

With the advancement of technology and science in relation to art and archaeological discoveries, specifically with artifacts from Native American peoples, the debate of progress in identification combats traditionalist views of art as purity in the form of expression, and challenges fraudulent pieces within collections based upon the facts of science and allows for undisputable identification of works. With legislation like the Native American Grave Protection and Repatriation Act (NAGPRA) and Codes of Ethics laid forth by museum associations like the American Alliance of Museums (AAM), the discovery of Native archaeological material whether it be human remains or other, is hotly debated and both sides of the argument are often scrutinized.

While archaeology is considered to be a secular science, truthfully the excavative studies culminate the humanities, social sciences and natural sciences into a singular cohesion. With such distain having developed between scientific analysis of archaeological discoveries, and the art community, the overall argument of scientific dating of artifacts becomes that much more intriguing to investigate deeper into.

Evidently enough, the practices of archaeology and art history have long since developed before that of scientific analysis, and have evolved numerous in their application and process. Early archaeology began as a crude form of discovery of ancient pieces and was less strategic and systematic in comparison to its evolution today.

Relying heavily upon excavation during its foundational stages, archaeological sites took season after season of digging with no definite guarantee of any important historical discoveries. Simply put, “excavation recovers from the earth archaeological evidence obtainable in no other way”¹. To be frank, archaeological excavations during the nineteenth century were rudimentary and chaotic in execution. Excavators utilized no specific method other than merely recording “only those things which appear to [excavators] at the time”² to be anything of significance. The keeping of detailed logbooks of daily activities was not a common act amongst archaeologists, thus making any discoveries of historical significance incredibly questionable in their credibility.

It was not until the middle part of the twentieth century that under the influence of Sir Mortimer Wheeler, that the gridding and three-dimensional recording of dig sights became the prevalent norm utilized by excavator foremen. Representing problems and limitations of its own, gridding often resulted in “economical, swiftly obtained microcosm of the site’s development and led to the trial trenching of hundreds of sites, with results being used as the basis for generalized statements about the whole site”³. Such uneducated presumptions often led to poorly interpreted information, and left many sites unsampled and dependent to rely upon generalized information for analyzing the sites, thus resulting in historical and anthropological theories determined out of proper context. To remedy such oversight, larger sample areas began to be utilized, and each

¹ Barker, Philip. Techniques of Archaeological Excavation. London: The Anchor Press, 1982, p.27

² (Barker), p.15

³ (Barker), p. 15

specific site is independently sampled from one another to produce a more concise and theoretically accurate hypothesis.

Beyond specific site methods of excavations, it is also important to note the significant training and procedures inherent to archaeologists themselves to follow. Danish scholar Christian Jurgensen Thomsen is often noted for his specialized eye in determining chronological time frame of findings just by purely, “paying attention not only to the material of which the artifact was made, but also to shapes and decorations, and to assemblages of artifacts excavated”⁴. Such attentiveness to detail by the archaeologist becomes a crucial quality when it pertains to identifying integral artifacts uncovered at a site versus meaningless clutter potentially discovered.

Overall, early archaeologists were dependent upon only a microscope, dental pick and their own perception -and historical knowledge in order to determine information from ancient pieces, leaving a large gap where error, misinterpretation or a complete lack of identification could have easily occurred.

Museum professional’s own humble beginnings as academics stifled proper identification of ancient relics, and thus, has lead to improper classification of older pieces and caused the need for new investigation to be pursued. Without properly coordinating with the archaeologists whom have unearthed these historical finds, art

⁴ Weiner, Stephen. Microarchaeology: Beyond the Visible Archaeological Record. New York: Cambridge University Press, 2010, p.8

historians, anthropologists, and other museum professionals continue to interpret items upon the basis of generalized knowledge and rules of methodology in art history of time periods and indigenous people of the excavated area.

With the renaissance of the archaeology field and the introduction of scientific measures and various testing within the twentieth and twenty-first century, new practices and applications arose aiding in more accurate diagnostics of ancient artifacts.

“Compared with the situation as it was only fifteen years ago [based from nineteen eighty-two], the amount of information which can be added to and deduced from excavated evidence by scientific means is enormous and increases annually”⁵ for as scientific knowledge and understanding increases, so does the possibility of increased understanding of ancient artifacts. Some scientific analyses are more accurate and commonly used when dealing with ancient remains than other more newly developed and untested forms of scientific analyses that possess a higher marginal error.

