December 24, 2016, Clark’s comments

Andres

Your submissions of files are near excellent as a final project. My comments are about minor issues but you could have used and cited the intro to Barnadas’ edition for background and context of Eder’s life. You probably did use the work, but it wasn’t cited properly. The “index to Eder” is extremely useful.

All Figure Captions need formal citations for the source of the images. See the American Antiquity style guide for examples of how to do these citations (identical to the citations in the main text).

Copy the References Cited for your Final Project Figures file to your References Cited in your Final Project Text file.

Early next semester, I’d like to work with you tweaking some of the Spanish translations of Eder.

You do not have to revise and resubmit, but I would like for you to address the issues that I’ve raised in this first draft and resubmit sometime before next semester so that we can promote the student projects online. We’ll probably give you an “A” for the Final Project.

I’d also like to work with you putting together a basic research website dedicated to the importance and relevance of Eder and his monograph sometime next semester.

Have an excellent Winter break!

Clark

Andrés De los Ríos

ANTH258/ CIS106

Visualizing the Past/Peopling the Past

December 19, 2016

Voicing the Past – Learning Agents in a Virtual Landscape of Baures

With every new age come new technological means and developments that let us look forward into different realms, transformations, and opportunities. Every year we progress through our timeline and discover unique innovations that reinvent most areas of our already-complex perspective of the world. despite the wide variety of breakthroughs, each sector of humanity must take it up to itself to make the most out of them, taking into account their potential benefits and restrictions. In regards to fields such as History, Archaeology, and Anthropology, the application of technological developments has been a subject of much debate inside and outside the scholarly community. While various archaeologists and anthropologists have made extensive use of digital tools to focus on or reveal new data, there has been little advancement on the adaptation of new modes of communication meant to disseminate the narratives and theories produced by the scholarly community. Consequently, despite the digitization of countless books and journals, the number of recipients remains stagnant: without a proper channel to translate and spread academic accounts, general audiences will continue to see the past through the inaccurate lenses of the media. For my project, I propose a midway point between the past, the present, and what could be the future of mainstream archaeological research. I believe that, within an engaging and interactive three-dimensional space, we can successfully present accurate historical accounts to greater audiences around the world.

Videogames exemplify one of our present society’s most popular modes of communication – a vast, experimental field thriving with potential for new stories, formats, and player experiences. Currently, with thousands of titles spread across static and mobile platforms, the gaming industry surpasses other entertainment titans like Hollywood itself (Graham 2016: 16). With such an economic, social, and cultural impact on audiences everywhere, it should not come as a surprise how multiple scholars are now evaluating the platform as a potentially beneficial means of communication for their projects. For example, the founding academics behind VALUE (Videogames and Archaeology at Leiden University) emphasize two particular ways in which games can benefit archaeology: expanding its public outreach and facilitating experimental archaeological research (Mol et. al 2016: 14). Some optimistic historians have even gone so far as to compare the frameworks behind videogame narratives with those of archaeological theories, arguing that the emphasis on contingency, causality, and processes lies at the core of both endeavors (Graham 2016, 17).

Although the flexibility and accessibility inherent to videogames has not gone unnoticed by the academic community, few attempts have been made at accurately representing archaeological/historical findings within said format. As the inspiration for this project stands one of the newest, most innovating efforts to adapt primary and secondary material as an engaging, educational gaming platform. In his essay, “Red Land/Black Land: Teaching Ancient Egyptian Archaeology through Digital Game-Based Learning”, Ethan Watrall proves that a game set in the past can be enlivened by including its appropriate historical context (2014). Through the implementation of text-based educational entries in a modified version of Fireaxis Games’ *Civilization V*, Watrall introduces players to different scenarios that represent the unique sociopolitical characteristics of Ancient Egypt’s many periods. Of particular note are Watrall’s so-called “Historical Learning Agents”: a group of four voices based on real scholars who advise the player throughout the challenges of each scenario (Figure 1). By bringing together as “agents” a 19th-century archaeologist, a 21st-century archaeologist, an Egyptologist, and a graduate student, the author successfully showcases the development of the historiographical field itself, as each character’s advice reveals the methods and ideas of his/her time period. Finally, one must note the relatively low cost of the project, as Watrall took advantage of the software modification tools released by the *Civilizaiton’s* developers, thereby sparing him the greater time and resources required to build the engine, characters, and other features from the ground up.

