The Anglo-Saxon Invasion of Britain: Beyond Gildas and Bede

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ABSTRACT

The Anglo-Saxon invasion of Britain in the fifth and sixth centuries is typically a story of slaughter and destruction. This is largely because Gildas, the only known contemporary to write about the events, portrayed it as such, and subsequent writers have taken his interpretation as fact. However, Gildas was not a historian, nor did he claim to be. Modern archeological research has proven that Gildas exaggerated much of the destruction he claims took place, but this has not changed the popular notion that the Anglo-Saxons conquered and subdued the native Britons. However, the literature, art, and language of the Saxons and the Britons prior to and during the Anglo-Saxon period indicates the two peoples must have joined together in more than just war. However, the question remains: to what extent did this affect the peoples, and the culture that emerged from this period? This paper uses an interdisciplinary approach. First, it uses archeological evidence to critically examine the modern historiographic evidence for the conquer-and-destroy model of Anglo-Saxon colonization. It then uses literary analysis to demonstrate the Celtic story-telling influences in the Anglo-Saxon literary opus *Beowulf*, and finally considers the linguistic evidence of Celtic language influences on Old English. Ultimately, though the Anglo-Saxon language (Old English) emerged as the dominant language of the island, there was far more cultural exchange between the two peoples than has previously been acknowledged. This is crucial to understanding this important era of British history and the development of British-English culture.

The records of late fifth and early sixth century Britain are, at best, fragmented and, at worst, partially fictionalized accounts written down in later centuries. The archeological evidence has typically been interpreted through the lens of these records (Hutton 21), resulting in a historically shadowy period of history. It is in this era, perhaps as early as the 430s (Blair 3) that the Anglo-Saxons (a group of Germanic tribes from what is now the Netherlands, northern Germany, and Denmark who later established the English nation) came to the British isles. Their campaign against the Britons (the Celtic peoples living in what is now England) is typically painted as a brutal, violent takeover that burned anything resembling civilization (Hylson-Smith 97). However, this

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narrative is based on the writings of Gildas, a fifth century British monk who did not even consider himself a historian (Gildas 5), and reinforced by Bede, a seventh-century Saxon pseudo-historian who relied heavily on Gildas for his chronicle of this period (Bede vi). Moreover, any details that might emerge from this period have been so coloured by the storytelling traditions of the Arthurian legends that they cannot be considered reliable facts (Hutton 22-6). What is certain is that by about 600 CE, the Anglo-Saxons were "in permanent control of half the island" (Blair 9). Of the other half, the largest British holding was Wales (Blair 9), though there is evidence of British presence in the English half of the country, as peasants or slaves (Blair 11). John Blair postulates that "little of [the Britonic] culture passed to the Anglo-Saxons, and almost none of their language" (11). However, the Anglo-Saxon epic poem *Beowulf* contains elements that are "strongly reminiscent of Celtic literature and tradition" (Puhvel 1), which is evidence of cultural exchange between the two peoples. Though historians typically use archeological evidence to support the conquer-and destroy narrative set down by Gildas, this same evidence might also speak to a far more complex relationship between these two peoples, a relationship attested to by both the adoption or appropriation of indigenous sacred sites and ritual, the exchange of cultural values through literature, and the development of the complex language we now know as English, all of which indicates that the study of this period needs to critically re-consider the long-accepted narrative of the Anglo-Saxon invasion story.

One cannot talk about fifth- and sixth-century Britain without talking about Gildas and Bede. Their writings are the foundation for modern understanding of this historical period. The primary problem with this foundation is that Gildas never claimed nor intended to be a historian. Gildas wrote *On the Ruin of Britain* as a polemic discourse—that is, a verbal attack—against the political and clerical leaders of his day, not a historical chronicle. He writes it as an allegory which likens the Christian Britons to the chosen people of the Old Testament and warns that they are on the verge of being punished for their unfaithfulness just as Israel was punished by the Babylonian invasion (Gildas 13-4). However, when Bede was writing his *Anglo-Saxon Chronicle*, *On the Ruin of Britain* was one of the only sources he could find for that era of history, and as it told a story that supported the image of the (now Christian) Anglo-Saxons as an instrument in God's hands, sent to cleanse the land of the corrupt Britons, he took Gildas' polemic as history, and thus the story of mass destruction became the common narrative of fifth century Britain.

