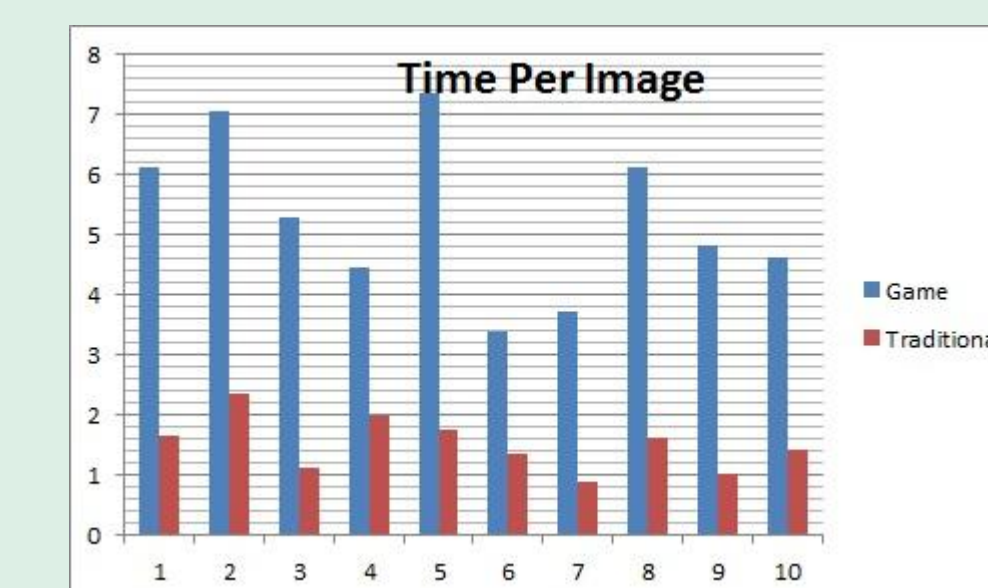
## Further information

Please contact [rwasson@connect.carleton.ca](mailto:rwasson@connect.carleton.ca). More information on this and related projects from the GIGL website <http://gigl.scs.carleton.ca/>

## Experiment: Game vs Textbook

- 25 Participants (11 art history students and 14 non-art history)
- 5 Game images and 5 textbook-style images
- Participants were shown 3 images at end and asked to describe details from memory

