

Assassin's Creed Origins as a Digital and Pedagogical Tool

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Introduction

Preliminaries

Before I begin, I should mention that I was advised not to present this paper by many people who are older and wiser than me. They worried that it would come across as trivial, and that giving such a talk at a major conference could negatively impact my reputation as a scholar. Needless to say, it is generally not a good idea for a grad student entering the job market to give a paper about a video game, but I'm here speaking to you now in spite of this risk, because I believe that this subject is much more important than it might appear at first glance. Not only is it especially timely (the game was released a few months ago), but it may also have real consequences for the future of teaching Egyptology and relating it to the general public. In order to ensure that this paper not be dismissed on the basis of quality, I have linked all aspects of the game that I will address to reputable publications, and I have passed around handouts with a comprehensive bibliography and a link to a PDF version of this talk.

To research this topic, I played the game with special attention to detail and kept records, I interviewed two of the game's creators, Maxime Durand and Jean Guesdon, I combed through social media posts to gauge player reactions, I read reviews written by both gamers and Egyptologists, and I cross-referenced my observations with egyptological publications. Today I hope to convince you that this subject deserves to be taken seriously and that it rewards our consideration with insights into the state of Egyptology in the public eye and the possibilities for building on this relationship.¹

Popularity

The popularity of Egyptology among the general public has been and continues to be one of its greatest assets. At a time when anti-academic sentiment is at an all-time high, Egyptology is still widely considered to be a worthy pursuit. Of course, that popularity is not always a good thing from an academic perspective. Not only does it make room for "Ancient Aliens" documentaries, it also creates a market for bad pop culture, and I'm sure you can all think of plenty of examples. But even if we set those complaints aside, there is a question about the value of that popularity: Does it help us to be better Egyptologists? Does it lead to more funding for research? Does it attract people to the field? Perhaps, but it's difficult to prove in most cases. However, the popularity of this game is directly translating into better support for the field of Egyptology, in some ways that are immediately measurable, and in other ways that we can only evaluate with the passage of time. This talk aims to critically examine the value of Assassin's Creed Origins to our field by critiquing it as a digital reconstruction and by considering its impact from an Egyptological perspective.



¹ Hall (2018)

Inspiring Interest in Ancient Egypt

There's a tendency to see video games as "low-brow" entertainment, but I think that matters a lot less than we imagine. For starters, Egyptology attracts interest with little effort, an effect which could not be better or more ridiculously described than this:



"The Egyptian duck is a dangerous animal. He welcomes you benignly, but if you allow yourself to be taken in by his innocent manner and handle him with familiarity, you are lost: with one peck he injects his venom, and there you are, an Egyptologist for life."²

Whether by run-in with a venomous duck, or by some other means, we all became interested in ancient Egypt at some point, and that interest probably developed quickly after a single brief encounter.

Take a moment to recall where your interest in Egyptology began. Was it purely academic? More likely, it was a film or a novel or some other form of popular entertainment. I myself can say that my interest in Ancient Egypt began very early, but it didn't start with an academic source (or a duck). For me, my interest grew out of a more general obsession with Bert and Ernie, and I don't see anything wrong with that. If we're honest with ourselves, I think we can all agree that a video game is a perfectly valid entry point to the study of Egypt.



I'm going to quibble about some of the game's imperfections in this talk, but it can hardly be argued that it is less historically accurate than Sesame Street or The Mummy. And I think we can all agree that anything that inspires a genuine interest, regardless of its imperfections, is worth paying attention to. For younger generations, video games also fulfill this role, and this game is generating an enormous amount of interest among the next generation. If you teach

² Auguste Mariette in: Thompson (2015: 223-224).

undergrads, it is likely that in a few years most of your students will have played this game. Keep in mind that it takes over 100 hours to beat the entire game. That means that some of your students will have spent more time interacting with the Assassin's Creed version of ancient Egypt than with all other sources of information combined. It is in our interest to know about the information they're getting and how reliable it is.

While we can't yet say how much of an impact this game will have on our field, there are some telling early signs. First, the game is very popular. It sold 1.51 million copies in its first week alone.³ Second, many people on social media have cited this game as the inspiration for their newfound interest in ancient Egypt. Vacation photos in Egypt are very popular on the Assassin's Creed subreddit, and one person even travelled to Siwa dressed as a character from the series.⁴ And these people are very interested in historical accuracy, as numerous other posts reveal.⁵

Perhaps you will be surprised to learn that historical accuracy is a selling point for video games, but numerous reviews have upheld this game as a faithful (though fictionalized) portrayal of ancient Egypt.⁶ Gamers might be broadly characterized as having a penchant for fantasy, but they also value authenticity as much as anyone else. Most importantly, Ubisoft prides itself on the historical component of this series, and has put in a great deal of effort into ensuring that the game remain faithful to its setting. In an interview, Ashraf Ismail, one of the creative directors, said: "We're trying to give Egypt a proper weight, a proper recreation. To make it authentic. We wanted to deliver an Egypt that you've never experienced before."⁷ For all of these reasons, the game itself is already a pedagogical tool. It sparks an initial interest, and it provides (or at least it is intended to provide) valid information about ancient Egypt.

³ See "Assassin's Creed Origins Sells an Estimated 1.51 Million Units First Week at Retail."