Gildas writes that the coming of the Anglo-Saxons was as "a fire heaped up and nurtured by the hand of the impious easterners spread from sea to sea. It devastated town and country round about, and… burned the whole surface of the island" (Gildas 27) and Bede talks about the "ruins of cities destroyed by the enemy" (Bede 34). There is, however, no evidence of such wide-scale destruction in the archeological record (Hylson-Smith 103-4). In fact, the Celtic peoples were not known for building and gathering in cities or even necessarily living in permanent structures (Bek-Pederson 280). Moreover, by the time the Saxons came to Britain, many of the Roman *civitas* (towns) had already been abandoned (Ward-Perkins 529). The collapse of the Roman economy and the complex mercantile system which supported it meant that large congregations of people could no longer survive (Lambert 54). It is also possible that the Celtic peoples, no longer directly occupied by Roman conventions, reverted to their traditional forms of life, which centred on clan-based settlements that could be moved around the country.

In fact, far from destroying the British structures, there is evidence that the Anglo-Saxons revered them, particularly the iron-age monuments, which were often re-used as Anglo-Saxon "cemeteries, estate boundary markers, meeting places, elite settlements and religious centres" (Williams

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95). Bronze age burial sites such as the one at Wigber Low in Derbyshire were particularly favoured and were re-appropriated as Anglo-Saxon burial grounds (Williams 92). By cultivating this connection to the ancient monuments of the Britons, the Anglo-Saxons could construct a relationship with the distant past and thereby deny the fact that they were newcomers to the land (Williams 91). It also connected them to the ancestors of the Britons and, by extension, to the Britons themselves in a deeply spiritual way that has far-reaching implications for the developing relationship between these two peoples.

The Anglo-Saxons may also have been drawn to the Brittonic monuments because the paganism practiced by the Anglo-Saxons had some commonalities with the paganism practiced by the Celts not so long before. While the exact nature of either Celtic or Anglo-Saxon pagan worship must be pieced together using the Christianized writings of the practitioners' descendants and archeological evidence (Niles 278-9), there are yet some clear similarities between the two. For example, "one recurring element in the archaeology of early Anglo-Saxon England is the occurrence of substantial post-holes…[which] are thought to have supported ritual standing posts" (Niles 313). Similar remains of both wood and stone posts and pillars cover the insular Celtic world, the most famous being Stonehenge. These sites indicate that both the Anglo-Saxons (Niles 313) and the Celts (Bek-Pederson 280) practiced open-air worship of trees, posts, and pillars — a practice later carried over into Celtic-English Christian practice as the worship of large stone crosses such as that found at Ruthwell, Northumbria.

