MASSACRES
Bioarchaeology and Forensic Anthropology Approaches

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Rethinking Massacres

A Bioarchaeological and Forensic Investigation of Prehistoric Multiple Burials in the Tennessee River Valley

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The Tennessee River in prehistory was the scene of multiple diverse Native American cultures. These groups did not always exist in peace (Bridges et al. 2000; Jacobi 2007; Smith 2003). Direct and indirect exposure to violence was part of the daily lives of every individual who inhabited the river valley. Bioarchaeological evidence for conflict from the middle section of the Tennessee River Valley, which runs across the northern part of the state of Alabama, ranges from the recovery of isolated body parts to both single and multi-individual interments. Here we reexamine mass graves found in the Middle Tennessee River Valley, taking a different interpretative approach to what constitutes a massacre episode and how different lines of evidence can impact our thinking about and understanding of past cultures and past interpersonal and intrapersonal conflict.

Research on massacres tends to focus on the grandiose, and often most gruesome, single episodes of violent encounters that resulted in the murder of a large number of people (Zimmerman et al. 1981). These events are often considered “large-scale” based on the minimum number of individuals (MNI) involved. Following the same logic, “small-scale” massacre events, which are more common and often overlooked in the bioarchaeological record, have lower MNIs. The arbitrary use of the term “massacre,” often based on the apparent scale of the violent episode (as assigned by an MNI), leaves wiggle room and gray areas that make understanding the day-to-day
effects of violence on the inhabitants of the Tennessee River Valley in prehistory difficult.

The study of massacres has always been the study of mass graves or, at the very least, the study of settlements that appear to have been wiped out in a single instance, with the victims scattered among the structures and site as a whole. In this later line of evidence the entire site is treated as a de facto mass grave. There are problems with the use of mass graves as a foundation for the recognition of massacres in prehistory. First, many researchers (Egaña et al. 2008; Kendell and Willey 2014; Owsley and Bass 1979; Turner II and Morris 1970) only focus on high-MNI mass graves as evidence of massacres and disregard low-MNI mass graves, under the presumption that they do not constitute a massacre. Second, there is no currently clear and immutable definition of what a mass grave actually is (Haglund et al. 2001; Skinner 1987). Bioarchaeologists often develop their own definition of a mass grave based on what they think is an appropriate MNI. They often go to great lengths to distinguish differences between what they term “multiple burials” (several individuals within the same grave) and “mass graves” (again, several individuals within the same grave). In some cases they use existing definitions for a mass grave, but even then the original definition is fraught with problems.

The cases presented here highlight the very problematic nature of defining massacres using just mass grave evidence and also highlight the tenuous nature of defining mass graves using MNI. Other attributes, including the interrelationships of the victims and the assailants as well as the timing between conflict events, also influence whether the term “massacre” is truly applicable to an episode of violence. Our goal is to take a critical look at what signifies a massacre and rethink the underlying concepts central to the interpretation and understanding of massacres and conflict in prehistory.

Materials

The skeletal remains examined and reviewed were excavated in the 1930s and 1940s before the construction of hydroelectric dams in the middle section of the Tennessee Valley was completed (Webb 1938, 1939; Webb and DeJarnette 1942, 1948; Webb and Wilder 1951).
**Case Descriptions**

Case 1 (Mulberry Creek-1Cl27): Individual 83 (Male, 45–55), 84 (Male, 25–35), 85 (Male, 18–20)

This burial has an MNI of 3. Cutmarks, indicative of scalp removal, were present on all three skulls. In addition, postcranial trauma included multiple rib-neck and posterior and lateral rib fractures and sharp force trauma to the lateral ribs of all three victims. Two of the three individuals, 84 and 85, had embedded projectile points in their vertebral column. The embedded points would not have been immediately lethal but would have paralyzed the individuals from the mid-back down. The trajectory of both points was the same, coming from the left side in an inferior to superior orientation. Fracturing to the upper cervical vertebrae of all three individuals suggests that they had their throats cut and their heads bent backward. Excavation drawings and photos indicate that all three heads were in anatomical position, suggesting they were never fully severed from the body (Webb and DeJarnette 1942:plates 274–275).

Due to a lack of repetitive patterns in the cutmark types, locations, and intensities, Hoskins (2015) determined that at least three assailants tortured and killed these three individuals.