⁴ See "The Great Sphinx..." and "Completed my Assassin Pilgrimage at Siwa."

⁵ See "Some Screenshots..."

⁶ Hotton (2018a-b) and Hall (2018).

⁷ Blain (2017: 33).

Critique

History

In order to better illustrate how this works, I will try to (briefly) summarize the main story of the game itself. The events of Assassin's Creed Origins begin in the year 59 BC, during the reign of Ptolemy XIII and Cleopatra VII.⁸



You play as Bayek, a “medjay” from Siwa, who seems to have been the Forest Gump of Greco-Roman Egypt, in the sense that he shows up in the middle of every major historical event for no other reason than to involve the audience. After his son is murdered by a mysterious secret society, he goes on a quest for vengeance that takes him all over Egypt. His name comes from

⁸ For more on this period, see Chauveau (2000).

the Egyptian word for falcon,⁹ which we know from Coptic was pronounced **BH&**,¹⁰ but the creators chose to vocalize it as “Bayek” because “they wanted to avoid having to call him ‘bike’”.¹¹ His faithful sidekick is a Bonelli’s eagle named Senu, meaning “companion”¹², who helps Bayek to see more of his environment through a bird’s-eye view.



Egyptologists usually ask why his sidekick isn’t a lanner falcon,¹³ but the answer is quite simple: the skill for which Senu provides the backstory has always been called “Eagle Vision”, so it needed to be an eagle to fit with the game’s existing lore. In addition, the creators have injected eagle symbolism into the main assassin character since the beginning of the series.¹⁴ With Senu, they did a good job of working within this limitation while selecting the appropriate animal for an ancient Egyptian setting. The Bonelli’s Eagle is native to Egypt, and it bears a striking resemblance to the Lanner falcon (as depicted in this faience inlay from the Met).

⁹ Faulkner (1962: 81)

¹⁰ Černý (1976: 30)

¹¹ Durand & Guesdon (2018)

¹² Faulkner (1962: 230)

¹³ The animal associated with the god Horus (and many others) and a common figure in Egyptian iconography. See Wilkinson (2003: 200-211).

¹⁴ Durand & Guesdon (2018)



Side note: I don't know why the designers believe that "bike" was their only other option (I asked, but I didn't understand the answer) or why they gave the female Eagle a markedly masculine name (I'm not sure that I got that point across very well in my interview), but I have to leave these issues aside for now. I'll return to the subject of language later.

Bayek's wife, Aya (named for the 13th Dynasty queen¹⁵) is also involved, and together they help to form a brotherhood of assassins, whose purpose is to defend the innocent against abuses of power. This naturally includes traveling to Rome to assassinate Julius Caesar.

¹⁵ Dodson & Hilton (2004).



“Origins” may seem like a strange name for a game set at the end of Ptolemaic Egypt, since it is separated by thousands of years from what most people here would call the “origins” of any of the things that we think about most of the time. In fact, it’s so late in Egyptian history that it might be more accurate to call it “Assassin’s Creed Origen’s”.



But joking aside, it does seem odd that a game ostensibly set in ancient Egypt would take place at such a late date (a fact which has garnered some criticism from other Egyptologists¹⁶), but the game's creators put a great deal of thought into this decision. The subtitle "Origins" refers to the origins of the Assassin's Creed, and, according to the creators, they placed it in Ptolemaic Egypt because it predates the other events in that story while being late enough in Egyptian history that there are already ancient sites to explore. They wanted players to find villages, farms, and functioning temples, alongside looted tombs and derelict ruins. This was an effective choice. It provides a realistic ancient Egyptian setting while simultaneously communicating to players that Egyptian civilization existed for a very long time, much longer than most people realize. It can be expected that many players will be surprised to find that the pyramids are already ancient, and perhaps this will encourage them to learn more.

¹⁶ Hotton (2018a).

To provide a simple illustration of how this manifests itself within the game. The Great Pyramid was about 2500 years old during the time period in which the game is set. It would have been showing its age, but not yet ruined, since its casing stones had not been removed as building material for the growing city of Cairo.¹⁷ This means that the pyramids still present a striking vista from a distance, but up close they are cracked and crumbling.



This means that Bayek, with his superhuman climbing abilities, can climb to the top, where the gold covered pyramidion is still in place with Khufu's name visible in the hieroglyphs.

¹⁷ Lehner (1997: 108-116).



Architecture

The designers recreated the internal layouts of pyramids as well. For Great Pyramid, they used the internal spiral ramp hypothesis to imagine interior spaces that “haven’t been discovered yet”. This created a small controversy after the now-famous “Big Void” was discovered, when a magazine reported that the designers claimed to have predicted the discovery of the void.¹⁸ A closer look at that article reveals that the magazine deliberately reframed their quote to make it seem that way. When I asked the game’s creators about it directly, they confirmed that they were only using the internal ramp to add interest for gameplay and because they liked that hypothesis. They do not claim to have predicted the void.

Their most impressive work is on the Step Pyramid. The layout of Djoser’s complex closely matches reality, and this provides an opportunity to discuss one of my favorite aspects of the game. Because of Ubisoft’s dedication to accuracy, the game actively rewards prior knowledge. I found the entrance to the substructure by going to where I thought it should be in

¹⁸ Totilo (2018).

the northwest corner of Djoser's funerary complex.¹⁹ When I got inside, I discovered that they had also recreated the interior of the pyramid, complete with vibrant faience tiles.