There are further cultural similarities attested to in the literature of these two peoples. As previously noted, some elements of the Anglo-Saxon poem *Beowulf* are "strongly reminiscent of Celtic literature and tradition" (Puhvel 1). Moreover, "the earliest Welsh poems show a society remarkably like that of the Anglo-Saxons, dominated by the same loyalties and with the same emphasis on treasure, gift-giving, and the fellowship of warriors in their chieftain's hall" (Blair 12). *Y Gododdin* is one of these early Welsh poems Blair refers to — traditionally dated to the end of the sixth century and attributed to the poet Aneirin (Jarman xiii) — and tells of the Brittonic Gododdins who died "in strife with the mixed host of England [the Anglo-Saxons]" (Aneirin 899). Given the nature of the poem's conflict, it is unlikely to celebrate aspects of culture that might have been inherited from contact with the Anglo-Saxons. Yet, as Blair indicated, the poem praises a culture with fundamental similarities to the Anglo-Saxon culture, and even contains phrases and imagery that mirror those from *Beowulf*. For example, compare: "He fed black ravens on the rampart" (Aneirin 971) and "craving for carrion, / the dark raven shall have its say" (*Beowulf* 150); "Wine and mead from gold vessels was their drink" (Aneirin 241) and "the adorned ale-cup" (*Beowulf* 86); "He gave gifts of horses" (Aneirin 970) and Hrothgar's gift of eight horses to Beowulf (99-100); "Never was built a hall so renowned" (Aneirin 364) or "famous" (372) and "he resolved to build a hall / ... / of whose splendours men would always speak" (*Beowulf* 75). The images of the hall are particularly notable, as they depict a society that is built around powerful, generous leaders that deserve the praise of both existing and future nations. Both poems also contain brief introductions that indicate they were meant to be performed in mead halls, which opens the door for cultural exchange, as both societies have a time and place for the exchange of stories, and visitors to both British and Anglo-Saxon halls would have been treated to such tales. Moreover, the celebration of bravery, sacrifice, and heritage of both *Y Gododdin* and *Beowulf* demonstrate how easy it would be for hearers of both cultures to relate to and appreciate the content of such shared stories. Most importantly, however, the similarity of the imagery conjured by the particular phrases indicates a shared pool of poetic idioms and tropes which both British and Anglo-Saxon poets drew on when composing their work.

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Other Brittonic literature further demonstrates that the two cultures likely shared compositional tools. The *Mabinogi* is a collection of Welsh prose stories that came to their present form in the tenth or eleventh century, but which likely come from an earlier tradition (John 5). Of particular interest to the study of Saxon-Briton relations is the story "Branwen Daughter of Llŷr", which bears a remarkable similarity to the story of Hildeburh, which is embedded in the *Beowulf* narrative. Branwen and Hildeburh are each betrothed to leaders of opposing tribes: Branwen, a Welsh woman, was given to Matholwch, an Irish king ("Branwen" 60) and Hildeburh, a Dane, given to a Jute (*Beowulf* 100). A closer examination will show that the stories are remarkably similar not only in theme, but in detail.

Branwen's marriage lasts for one happy year, during which she has a son ("Branwen" 65), and then the Welsh and the Irish resume the feud, quickly culminating in war between the two peoples (65-8). Branwen's son, the clans' only hope to regain peace, is thrown headlong into a fire (69), and in the end all of Branwen's kin are killed, and she is escorted back to Wales by what is left of her brother's host. She mourns: "alas that I was born! Two good islands have been destroyed because of me" (70). Hildeburh, too, loses her son, brother, and husband to the feud her marriage was meant to end (*Beowulf* 100; 102). Her son is also burned — this time on a funeral pyre — and "that grief stricken woman keened over his corpse, / Sang doleful dirges" (101) as "the ravenous flames / swallowed those men whole, made no distinction / between Frisians and Danes; the finest men departed" (102), and she, too, is eventually escorted home by what remains of her brother's warriors. Some of the strife in Branwen's tale is over the possession of a magical cauldron which may or may not have been stolen from one side or the other ("Branwen" 63-4). These tales all stress that neither side is in the right: both Ireland and Wales are "good islands," both the Frisians and Danes are "the finest men," and "both sides will break the solemn oath" (*Beowulf* 125), and it is the women who lose everything in the end. As these episodes are likely to be based on common cultural practice of using women as "peace-weavers" (*Beowulf* 124), it is impossible to say for certain if Branwen's story was inspiration or even known to the *Beowulf* poet, or vice-versa. However, the similarities do still demonstrate how the stories of one nation might be entertaining and familiar to citizens of another, and how the cultural practices of the native British and the invading Saxons had a great deal in common with one another, enough that their literature contained similar plot devices.