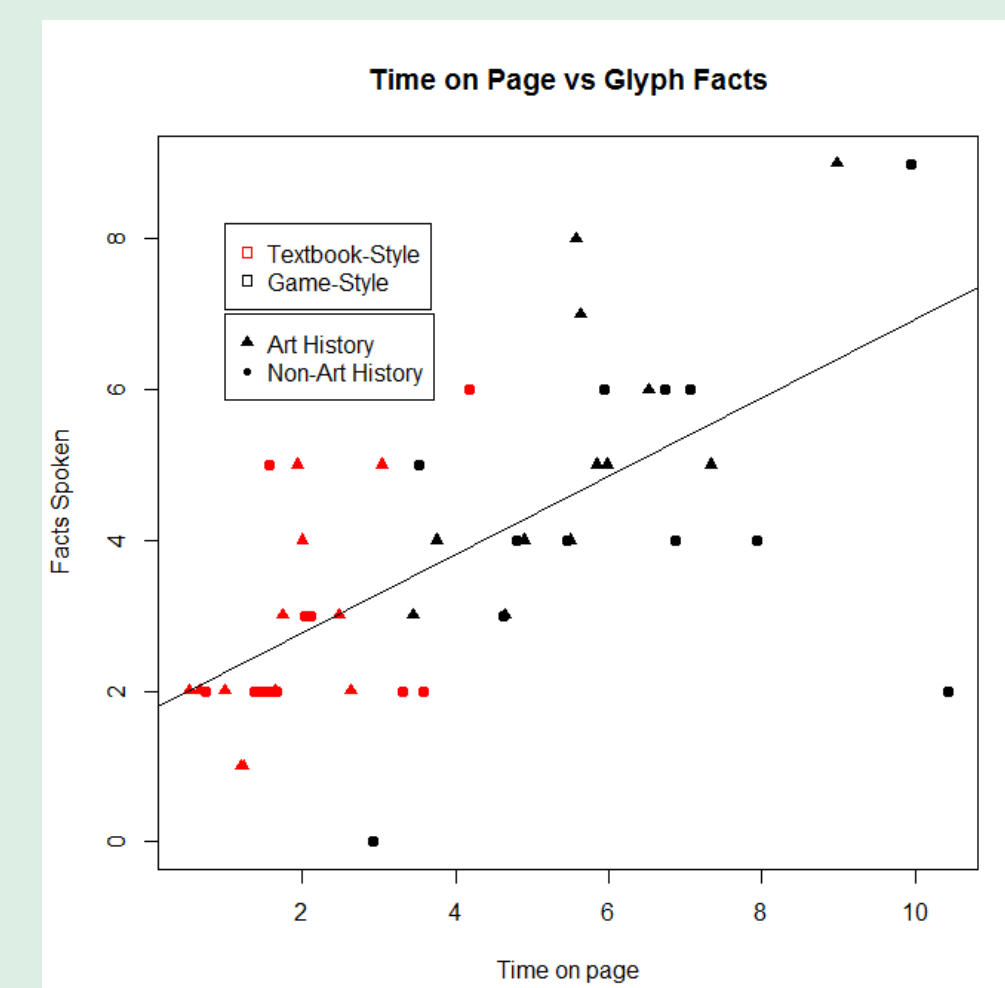
### Time spent



Participants spent far more time on game-style images compared to the traditional textbook-style images.

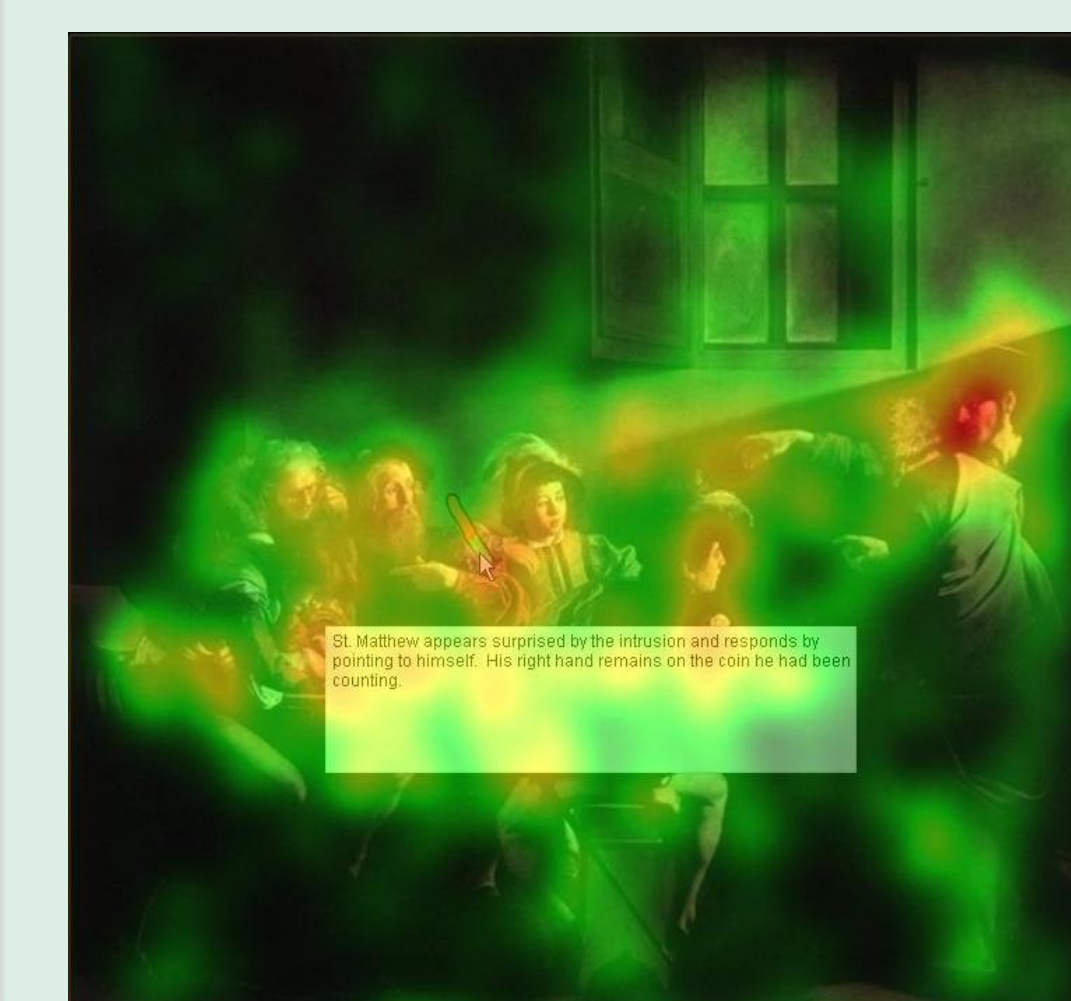
## Facts and details recalled

Participants also remembered more of the important information that was associated with the glyphs in the game-style images.