¹⁹ Lehner (1997: 84-93).

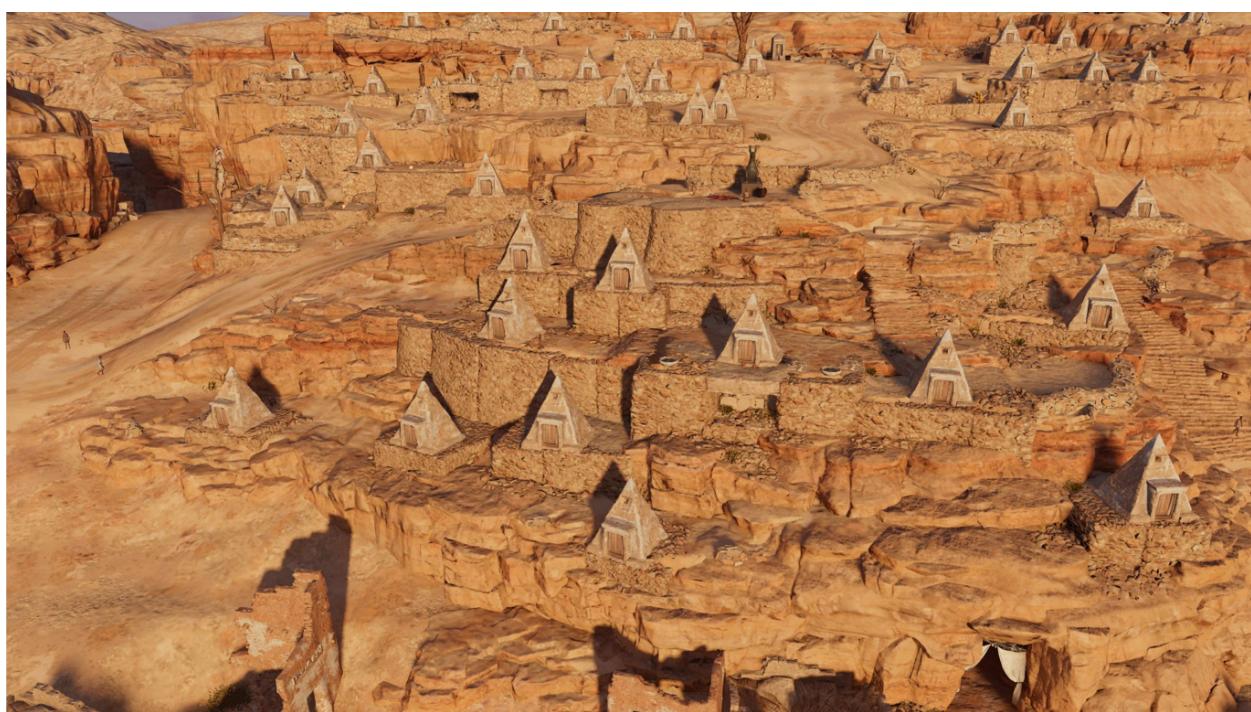
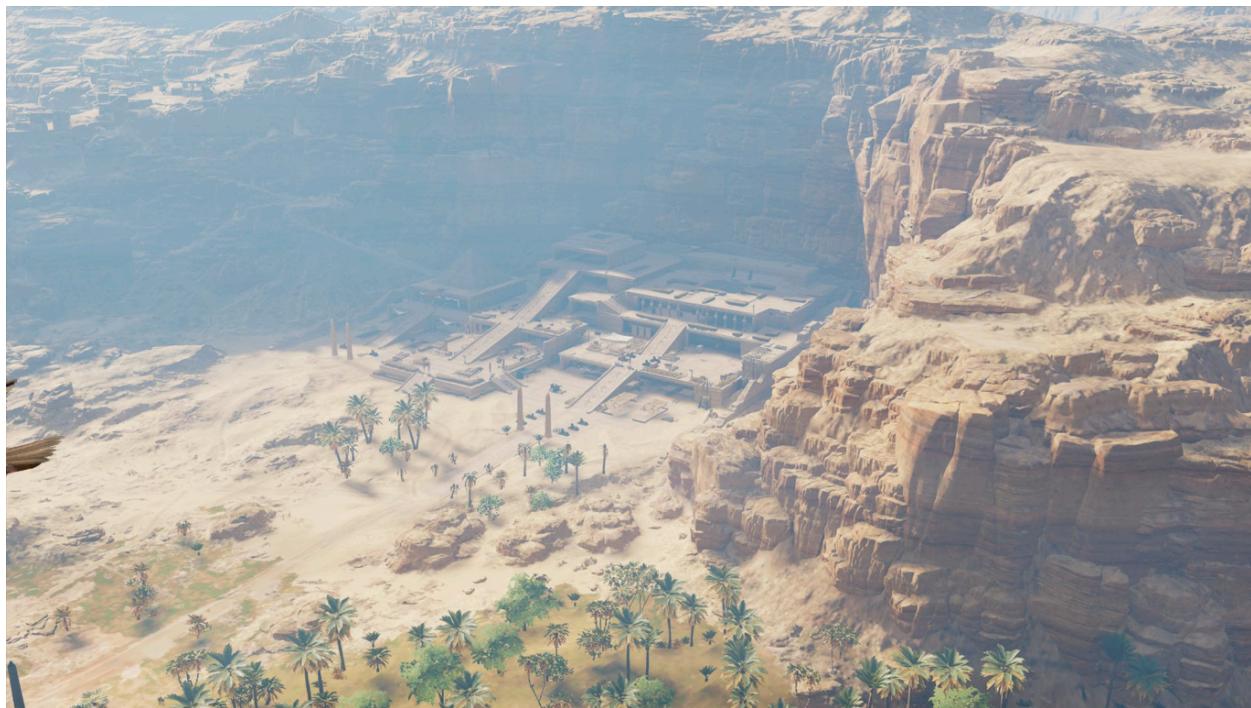
To sculpt the appearance of cities and monumental architecture, they relied heavily on the watercolors of Jean-Claude Golvin,²⁰ who worked closely with the developers and produced original artwork for the game.²¹ A direct comparison reveals how diligently they reproduced his reconstructions in three dimensions: Siwa, The Pharos, Deir el-Bahri, Deir el-Medina, and Thebes, and especially Karnak. The depiction of Karnak is not exact, but it is quite good. Its location and prominence in the city of Thebes is correct, and it closely replicates the layout of the temple while remaining open and navigable for gameplay.²²