There are other literary tropes in Irish literature that have parallels in *Beowulf*. The Irish were Celts, like the Britons, and, as indicated by Branwen's story, had close, if tempestuous relations with the Britons. Their mythology was also quite similar to that of the Briton's, though far more of the Irish stories have survived (Squire 251-2). Irish tales, or their lost Brittonic counterparts, may even have directly inspired the *Beowulf* poet: Martin Puhvel conducted an intensive review of Irish and Germanic folklore themes and found several aspects of *Beowulf* that are mirrored in Irish stories, but are not present in pre-Beowulf Germanic or Scandinavian lore (40, 65-6, 74-5). Most notable are Beowulf's encounters with various water-monsters or *nicor* during his swimming competition (*Beowulf* 87-8) and again in Grendel's mire (109-11). These episodes are not replicated in Germanic myth, though there are numerous such encounters in Irish tales (Puhvel 65-6). Even the term *nicor* "is not found anywhere in Anglo-Saxon verse outside of *Beowulf*" (Puhvel 63), while "the tradition of water-monsters extends far back into the Old Irish period" (Puhvel 66).

Puhvel sees Grendel's mother as a fusion of two Celtic archetypes of the hag and the fairy guardian. The hag is usually a more-powerful female monster who seeks revenge for the killing of her sons (Puhvel 18-9), and the fairy guardian is a female spirit or fey responsible for the keeping of secret places generally found beneath the waves of lochs

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or seas (Puhvel 76). Indeed, Grendel's mother only enters the story after the slaying of her son, at which point she is "mournful and ravenous, resolved to go / on a grievous journey to avenge her son's death" (*Beowulf* 106). Also, she "had to live in the terrible lake" (105), where she "guarded its length and breadth / for fifty years" (111). To get to her lair, Beowulf swims down into the lake for "a full day" (111), apparently without running out of air, and emerges into a cavern or hall in which "there was no water to impede him" (111). Both the hag and the underwater realm are familiar to readers of the Irish Fenian tales, in which the hero Fionn and his followers often journey to the land under the waves, usually to do battle with the fairy folk who live there (Squire 205), and Fionn himself often fights with fierce female hags and giants alike (Puhvel 19-21). Notably, the end of the Fionn saga is also brought about through the resurrection of an old feud (Squire 226), a theme echoed in some of the stories embedded in the *Beowulf* narrative, such as the tale of Hildeburh.

A still more specific parallel between Fionn (or sometimes one of his companions) and Beowulf is their feat of tearing off a monster's arm using only their own strength (Puhvel 9). Puhvel calls this the "Hand and Child" motif, as in the Irish versions, the monster's arm generally comes down a chimney to snatch people (usually children, but not always) away from the house (Puhvel 5; 87). Puhvel believes the "Hand and Child" origin of the battle with Grendel explains why "Beowulf grips the monster's arm instead of using more obviously lethal tactics, such as going for the throat — which in a fight in the open spaces of [the hall in which this battle takes place] would seem to be... far more natural" (89). This would also address why Grendel is apparently helpless against Beowulf's grip of just one of his arms when "surely he has another arm of gigantic strength with which to retaliate" (91). This indicates that the battle with Grendel was using a story trope out of its usual context, and it was popular enough with the intended audience that the inconsistency highlighted by Puhvel was allowed to remain when the tale was written down. All in all, the geographical proximity of Anglo-Saxon territory to the western Celtic world, combined with the similar cultural norms of the two societies, make it likely if not inevitable that literary influence would pass in both directions, accounting for the strong Celtic influence on the themes and plots of the *Beowulf* narrative. And yet, for all that, the poem itself is a unique blend of literary traditions that shows the power of stories, not wars or marriages, to bring people together in understanding. Moreover, the number of Celtic literary tropes and images that are mirrored in the Anglo-Saxon *Beowulf* is evidence of an active cultural exchange between the Anglo-Saxons and the Britons, which goes against the usual narrative in which the Anglo-Saxons subjugated and eradicated the Britonic culture.