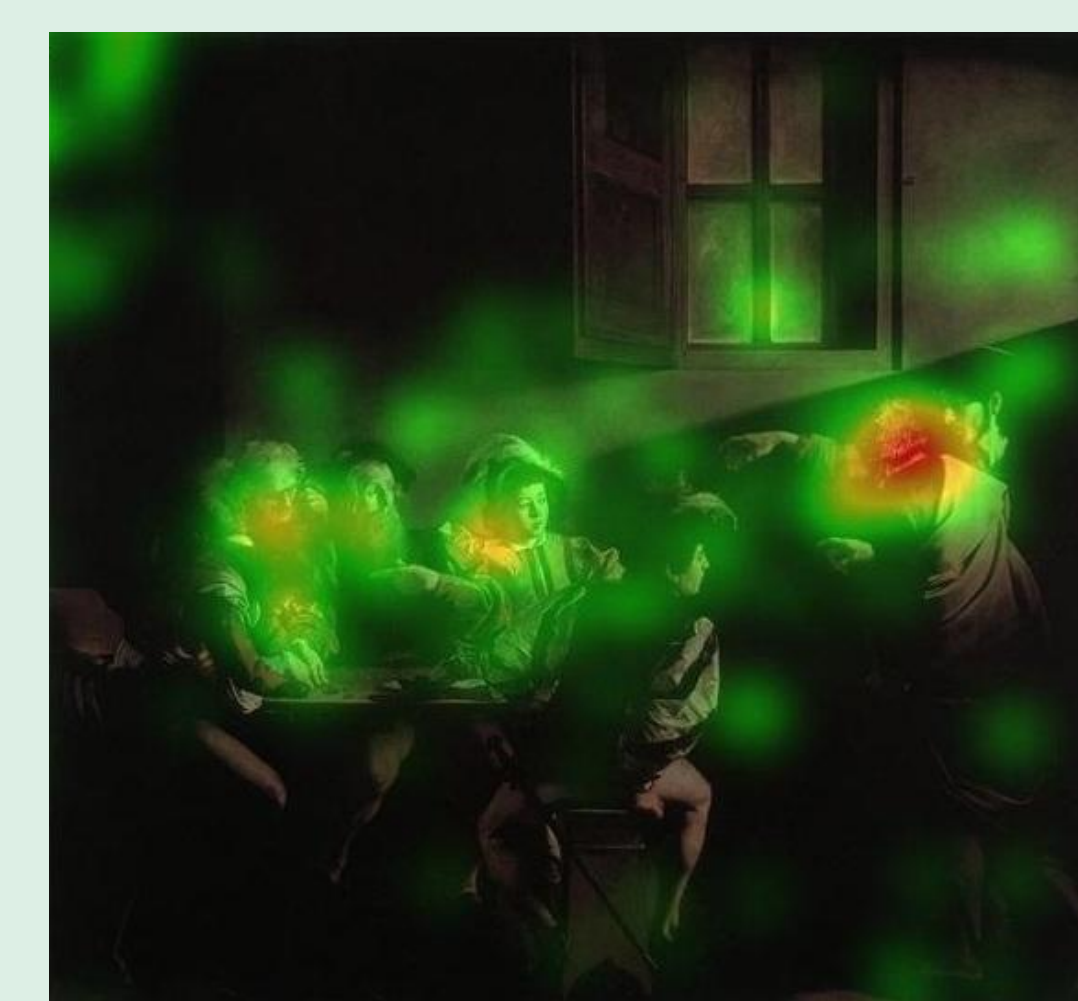


## Eye tracker hotspot map

Participants gazed at more areas, including the corners, the feet, and a larger area around the faces and figures.



Game-Style



Textbook-Style