²⁰ Aufrere, Golvin, & Goyon (1991).

²¹ Durand & Guesdon (2018).

²² Wilkinson (2000: 154-171).





In addition to living sites, ancient tombs are also present, recreated with clear attention to accuracy. Inside of Tut's tomb, the wall decorations are taken from life, and various Tut-themed easter eggs can be found throughout the game, such as the famous Restoration Stela.



Landscape & Geography



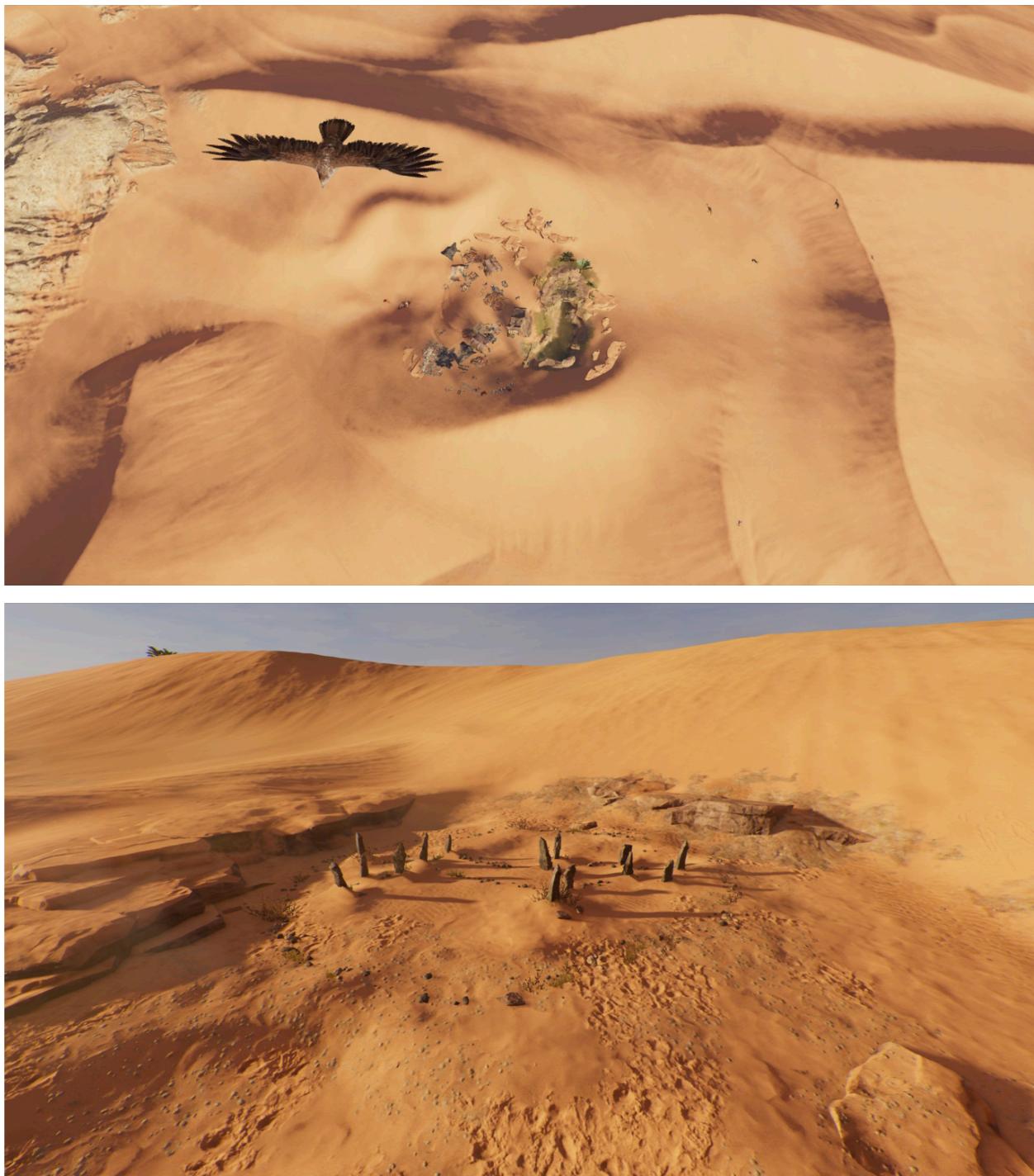
This image depicts the main game map, which is centered on Lower and Middle Egypt (Upper Egypt and Sinai also appear in the form of additional downloadable content). The layout of locations in the game is based on a schematic map of ancient Egypt, which is not true to scale. To create it, the designers placed major sites in their relative positions, but much nearer to one another than they are in life, and filled in the intermediate spaces with the appropriate types of wilderness. The map is quite large by game standards, but by necessity it is much smaller than the true dimensions of Egypt. It is important to remember at all times when evaluating Assassin's Creed that it deliberately creates a toy version of ancient Egypt. It may be a very sophisticated toy, but the rules of toymaking apply. It is meant to provide a fun approximation, not a true-to-life simulation, so it should not be expected to recreate reality precisely. In terms of