Following Watrall’s footsteps, I first visualized my project as a small-scale “Civiliopedia” – a database of information used in the *Civilization* franchise detailing the different uses and histories of each object, culture, and character present in the engine (Figure 2). I originally wanted to create a similar database for the world of digital Baures to have textual material available when audiences showed interest in knowing more about the three-dimensional characters they interacted with. At the same time, I contemplated using the text as the basis for a script to be used by an animated model of Fr. Francisco Eder S.J., whose *Breve descripción de las reducciones de Mojos* has provided the basis for many of the on-screen recreations (Eder 1985). Ideally, at the start of a certain animation, the user could read Eder’s lines on each topic – for example fishing, methods, hunting parties, and local festivities– in the shape of a pop-up notification next to a model bearing his likeness. The intended format would parallel the notifications presented by *Civilization VI* – a series of short entries that guide the player and explain the significance behind the actions shown on screen (Figure 3).

Unfortunately, upon closer consideration there were various setbacks that complicated said format. First and foremost, animating the figure of Fr. Eder needed to be a project in and of itself, as it requires the three-dimensional model of a Jesuit priest bearing the long, flowing garments of their order – clothes that, due to their complexity, may be complicated to recreate by someone without experience in 3D design. (To make matters worse, there seems to be no image of Eder, only representations of generic Jesuits in colonial Latin America [Figure 4].) Furthermore, due to the length of Eder’s account, the task of consolidating everything into one cohesive “Civilopedia” proved too demanding within the time allotted to this project. Finally, the placement of the text within the digital world requires a close collaboration between the entries’ author and the designers, so that the content runs smoothly when needed during each animation. I then switched formats and instead translated and recorded Eder’s segments as audio-entries: the user can now direct his/her full attention to the animations while enjoying an engaging, narrated recreation of the priest’s chronicle. At the same time, this medium preserves the priest’s role as “Learning Agent” as he discovers and describe Baures to users. As complement to my recordings, I also decided to create a translated index of Josep A. Barnadas’ latest Spanish translation of Eder’s chronicle originally in Latin (Eder 1985) – a standardized referential tool that should help highlight the missing entries or themes that need to be recreated through new animations or recordings. Finally, as a source of introductory background information, I wrote three entries that expand upon Eder’s life and work (Barnadas intro to his version: 1985) as well as that of 21st-century scholars such as David Block (year).

For the purposes of this project, Fr. Eder’s work represents an ideal chronicle with which to introduce audiences to the Mojos regions and peoples. Throughout his writing, Eder displays curiosity and eagerness that most audiences would not associate with 18th-century literary sources. At the same time, Eder’s rich descriptions can reveal the importance and unique benefits of texts written by eyewitnesses: in this case, Eder relays the information with the eyes of an outsider, much like modern viewers who will also observe the Baures society for the first. Nevertheless, despite the parallels between viewer and author, the text required some tweaking to accentuate each scene’s actions, adapt Eder’s antiquated terms to modern English terminology, and also placate some of the Jesuit’s harsher commentary. For example, in his entry about the construction of bridges over the Mojos’ channels, Eder repeatedly references the native people’s alleged “inherent negligence”, laziness, and ignorance (Eder 1985, 105). Consequently, for my translated entry, I replaced blatantly negative commentary with descriptions that instead represent a laxer mentality from locals [I’m not sure that this strategy is the best decision; maybe the negative with your meta commentary to explain the context] . My goal is thus to portray Eder’s Eurocentric biases (by which most Indians were perceived as uncivilized children in dire need for conversion) while keeping the descriptions respectful and appropriate for an educational environment.

Finally, I also decided to include an informational entry on 21st experts. After reading David Block’s *Mission Culture on the Upper Amazon* (date), I realized the potential lying in the contrasts between Block, his contemporaries, and Eder: each writing represents its time period’s trends, perspectives, and foci - similar to Watrall’s “Historical Agents”. due to time constraints, I produced only one entry consolidating the new methodologies and efforts of current historians, archaeologists and anthropologists – e.g. Block’s focus on social transitions, demographics, and the two-way processes of colonial adaptation demonstrated by data and literary sources alike 🡨long confusing sentence; also use “e.g.,” only in parentheses in main text; use “for example” in main text of a sentence (style guide)(Block 1994, 2-4). Nevertheless, this could easily serve as the basis for new narratives, entries, and recordings that complement Eder’s what?. The animations could have different narrators or “Agents” following Eder’s template who describe what the user sees through the lens of their own research. For instance, based on the user’s preferences, they could choose between Manuel Limpia Salcedo’s socio-political commentary, Alfred Metraux’s historical ethnographies, or even Rogers Becerra Casanovos’ studies on Mojos folklore and art (Limpia Saucedo 1942; Métraux 1948; Becerra Casanovos 1977). Overall, the project contains ample room for expansion, as more “Learning Agents” would better represent not only different concentrations of the academic world, but also its shifts and transformations with the turn of every historiographical trend.