Case 2 (Columbus City Landing-1Ms91–Unit 2): Individual 12 (Male, 25–35), 13 (Male, 20–25), 14 (Female, 50+), 15 (Female, 20–30—graphite), 16 (Female, 20–25—graphite), 17 (Female, 20–25—graphite), 31 (Male, 40–45), 32 (Male, 40–55)

This burial has an MNI of 8. Individuals 13, 14, and 31 are headless. Individuals 12 and 32 had their heads. Individual 32 has cutmarks on the cranial vault consistent with scalping. Individuals 15, 16, and 17 had graphite painted decorations on their skeletons, including the skulls. All three skulls, in addition to being decorated, had expanded foramen magnums, indicating the placement of the skull onto a pole for display. All three skulls also show scattered cutmarks on the cranial vault that do not allow for differentiation between mortuary defleshing and conflict-related soft tissue mutilation.

The burial pit was large and oval shaped, tapering toward the bottom. The limbs and skeletons of the individuals were intermingled as a result of having their bodies piled one on top of the other during placement in the grave.
Case 3 (Harris Site–1Ms80): Individual 33 (Child, 1–2), 34 (Male, 20–30), 35 (Female, 25–35)

This grave has an MNI of 3. Based on the cutmark evidence it appears that the victims were killed for adultery, representing a case of capital punishment (Boyer and Gayton 1992:83; De Vore and Jacobi 2015; Ewers 1958:108). Individual 34 has cutmarks on the frontal, parietals, and left temporal of the cranial vault. Cutmarks also are found on both the left and right zygomatic arches and on the right maxilla of the face. Individual 35 has cutmarks on both temporals and the occipital. She also has cuts on the left and right maxillae.

Based on the type of soft tissue that would have been mutilated as a consequence of the cutmark locations, ethnohistoric accounts reinforce the idea that this is a case of punishment for adultery. Inclusion of the small child seems to support this interpretation and is again consistent with ethnohistoric accounts (De Vore and Jacobi 2015).

Case 4 (Harris Site–1Ms80): Individual 76 (Male, 20–25), 77 (Female, 35–45—red paint), 78 (Female, 30–40—red paint), 79 (20–30—red paint)

This burial has an MNI of 4. It is a complete and fully articulated individual surrounded by three skulls painted with red ochre. The whole individual (76) showed no signs of conflict-related trauma. One of the three skulls (78) had cutmarks on it. Given the red decoration, it is impossible to determine whether the cutmarks are related to scalping/trophy taking or defleshing for curation.

DISCUSSION

The use of evidence from mass graves has been central to the study of massacres. There is no clear understanding, however, of what characterizes a mass grave. Additionally, the term “massacre” itself is applied arbitrarily. No set of criteria has been developed to use in the examination of evidence of conflict when trying to establish whether or not a massacre or some other episode of violence has occurred. This tenuous foundation does not account for all the cultural variability observed in the archaeological record.

In reexamining the defining attributes of a mass grave, Jaeger (2013) suggests the adoption of an MNI of 3 as the threshold. Again, this definition
proves slippery when scrutinized further. As our above cases demonstrate, three or more individuals can end up in the same grave in multiple ways. The case of 1Ms80-33, 34, and 35 is likely an example of capital punishment for criminal activity, based on ethnographic records. The case of 1Ms80-76, 77, 78, and 79 is probably a single individual interred with three previously curated skulls. The case of 1Ms91-Unit 2-12, 13, 14, 15, 16, 17, 31, and 32 is a mix of individuals who show signs of either violent death or curation prior to final burial. Finally, the case of 1CT27-83, 84, and 85 involves three individuals who were tortured, killed, and buried. In all of these cases the MNI is 3 or more, but the number of primary and secondary individuals is different. Here we define primary individuals as those for whom the grave was dug. Secondary individuals are represented in several ways. First, some individuals were included in the grave, by the persons conducting the burial, as mortuary inclusions for the primary individuals. These can be whole bodies representing retainers or human body parts that may or not have been modified. Second, secondary individuals can be represented in a grave through unintentional inclusion/mixing of parts of other people. Because of these different possibilities, determining whether an individual is primary or secondary is a difficult task that requires a bioarchaeologist's interpretations as to the thought processes of the individual(s) who dug the grave.