gameplay, the telescoped map is very large, and it provides plenty of opportunities to appreciate the scenery.



The landscapes in the game are not only breathtakingly beautiful, they also do justice to the diverse natural beauty of Egypt. There are deserts of course, and within them there are oases, wells, and stone circles.





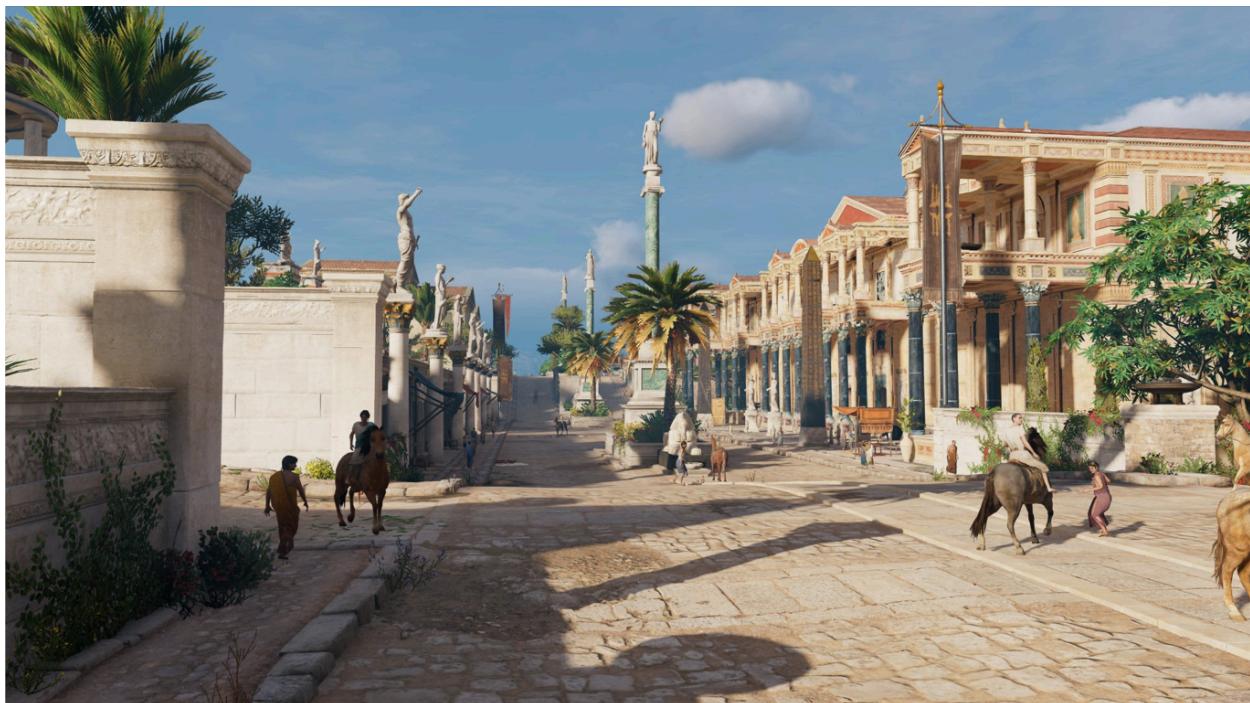
Interestingly, the stone circles are connected within the game to a star map, raising the much-debated issue of a possible relationship between the stone circles at Nabta Playa and the stars.²³ But while most of pop culture treats Egypt as a massive desert, Assassin's Creed primarily