One of the initial scientific crossovers into archaeological and anthropological studying would be that of radio carbon dating, meaning in more simplistic terms, that any death of a living organism has measurable organism decay at a constant rate. “The material to be dated has to not only contain carbon, but carbon that was derived from carbon dioxide in the atmosphere and was incorporated into the material at the time was formed”⁶, meaning all organic matter can be accurately dated by utilizing radiocarbon

⁵ (Barker), p.20

⁶ (Weiner), p.19

dating. Based upon this set of parameters, even the carbon in ancient bone can be accurately tested and dated, as long as it did not exchange any of the carbon it contains during burial. This includes the ability to analyze charred remains, which previously could not be thoroughly examined, as they were believed to be contaminated, and lacking usable data. With the only possibility of error discretion being that of a few tens of years, carbon dating provides the most accurate form of ancient artifact dating available other than written, certifiably exact documentation, which is few and far between when handling ancient artifacts.

DNA itself has been a key tool in taking archaeological finds and giving them a scientific context in which to be analyzed as well as a definitive place within ancient art and archaeology. Through studying mitochondrial DNA (further referred to as mDNA), a single copy of genetic traits that “is inherited only through the females of the previous generation”⁷, the individual genetic makeup of a specimen, more can be understood about discovered remains. This means that several DNA samples from various human remains can be thoroughly analyzed and genetic relations can easily be determined through their respective matriarchal donor. In combination with carbon dating, mDNA allows for not only the identification of family members and their relation to one another, but also any maternal inherited disease or disorders to be identified.

⁷ Hummel, Susanne. Ancient DNA Typing. Berlin: Springer-Verlag, 2003, p.21

With these various scientific advances and forms of experimentation, the question arises as to its practical application to the archaeological and art historical fields and its significance in deciphering historical significance. Simply put, “it is useless for the field of archaeologist to try to work in isolation from the geologist, the geographer, the pedologist, the climatologist or the ecologist”⁸ but when, working together as a singular entity, monumental discoveries can be made.

The most notable discoveries revolving around the collaboration between art and science, even in the past twenty years, seem to primarily surround scientific testing of ancient human remains rather than ancient pieces of art, though both receive mass amounts of scrutiny by those in the museum field. The act of burying individuals after death is a practice that has been used for centuries, and is often just a spiritually significant, if not more so, than it is for sanitary or other humane reasons. It is a physical act of commemoration, honor, and memory for an individual after death, and often retains significance after funeral services. In an attempt to protect these sacred sights, the creation of NAGPRA was developed as a federal law to keep non-native individuals from confiscating property and human remains.⁹

To better understand the creation and necessity of NAGPRA, it is important to examine the history leading to the law’s creation. According to Laura Talbert’s piece *NAGPRA: Requiring Federal Recognition Digs its Own Grave*, “North American

⁸ (Barker), p.28

⁹ (Talbert), p.172

indigenous religions are, in their organizational structure and choice of religious imagery, dependent on the nature around them and on their ecological use of this nature.” With such a large variety of native populations in North America, the types of burial are numerous ranging from below ground burial, above ground mound burial, and even chambered crematory mounds to name a few. The first government attempt to guard burial sites came with the Antiquities Act of 1906, which attempted to protect “archaeological sites on federal and tribal land by making it a crime (subject to punishment) to alter, damage, or destroy any object of antiquity.”¹⁰ While this may seem to be progressive for the time period, it does not include any repatriation law to return remains or other cultural material that has been looted.

Perhaps one of the first acts to truly make a difference and distinction “between tribes with standing in federal court and tribes without was the National Museum of the American Indian Act of 1989” which allowed for the repatriation of remains as well as funerary items.¹¹ However, this only was applicable to discoveries made by the Smithsonian and still required “inventory of all human remains and funerary objects” before it was necessary to contact the respective tribe for their return.¹² Many members of the Native American community found this disgraceful as it allowed for dating, DNA testing, and other scientific measures to be taken without consideration for their religious preferences.

¹⁰ (Talbert), p.175

¹¹ (Talbert), p.175

¹² (Talbert), p.178

On November 16, 1990 President George H.W. Bush signed NAGPRA into law. How the act is written, however, it requires “federal agencies and museums and universities receiving federal funding to provide opportunities for federally recognized tribes to obtain culturally affiliated Native American human remains and artifacts.”¹³ This means that a tribe must be federally recognized in order to be eligible for repatriation through NAGPRA. With how difficult the federal recognition is for tribes, this limits the groups able to lay legal claim on looted human remains. This precedence that has been set by NAGPRA is what the AAM cites in their Code of Ethics for museums to follow, and thus, also limits the claim non-federally recognized tribes have on cultural artifacts and remains.