This is not to say that relations between the Celtic and Germanic peoples were entirely copacetic. By the time the Anglo-Saxons arrived, the Britons were largely Christian (Lambert 81), and the Anglo-Saxon appropriation of pagan sacred sites was thus no longer a point of common ground upon which they could build a relationship. Moreover, both Welsh and English literature, despite their literary commonalities, still depict "two distinct and hostile peoples fight[ing] for the same territory" (Ward-Perkins 516). *Y Gododdin* in particular demonstrates the animosity that existed between the Saxons and the British. Offa's Dyke, a 20-metre-wide ditch built by the Saxons in the 8th century, still marks the borders of Wales and speaks of the lengths to which the Saxons went to keep the Welsh in Wales. Additionally, place names in most of England are overwhelmingly Germanic in origin, a fact often used as proof that the Anglo-Saxons were generally victorious in disputes with the Britons (Ward-Perkins 521), thus earning them the right to name the disputed territory. However, Germanic place names may have been re-introduced by the later Viking invasions (Niles 313), so it is best not to draw firm conclusions from this evidence. However, linguistic analyses of Old English — the language of the Anglo-Saxons — is often

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cited as the key evidence for Saxon dominance of the Celtic peoples (Filppula and Klemola 35), and this argument must be addressed.

The Britons spoke a language called Brythonic, a now extinct language that may have been very similar to old Irish. Typical analyses of early English note the low number of Brythonic words that entered the early English vocabulary (Ward-perkins 521). Otto Jespersen, writing in 1905, noted that "there was nothing to induce the ruling classes to learn the language of the inferior natives; it could never be fashionable for them to show an acquaintance with that despised tongue by using now and then a Celtic word" (qtd. in Filppula and Klemola 35), a view that has since become "a compulsory piece of dogma, cited in almost every textbook on the history of English" (Filppula and Klemola 35). This elitist view of the Saxon-Celtic relationship does not account for either the state of the Brythonic language when the Saxons arrived nor for the modern scholarship in Old English linguistics, despite its reiteration in modern textbooks.

When the Saxons arrived on the British coasts, Brythonic had already been diluted by Latin as part of the Roman occupation — even after Rome left, Latin was still the language of choice for written documents (Ward-Perkins 528), supplemented by ogham script (a writing style made up of vertical lines cut into wooden sticks) for short messages and epigraphs (Lambert 85). Therefore, much of the Brythonic vocabulary existent at the time is unavailable for modern scholarship. However, there have been some recent linguistic studies that indicate a strong Celtic influence on early English vocabulary that has hitherto been overlooked in such studies (Filppula and Klemola 35-8). Filppula and Klemola also note that the scant number of Celtic loanwords to Old English is something of a myth, and that the *Oxford English Dictionary* (OED) contains:

> a considerable number of words that have in recent studies been found to have a plausible Celtic origin. What is more, the OED contains dozens if not hundreds of words that have now been marked as being of 'obscure origin'. Their exact etymologies await further scrutiny but already there is reason to suspect that many of them will eventually turn out to originate in a Celtic language. Indeed, some such revisions have already been made on a number of OED entries (47).

Moreover, the field of comparative linguistics has recently noted that English contains a number of phonemic (language sounds) and typological (the functions and structures of words and sentences) constructions that are absent from other Germanic languages despite being quite common in the Celtic dialects, which indicates substantial language interaction between the British and the English peoples (Filppula and Klemola 41-7) that contributed to the uniqueness and complexity of the early English language. For example, in modern English, possession is indicated using possessive pronouns (mine, your, his) or apostrophe s ('s). This is called an internal possessor. Conversely, other Germanic languages usually indicate possession using a separate, additional phrase called an external possessor, "as in German *Sie schlug dem König / ihm den Kopf ab*, literally 'She cut the king / him the head off'." (Filppula and Klemola 44). Like English, the Celtic languages do not use external possessors, and the Celtic languages adopted internal possessors before the English language did, which indicates a direct influence of Celtic typological form (Filpula and Klemola 44).

It is also interesting to note that some of the Old English magic charms actually contain Celtic (mostly Irish) words and phrases (Meroney 172), which demonstrates an early association with Celtic language and the Anglo-Saxon written word. It is interesting to note that the Anglo-Saxon word 'spell' is used both for a mystical incantation as

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well as the act of writing a particular word, which speaks to the close relationship between words and power. That Celtic words were used in Anglo-Saxon charms indicates a respect for the Celtic tongue that belies Otto Jesperson's theory that "it could never be fashionable" for the Anglo-Saxons to know Brythonic words, because only the powerful individuals, such as those capable of writing or spelling, would have known the charms.