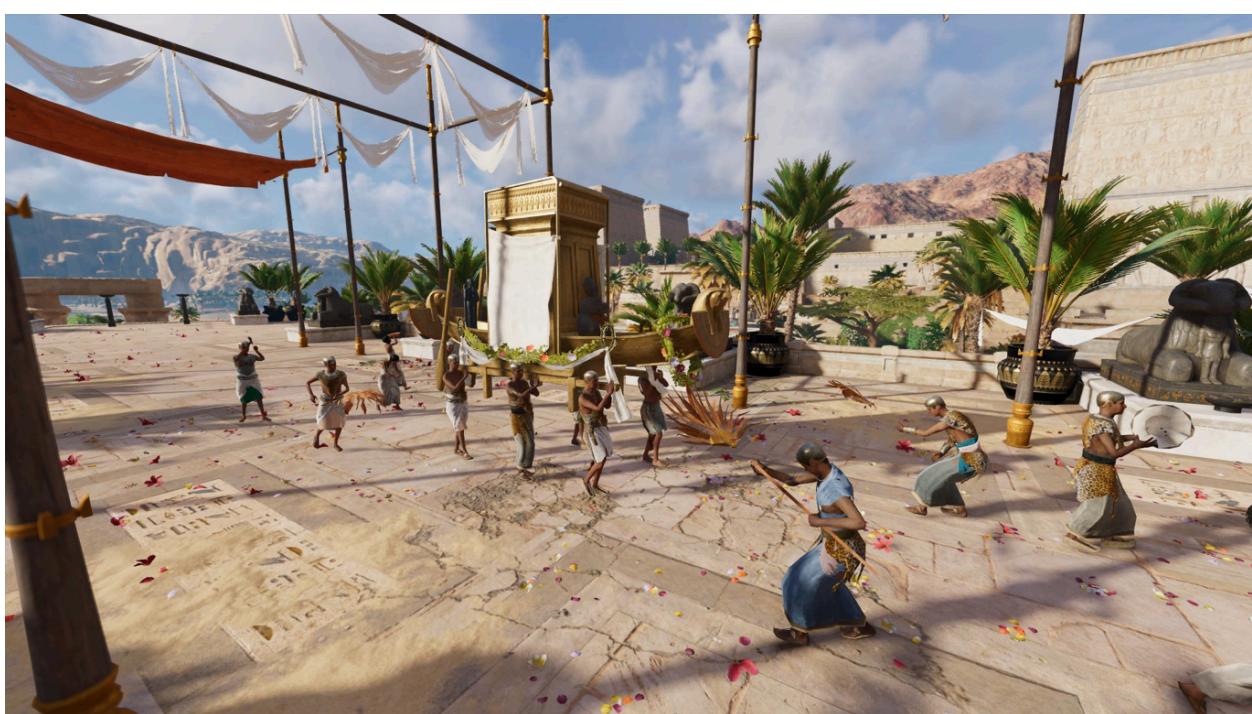
²³ Malville et al. (1998).

depicts life in cultivated areas.



The decision to focus on the lush portions of Egypt may seem obvious to us, but we should remember how rare this is in popular media. While playing the game, you spend most of your time in villages and cities, such as Alexandria, Memphis, and Thebes, which are clearly recognized by their Greek and Egyptian characteristics.





Flora & Fauna

The game's creators sought to avoid the dullness typical of most depictions of Egypt. To achieve this, they incorporated native Egyptian plants as often as possible to add color to the scenes. There is abundant flax in full bloom (at all times, even though flax only blooms for a day in real life), which provides blue to the color palette. *Side note: The Egyptians occasionally referred to flax blooms as ἄρανμτε, “color of sky”, in reference to their vibrant blue color.*²⁴ For red, there are poppy flowers, which is a bit questionable, but it is reasonably likely that poppies were cultivated for the production of Opium during the Ptolemaic Period.²⁵ There are also fruits and fruit trees, alongside other plants, which contribute to the predominance of green in many landscapes. The most problematic of these is the mango, which certainly did not exist in Egypt at the time, but the designers decided to fudge this one slightly in the interest of having more varieties of color.²⁶



²⁴ Meeks (1972).

²⁵ Krikorian (1975) and Veiga (2017).

²⁶ Durand & Guesdon (2018).





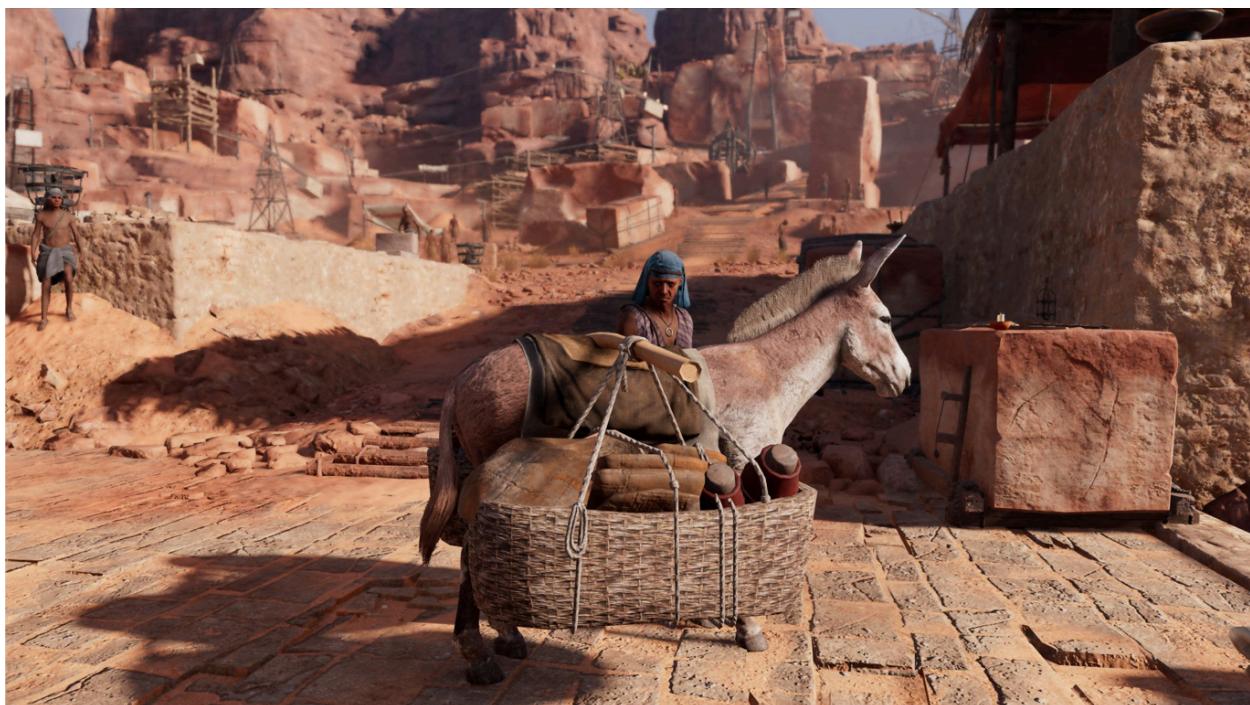
There are also many working farms, where characters can be found growing, harvesting, and processing plants, including cereals and papyrus.²⁷