This being said, the collaboration between digital and academic spheres must be further explored and evaluated. Consequently, scholars should continue exploring new channels through which to present their arguments. As demonstrated by Watrall, different venues exist that do not necessarily entail a costly gaming project built from the ground up or meaningless regurgitation of theses; instead, new opportunities offer the chance to enliven research with visual representations of the characters, traditions, and methods that define it. For this case study, “Voicing the Past” would allow users from around the world to marvel at a complete perspective on of Mojos’ colonial past – a representation that tells all sides of the story through a display of both European and native characterizations. The project and its future counterparts could finally grant a voice to crowds that would otherwise remain stashed within books. Each prospect therefore represents countless tools with which to enhance our preservation of the past, our interpretations in the present, and the exciting venues lying in our future.

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Appendix

Informational Text Entries

Francisco J. Eder S.J. – Biography

Francisco J. Eder was born in 1727, to a German family in the mining town of Schemnitz – a multicultural location, found in modern-day Slovakia, that was then under the authority of the Hungarian crown and ultimately the Austrian Holy Roman Emperor. At the mere age of 15, Eder finished his early studies and entered the Jesuit novitiate of Trencin, Slovakia. In accordance to the strict academic curriculum of the Jesuits, Eder spent many years preparing for his ordination: after two years in Trencin, he studied philosophy for three at the Jesuit University of Tyrnau, only to then visit both his hometown and Neusohl to obtain teaching practice in the Order’s local schools. Even when he sailed to the New World Eder was still missing some scholastic experience, as evidenced by the two more years he spent as a student finishing his theological formation in Lima’s College of San Pablo. Finally, in 1753, Eder was ordained as a Jesuit priest and sent as a missionary to the Mojos Mission, where the Order had spent almost a century building around 20 reductions. Eder was specifically assigned the reduction known as San Martin, in the eastern half of the area; he stayed here for fifteen years, until he returned to his native land in 1770, soon after the Spanish king Charles III decreed the expulsion of the Jesuits from his lands. Back in Neusohl, the priest spent the last two years of his life writing his chronicle and sharing with his peers the products and memories he gained from his time at the Amazon basin

Francisco J. Eder S.J. - *Breve descripción de las reducciones de Mojos*.

In the words of the scholar and translator Josep Barnadas, Eder’s chronicle was, first and foremost, “a catharsis” for the author’s obsession with the Americas. At the same time, the piece was meant to quench the hungry curiosity Eder’s acquaintances showed regarding the New World’s exotic lands and peoples. Not only do we know that the priest exhibited samples of Mojos fabrics to his European acquaintances, in the text itself we often find Eder explaining how he writes to share the unique world he found across the Atlantic. Even today the work is considered a literary treasure as the most complete historical source we have about the Mojos during the colonial period. Furthermore, the book has the added bonus of being a first-aperson account written by an actual witness of the events described – a rare treat for audiences of all time periods. Nevertheless, despite his detailed descriptions of the region’s climate, fauna, and societies, there are sections that ought to be considered with a grain of salt. After all, Eder was affected by the cultural and spiritual perceptions of his time – ideas of the Americas that rendered their people as inept, uncivilized crowds in dire need for education, which would in turn be a justification and vehicle for conversion. Consequently, readers of the Eder’s treatise must recognize the author’s colonial bias and unravel the true aspects of the Mojos Indians: complex cultures who conducted life through their own, unique systems, divisions, and structures. As opposed to the Jesuit and his colonial contemporaries, we must hence find and value these differences in hopes of learning more about those who have yet to write their own “Descripción”.