It must be recognized that there are multiple ways to look at MNI in regard to calling a burial a mass grave. When making a final determination concerning mass graves, it is necessary to answer two questions. First, how do we determine MNI? Second, what is an appropriate threshold number to differentiate mass graves from those burials that are not mass graves?

We have two ways of looking at MNI. We can “lump” or we can “split.” If we lump, MNI is defined by the number of individuals, irrespective of how much material from an individual’s body is present and how it came to be in the grave. If we split, MNI is determined through the separation of individuals based on their primary or secondary status within the grave. To settle this debate, we argue for the use of three different MNIs. “Total MNI” is a count of every individual recovered from the grave. “Primary MNI” is a count of only those individuals who appear to be the intended recipient(s) of the efforts of those who dug the grave. “Secondary MNI” is a count of individuals considered to be secondary to the primary individuals within the grave. Again, these determinations must be made by the bioarchaeologist based on the remaining evidence and a “cultural” interpretation of the events surrounding the final interment of the deceased individual(s). This
teasing out of different types of MNI allows for a more refined interpretation of the archaeological record and past cultural practices.

Any discussion on mass graves should factor in the roles that each of the interred individuals is performing. The general principle is that mass graves have multiple primary individuals in a single pit who died around the same time or in a single episode of violence. This definition eliminates all secondary individuals. We argue that any grave with an MNI of 2 or more primary individuals, irrespective of the number of secondary individuals, is a mass grave. By this reasoning, case 4 (IMs80–76, 77, 78, and 79) does not constitute a mass grave. It has a total MNI of 4, a primary MNI of 1, and a secondary MNI of 3. Refining our methodology for the identification of mass graves has the most impact on our interpretation of small-scale massacres. For years bioarchaeologists have looked at mass graves and said, “Yep, that’s a massacre all right.” But what criteria are we using? What set of standards are we employing?

A strict definition of the word “massacre” is “the unnecessary, indiscriminate killing of a large number of human beings” (Webster 1996). As previously stated, the application of the term to bioarchaeological evidence is ambiguous. Developing criteria for the determination of massacres is not cut-and-dried. The structure of any society is multilayered. A victim’s political/cultural community (as identified based on their social structure: family-level groups versus local groups), secondary affiliations (sodalities/moieties and so forth), and potential temporary groupings that reinforce/support daily social life (raiding parties, hunting/gathering groups) must be taken into consideration.

Our three-tier definition for massacres excludes motivation and focuses on the political/cultural affiliations of the victims. Genocide, the destruction of most or all of a cultural community, represents the highest form. Large-scale massacres, the middle form, are the destruction of most or all of a political community within a broader cultural community. Small-scale massacres, the lowest tier and likely the most common, are the destruction of some subcomponent (small group) within a political community. Therefore, massacres involve only events at the political community level, while genocides involve events at the cultural level. Timing between discrete events allows for large-scale massacres to be individual episodes of a broader genocide and small-scale massacres to be individual episodes of a larger massacre.

Case 1 (1Ct27–83, 84, and 85) meets the criteria for a mass grave because it has more than two primary individuals. Our interpretation, based on the
circumstances (they were tortured to death), is that these individuals were probably not from the site where they were found. If we make the logical assumption that they were together when captured, then they could have been a hunting party or raiding party that was taken captive. Based on the “temporary group” idea, interpreting the evidence in that light would mean that this burial represents the massacre of a small hunting group of men and would fall into the category of small-scale massacre because the temporary group identity would be subservient to a larger political community.

Case 2 (1Ms91–Unit 2–12, 13, 14, 15, 16, 17, 31, and 32) includes the burial of eight people within the framework of a mass grave and massacre. However, the roles of the people within the mass grave are not all the same. We believe that the grave contains five primary interments and three secondary interments. In this instance, our separation of the primary and secondary individuals within the grave is based upon the presence and absence of flesh on the bodies at the time of burial. Three of the five primary interments (flesh on the body) are headless, and cutmarks were observed on several. This is a clear indication of violent death and therefore a small-scale massacre of the primary individuals. The origin of the three secondary interments (defleshed skeletal remains), with signs of decoration on their entire skeletons, eludes us. They may or not constitute a separate small-scale massacre. If they represent venerated ancestors they likely are not massacre victims. If they represent vanquished enemies, then they very well could represent a massacre of three individuals not unlike the three people in case 1. In a similar case from 1Lu92 (Koger’s Island) burials 101 and 102 show evidence of mutilation associated with adultery (De Vore and Jacobi 2015). Burial 101 (a 35- to 45-year-old adult female) was defleshed, disarticulated, and had her foramen magnum expanded in order to display her skull on a pole. This case calls into question the interpretation of the graphite-decorated skeletal remains of 1Ms91 Unit 2 as venerated ancestors.