²⁷ Parkinson & Quirke (1995: 9-19).



The game is also filled with animals, both domesticated and wild. There are cats everywhere, including maos. Sometimes they even come hang out with you. *Fun fact: Cats are sacred. If you kill one, you die immediately.* There are also dogs, horses, donkeys, and camels traveling in caravans. Wild animals can be found outside of cities, including lions, crocodiles, hippos, and many varieties of birds, to name a few.





People

Many of the people you encounter are genuine historical figures. We've already seen Cleopatra, Ptolemy, and Caesar, but lesser-known figures also appear within the story of the game. For example, in one section of the Duat, you meet a young Khamwas, who still struggles to please his father in the afterlife. This and other situations provided many opportunities to do "fan service" for Egyptologists. Perhaps the best example is the fight with Ramses the Great on the upside-down version of the battlefield of Qadesh.



But it's the ordinary people who make the experience truly remarkable. Advanced AI gives characters in the game a special sort of realism. They go about their business, talk to one another, sleep at night, rise in the morning, and do all the other things that real people do. This is the result of deliberate effort by the game's creators, who wanted the players to feel that they are interacting with a living world: "Real people, real events that are much smaller than the grand stage – the Cleopatra/Caesar stuff – and we asked ourselves 'how can we provide these experiences, these stories to players?'"²⁸ The effect is much more like visiting a place than you

²⁸ Blain (2017: 32).



might normally expect from a video game. There is a sense that the people you encounter here have their own individual existence.

Language

The aspect of the game that I must criticize most severely is language. According to the game's designers, they provided lists of Egyptian words to the sound director, and he combined them at will to produce ancient-sounding phrases. As you can imagine, the result is almost never valid. In a few notable instances the choices turned out to be quite fun. For example, Egyptian characters often say *nb* for "sir",

and use authentic Egyptian words as expletives, such as *nk* and *fgn* (whose meaning you can look up on your own). But they also say things like *st bint*, which is probably supposed to mean "It is bad" but (if you remember your Egyptian grammar) you'll recognize that this is incorrect. It should be *bin-st* as a proper adjectival sentence.²⁹

Roman soldiers say things like "Irrumabo!" (presumably a reference to Catullus 16³⁰), but they also say things like "Siste, non movere!" ("Stay, not to move!") and "Mortui sunt!" ("They have died!"). To the designers' credit, there is an informative and (mostly) historically valid distribution of languages throughout the game's different environments. In Alexandria, the citizens speak Greek, Roman soldiers speak Latin, and Egyptians everywhere speak reconstituted Egyptian, but the execution is very poor on the whole.

This is especially disappointing, because several common phrases are used repeatedly by multiple characters throughout the game, so they have time to sink in as you play. In fact, players have taken notice of the most frequent phrases, and debate both their meaning and pronunciation on social media, presumably on the assumption that they are authentic snippets of

²⁹ Allen (2014: 86-88)

³⁰ Catullus, *Carmen* 16.

ancient language. One phrase in particular, transcribed by players as “Great decision, Garrett” or “Quite precision, Garrett”,³¹ is intended to be *hʒ psš n grh* (“Oh midnight!”), albeit pronounced in the artificial style of Egyptologists as *[ha peseʃ en gereħ], and used by characters in the game at all hours (not only at midnight). The vocalization obtained from Coptic would be ȝɛ πѧȝe N δωΡȝ,³² but that is still not an ideal choice. A better approach would be to use known Coptic phrases as they would have been used in real life. The setting of the game postdates the major vowel shifts and other sound changes which led to the distinctive sounds of Coptic, so the use of Coptic phrases would be realistic enough to be valid and far superior than the current approach.