Translated Narrations Scripts (examples)

1.9.214: Constructions of Bridges and Embankments

It is often only when confronted with great risk or necessity that men expose their true creative potential. In the case of the Moxo, the recurrent floods covering the savannah (as well as their insistence on visiting and drinking amongst their friends) serve as inspiration to build their own bridges. With excavated earth, they are construct paths that are high enough to rise above the waters and wide enough to hold two horse-carriages side-by-side. The holes made from digging are then used as water deposits in which to plant maize and other crops during the hot, dry summer months. The Baure built enough of these bridges to sprinkle the Moxos landscape, although by the 17th century, due to an abundance of canoes, they were abandoned to time and the elements.

1.9.215: Fortification of Channels

As a defensive mechanism against their aggressive, cannibalistic Guarayo people, the Baure surrounded their islands with multiple miles-long pits, each backed by steep ground barricades that protected them from their enemies’ assaults. Unfortunately, the Guarayo forces still managed to breach the defenses and reach the islands, which is why the Baure were supposedly overjoyed when the missionaries arrived, as they could hopefully provide them with a long-overdue sense of security. But while the Guarayo stopped invading the islands, they switched strategies and focused instead on Christian ships transporting goods and Indians downriver. Once such attacks reached the attention of the Royal Court at Charcas, the Spanish authorities ordered a Portuguese militia to put an end to the threat; a conclusion that was never fulfilled due to the tensions between both nations in the colonies and abroad.

1.9.216: Other Groundworks

Due to their altitude, some savannahs would never flood and so required further excavations in order to be navigated. The Indians hence modified such lands with artificial channels. Local legends even tell of an ancient Baure chieftain who, wishing to discover what the sun, moon, and stars were made of, ordered his men to build the tallest tower man had ever seen. But upon digging its base deep into the ground, the construction was interrupted by scalding waters found underground. Upon realizing their impossible task, the workers killed the chief and abandoned the gargantuan project.

2.1.293: Yucca or Mandioca

An original root of the American continent, the yucca is used equally throughout many of its lands. The plant itself is small, with many branches bearing knots separated by around an inch and leaves similar to the fig trees’. After removing the edible part (that is, the root), the branches are stored in the hills. There, the humidity helps preserve them until they are buried underground to plant the next harvest before the next raining season – in other words, around March and April. The roots are extracted in small groups, usually enough for two or three days, so that they keep growing instead of quickly drying out once they confront the blazing sun. It is not uncommon to find bundles of up to 40 yuccas, some thick as a femur and stretching up to 20 centimeters.

2.1.294: Two Types of Yucca – Sweet and Bitter

Before learning about their uses, it is necessary to know about the two types of yucca found in the area: that which is called “sweet yucca” by the Spaniards or “cuhupa” by the Indians; and the wild yucca, also known as “bitter yucca” or mapihere. The former can be cooked and eaten without any dressings or spices; the latter though contains a light venom that, if left untouched, may cause violent fevers, vomit, stomachaches, and headaches that can drag an individual into madness. Because of how difficult it is to distinguish these types, even amongst the Indians, thieves who think they are stealing sweet yucca quickly pay their dues

2.1.295: Use of Sweet Yucca

The sweet yucca can be cooked and mixed with any meal as soon as it is harvested. Especially in regions where people lack bread, it is often roasted under burning ashes and served inside leaves because of its tenderness. Its flavor is similar to roasted chestnuts, albeit slightly sweeter. It can be easily preserved by drying it under the sun, even in the coldest regions where it can also be dug underground or frozen throughout the night. In the reductions, it is often allowed to grow underground for two years, as they usually can only get thicker and longer.

2.1.296. Use of Bitter Yucca

The bitter yucca is used more often than its sweet counterpart, even though it is not roasted or boiled. Instead, the yucca is chopped similarly to the watercress; it is then washed many times and wrung, only to then placed to dry until toasted by the sun. The product is finally used in this shaped to make dough with which one can prepare bread and buns. In order to prepare stronger chicha, Indians would add a drizzle of this yucca to the mix. Most Europeans, upon trying out both types of the root, would be surprised by its nutritional properties its easy-yet-abundant harvest, and its simple cooking methods. Eder was so amazed by the yucca’s revolutionary dietary attributes that he prayed some Spaniard or Portuguese could ship it back to their own continent to better feed the farmers, the hungry and the poor alike.