An alternative interpretation for the grave in case 2 is that the three graphite-decorated individuals might in fact also be primary recipients of the burial effort. This burial is intriguing because of the intermingled nature of the individuals and the apparent attempt at “rearticulation” of the decorated skeletal remains, which also was observed in Burials 101 and 102 from 1Lu92. Could this grave represent the massacre of a lineage group and the subsequent burial of that lineage’s ancestral power base? This idea is plausible, as the intermingling of the two types of individuals suggests an “equal” standing. Considering the importance often associated with rare objects, of which decorated human remains are the perfect example,
we might wonder why the surviving population had no desire to continue curation of the three graphite individuals. Could it be that the individuals in the grave were the only ones within the community who had the knowledge and capability to hold and wield the power that the graphite-decorated skeletons represented and possessed?

Case 3 (1Ms80–33, 34, and 35) brings up an important issue. Should instances of capital punishment be considered massacres? All three individuals (adult male, adult female, and child) are represented by skulls only. All three show evidence of perimortem craniofacial mutilation. If the interpretation of the victims as people who were executed for criminal activity (adultery) is correct, then this was a “state”-sanctioned punishment of an illegal family unit. So does this case represent a massacre?

Case 4 (1Ms80–76, 77, 78, and 79) is not a massacre. This burial has one complete individual with no evidence of violence and three additional ochre-painted skulls. The origin of the three skulls, like that of the graphite-painted individuals, remains open to debate. If these represent venerated ancestors then they are not likely the result of a massacre. If they represent trophy items, then they could be the result of a massacre.

**Summary**

When bioarchaeologists use the term “massacre” they instill images of violent encounters, families and friends dying together, and merciless attackers. Most often this image takes on the form of grandiose destruction of villages and towns; rarely does it venture into the realm of the small groups. The cases considered here were chosen to highlight what we see as two major areas that have received little attention. First, what is the nature of the evidence of massacres? Second, what are the criteria that we use to determine massacres?

Mass graves, unlike isolated burials, provide the quickest reliable proof of massacres. This form of evidence has unique underlying attributes that have seldom been fully examined. The differences in how MNI is defined and used as a criterion for “mass graves” have an effect on the mortuary interpretation by bioarchaeologists when they encounter multiple individuals buried in the same pit. All graves with multiple individuals have a Total MNI. Failure to separate primary and secondary roles within a mass grave can result in an erroneous interpretation of the mortuary record.

Beyond the issues surrounding mass graves, bioarchaeologists have all too often overlooked the critical step of disseminating their exact criteria
for whether or not the material that they are studying is a massacre. This ambiguity, whether intentional or accidental, makes true cross-comparison of massacre episodes difficult; especially considering the general neglect of small massacres. Having a clear understanding of the cultural/political spheres in which conflict victims existed when they were alive also makes a difference in massacre interpretations. The killing of a family of five within a cultural community whose main political subunits were small family-level groups should be considered a large-scale massacre. Some might not see it as such, because at first glance it does not appear to involve a grandiose loss of life. If that same family of five existed as a subcomponent of a larger political entity within a larger cultural community, then their murders represent a small-scale massacre. A large-scale massacre would entail the annihilation of most or all of the larger political entity of which the family was a subcomponent.

Another dilemma facing the bioarchaeologist trying to interpret mass graves as massacres is the inclusion or exclusion of executed criminals within the purview of massacres. For example, if episodes of capital punishment are not included within the scope of massacres then some mass graves with evidence of violence fail to meet the criteria of a massacre simply because these individuals were put to death for criminal activity by people in their own community and were not victims murdered by enemies.

Bioarchaeologists rely on criteria, including criteria for massacres, whether large or small. The consistency and the transparency of those criteria are essential to the reliable evaluation of the evidence that is presented as a massacre.

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REFERENCES CITED