In consideration of the incredible attention given to historical accuracy overall, the disregard for language in the game is totally inexplicable. Having correct, properly vocalized Ptolemaic Egyptian would make this component of the game a valid pedagogical exercise. When you consider how much effort people put into learning fictional languages, such as Elvish and Klingon, the scale of this missed opportunity becomes apparent. People would want to learn Egyptian after playing this game, but unfortunately it does not provide a valid introduction to the subject.

Discovery Tour

Along with the game, Ubisoft has released a free add-on called The Discovery Tour. In the Discovery Tour, players can move around in the game world without encountering quests or enemies. Instead, they follow guided tours through the ancient sites while a narrator provides the history of the site and other facts about ancient Egypt. Each stop along the tour is accompanied by an image of an artifact, with a citation listing its current location in various museums. Though there are a few minor factual errors, the information in the tours is accurate and valuable. Unfortunately, time constraints don't allow me to spend much time on the Discovery Tour, but, since it takes place within the same game world, everything that I have said about the game also

³¹ See “Great Decision Garrett” and “I Have to Know What Is This Garrett Meme”.

³² See Černý 1976, ȝɛ p. 270, πѧȝe p. 131, δωΡȝ p. 336.

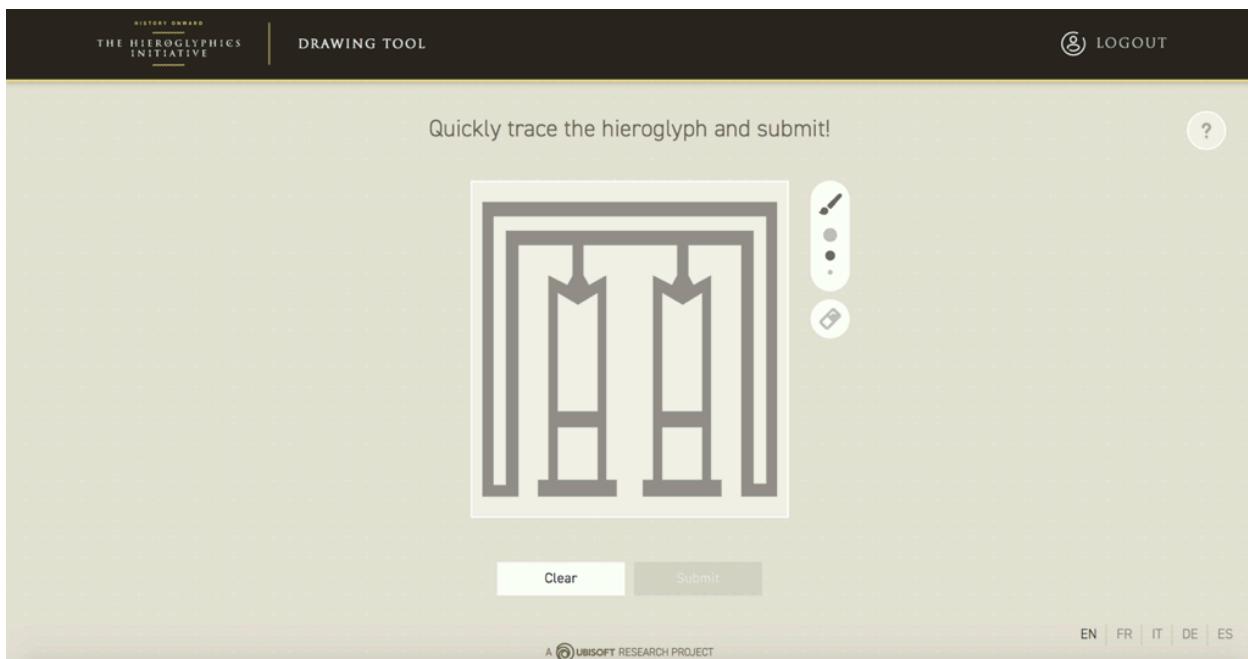
applies. It is more obviously a pedagogical tool than the game itself, but both serve this role in complementary ways.



The Hieroglyphics Initiative

Finally, I'm excited to tell you about a new project: The Hieroglyphics Initiative.³³ Ubisoft is connecting its programmers and in-house historians with the academic community in the hopes of creating a platform for digitizing Middle Egyptian texts. The project is still in its early stages, but when completed it will be shared with the academic community. As of now, Ubisoft is crowd-sourcing drawings of hieroglyphs to use for machine recognition of handwritten Egyptian texts. If successful, this project will change the way textual research is done by making it possible to search through digitized texts and operate on large amounts of data, which are currently inaccessible to computational approaches.

³³ <http://hieroglyphicsinitiative.ubisoft.com>



How can it be used as a pedagogical tool?

Know what's in it

The game contains within it a pedagogical component. Students will undoubtedly gain a better understanding of ancient Egypt simply by playing the game. All we have to do as educators is know what they are learning and be able to answer their questions. The primary purpose of this paper is to share the aspects of the game that make it most compelling as an educational tool so that teachers can be ready to address students' interests.

Use it in the classroom

It is a simple matter to connect to a projector and lead students through elements of the Discovery Tour. Naturally, the best use of this approach depends on the class itself. Educators will need to spend some time with the game in order to decide how it can fit with their curriculum.

Look forward to new developments

The Hieroglyphics Initiative will soon produce results that enable new research into Egyptian language and script. Be on the lookout for new information as it becomes available.

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