2.4.380: Hunting During Floods

The annual flooding of the rivers due to torrential downpours leads Indians to hunt through incredible procedures, unlike anything seen amongst Europe’s noblemen… Seeking refuge from the rising currents, all animals rush towards the nearest hill or island, just like in Noah’s time. Having agreed upon a specific date, the men prepare their canoes, particularly the smaller ones of two or three Indians, with which they speed through the waters by rowing with nothing but long branches. The day of the hunt, armed with arrows, dogs, horns, and drums, the Indians sail to the island on groups of 8 to 10 canoes. Upon arrival they surround the area, hiding underneath the land’s tall pastures. And so, once in position, the signal is given and chaos abounds: across all directions, drums are struck, horns are blown, hounds are released, and hunters roar as they pursue their prey. There is no escape, as even those deer who tried to swim away are chased by the hunters on the canoes; each striking his target with sticks or lassos. If all else fails, the hunters jump on the deer and wrestle it until one of them drowns under the flood… The animals never stood a chance: hunters, arrows, and hounds find their mark, regardless of the creature – tigers, swine, ostriches, anteaters, and deer alike fall prey to the chaotic clamor of the event. And so, the men sail back to the settlement with weeks-worth of supplies from another astounding hunt.

2.5.427: Esáne

The Esáne is the smallest of fishes; it is still unknown if they ever grow out of such a miniature size. The Indians can often watch them swimming in great groups, moving as dark clouds within the waters. By trapping the Esánes with grass baskets, the Indians are able to capture up to three sacks full of the fish in merely a couple of hours. Be them boiled and packed in leaves or simply fried, they are quite a delicious treat! Unfortunately, they are so small that in just a spoonful, one can find up to 50 specimens. To make them last, the Esánes are often toasted, grounded, and kept in pots, to be later enjoyed with a pastry made of maize flour.

2.5.429: Snails

There are snails everywhere and at all times: be it during the beginning of the raining season or when the waters finally recede from the savannah and the land is full of mud. Snails in the Americas are much bigger than their European counterparts, they also carry a black, open shell. Often, the Indians would2 simply pick them off the ground and have them as a snack.

2.6.432: First Fishing Form

The Indians will always look for a chance to fish, especially if it doesn’t require any extra work. For example, during the summers, they observe as birds fly in the thousands to the once-flooded lands full of mud and fish. After letting the birds peck mercilessly at the helpless catch, the Indians drive them away so that they may easily pick the remaining, confused prey.

2.6.433: Second Fishing Form

Another fishing form used by the Mojo Indians involves imitating the birds’ own methods: that is, upon finding a muddy lagoon, they stir the waters, stomping the earth and making a racket in hopes of uncovering the fish swallowed by the mud.

2.6.434: Third Fishing Form

The Indian’s third method of fishing is only possible thanks to the sun’s scalding heat, which often stanches the rivers and forces fishes to the surface. Confused by the oxygen, the fish fall prey to the Indian’s tridents and clubs. The fish will only disappear until around sunset, only to then continue agonizing due to the season’s heat and fatigue.

2.6.435: Fourth Fishing Form

A fourth fishing method was unique to Eder’s reduction, where a nearby stream had its mouth blocked by vegetation that, when dried and rotten, would infect and taint the waters red. Throughout a whole month, groups of Indians would go to the stream armed with their arrows, for wherever one looked, hordes of fish of all shapes and sizes would lay stunned on the riverbed. The greater the pollution, the more fishes would show up, reaching so far up as to reach the riverbank. As a result of these conditions, Indians who fished from such a stream returned home with more than a horse-load of creatures from merely a couple of hours of work. The fish that were not captured died under the grueling conditions resulting from the sun’s heat and the plant’s toxicity. So big was the count of remaining fish that Eder preferred to omit his calculations due to fears of being considered an exaggerated rhetorician instead of a trustworthy chronicler.

2.6.436: Fifth Fishing Form

The last fishing procedure was the easiest and simplest of the ones used by locals: upon burning the savannah, the leftover ashes would be disseminated by the winds, with many of them falling and intoxicating the area’s lakes and streams. Lost and confused by the murky waters, the fishes could then be easily captured.

2.6.439: Blocking the Lake’s Outlets with Bushes to Fish

Sometimes, the Indians would construct weirs, fences, or dams that effectively blocked the entrance between a river and its source in the lagoon. The structures also had small openings leading to wicker baskets that trapped the fishes trying to leave the river. This procedure was particularly comfortable for the locals, as they only had to check their baskets once or twice per day, letting them fill while they worked or slept in town.