Perhaps the most notable and controversial cross-issue between archaeology and the Native American community is that of Kennewick Man. Discovered in Washington state in 1996, Kennewick Man is a nine thousand year old Holocene. Appearing to have Caucasian features, the remains were quickly and fully examined by a team of scientists chosen by the government “who were forbidden to discuss their findings”, though it has been stated, concluded the cranium has both Caucasian and Native features making his origin hard to determine and calling into question who were the first to settle Northern America.¹⁴

¹³ (Weiss), www.friendsofpast/prg/nagpra/06weissNAGPRA.pdf

¹⁴ (Weiss), article p.13

Kennewick Man is said to be one of six or seven skeletons of such an age in North America, thus, it made this find absolutely remarkable. “Under NAGPRA, Kennewick Man could be reburied within ninety days after an initial examination,” as long as a tribe came forward providing evidence that this could be an ancestor.¹⁵ “A coalition of Columbia River tribes, headed by the Umatillas of Northeastern Oregon, filed a formal claim to the skeleton, even though there was no direct evidence linking them,” which angered anthropologists.¹⁶ “A judge in the US District court in Portland, Oregon decided in favor of the eight anthropologists,” that filed a motion to be able to test the remains.¹⁷ It was decided by the court that the Army Corps that had decided to repatriate Kennewick Man were flawed, as he had yet to be determined as Native American.¹⁸ After non-invasive and invasive testing procedures were completed on Kennewick Man, “the government team could not conclude that Kennewick Man was affiliated with modern American Indians.”¹⁹ Regardless, US Secretary of the Interior, Bruce Babbitt, ordered for the repatriation of Kennewick Man stating that the remains location was circumstantial evidence enough of his Native American heritage.²⁰ In a later court motion, it was decided that Babbitt had inappropriately applied NAGPRA, leaving Kennewick Man’s fate still undecided.

¹⁵ (Weiss), article, p.14

¹⁶ (Weiss), article, p.14

¹⁷ (Weiss), article, p.14

¹⁸ (Weiss)

¹⁹ (Weiss), article, p.14

²⁰ (Weiss)

Kennewick Man only represents numerous other remains that are in danger of being lost from scientific exploration. Especially in cases where the skeletal remains are thousands of years old, the likelihood of being able to identify them to a modern Indian American cultural group is rather slim. While anthropologists, art historians, and others in the academic field are not against the repatriation of remains, the asterisk is that they should be remains that are affiliated with a specific cultural group. To say that Native Americans have the right to any remains found in their area of origin in the United States seems a bit overstated, just as it was the British Colonial belief that this land should be there's when they arrived to the new world.

To claim that remains as old as Kennewick Man would have to be Native American is like stating that someone living in East Lansing, Michigan today and their family has lived here for generations must be related to Chief Nokomis. While, personally, I disagree that it is necessary for a tribe to be affirmed by the government in order to stake claim on remains, I do agree that remains past a certain age, perhaps four thousand years old just for an example, should not necessarily be housed under NAGPRA authority. To be able to prove ancestral ownership without some sort of scientific testing, at that age, would be practically impossible. So either, Native groups would need to be okay with minimal testing in order to determine identity, or forfeit the right to place claim on remains that old.

Through more intense collaboration, maybe even including scientists, members of the Native community, and other academics to partake in excavative activities, it would be

ideal to strengthen the respect and mutual work of the sciences and the arts in order to properly preserve and understand found objects and remains with the least amount of disagreement. Though the sciences and the arts represent two opposing classes of thought and of characteristics, the two clearly complement one another and allow for exponential growth to manifest in their respective fields through the sharing of information, test subjects and ideas of investigation. Science allows for the base, rash facts to be obtained more accurately than otherwise possible, whereas art provides an anthropological background of the life of ancient peoples and the ability to transcend detail upon relics into the importance and livelihood of individuals.

While it seems it will take a few more decades to acquire such harmony between the two fields, it observes as an inevitable if both wish to move forward and to reiterate a complete, truthful investigation of the ancient world. I, personally, do not think that making additional laws, acts, and ethical codes will necessarily always give a happy answer. But perhaps if both sides were able to give a little, the scientific achievements could enhance our understanding of ancient Native communities and their evolution to modern day. It is understandable the reluctance of Native Americans to work with the government, as they often times seem to be handed the short end of the stick, but it is not the intentional goal of the arts and sciences to prove themselves right at the expense of others. Rather, it is the goal for better understanding of the past and its correlation to our future, and to present the truth as accurately as possible.

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