In the end, however, English did eventually arise as the dominant language of the islands, so the narrative of the Anglo-Saxon conquerors is not without merit. Yet the assumption that this linguistic dominance implies a similar cultural dominance (Ward-Perkins 521) not only assumes that there was, in fact, a clear cultural division between the Germanic Saxons and the Celtic Britons, but also that the Anglo-Saxons were actively working to suppress the Brythonic culture. However, the Anglo-Saxons demonstrated a reverence for the monuments of the ancient Britons by re-appropriating them for their own sacred sites, adopted a variety of storytelling tropes from the Britons, and likely incorporated more of their language into English than has hitherto been acknowledged. All of this indicates that there was much more cultural exchange between the Britons and the Saxons than the narrative of conquest and subjugation would imply. This is a crucial period of British history, for it is during this time that the Island first began to come together as a united people. And though the common narrative implies that this was a purely English peoples, the fact is that the Celtic inhabitants were an integral part of the population, and their influence and presence should not be overlooked: it is important that the contribution of the Britons to the early English nation is recognized if we are to fully understand the origins of the English people. It is particularly important that historians critically consider the context of the primary sources which have so often been used to confirm the conquer-and-subjugate narrative because, as the archaeological, literary, and linguistic fields have already begun to realize, the coming of the Anglo-Saxons was not the catastrophic slaughter Gildas claimed it was. It is time to revisit the story.

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Works Cited

Aneirin. "Y Gododdin." *Y Gododdin: Britain's Oldest Heroic Poem,* edited and translated by A. O. H. Jarman, vol. 3, Gomer Press, 1988, pp. 2-66.

Bede. *Ecclesiastical history of the English people: a revised translation*. Translated by J.A. Giles, G Bell, 1907.

Bek-Pederson, Karen. "Insular Celtic religion." *The Handbook of Religions in Ancient Europe*, edited by Lisbeth Bredholt Christensen, Olav Hammer, and David A. Warburton, Acumen Publishing, 2013, pp. 278-90.

"Beowulf." *The Anglo-Saxon World: An Anthology*, edited and translated by Kevin Crossley-Holland, Oxford University Press, 2009, pp. 74-154.

Blair, John. *The Anglo-saxon Age: a Very Short Introduction*. Oxford: Oxford University Press, 2000.

"Branwen Daughter of Llŷr." *The Mabinogi and other Medieval Welsh Tales*. Translated by Patrick K. Ford, Berkeley: University of California Press, 1977.

Filppula, Markku, Juhani Klemola. "Celtic Influences in English: A Re-Evaluation." *Neuphilologische Mitteilungen*, vol. 115, no. 1, 2014, p. 33, http://www.jstor.org/stable/43344757. Accessed 18 Dec. 2018

Gildas. *The Ruin of Britain*. Translated by Michael Winterbottom, Phillmore & Co. LTD, 1978.

Hutton, Ronald. "Early Arthur: History and Myth." *The Cambridge Companion to the Arthurian Legend*, edited by Elizabeth Archibald and Ad Putter, Cambridge, 2009, pp. 21-35.

Hylson-Smith, Kenneth. *Christianity in England from Roman Times to the Reformation: I from Roman times to 1066*. SCM Press, 1999.

Jarman, A.O.H. Introduction. *Y Gododdin: Britain's Oldest Heroic Poem*, edited and translated by A. O. H. Jarman, Gomer Press, 1988, pp. xiii-ciii.

John, Ivor B. *The Mabinogion*. New York: AMS Press, 1972.

Lambert, Michael. *Christians and Pagans: The Conversion of Britain from Alban to Bede*. Yale University Press, 2010.

Meroney, Howard. "Irish in the Old English Charms." *Speculum*, vol 20, no 2, 1945, pp. 172-82, http://www.jstor.org/stable/2854593. Accessed 29 Dec. 2018.

doi: 10.29173/spectrum59

Niles, John D. “Pre-Christian Anglo-Saxon Religion.” *The Handbook of Religions in Ancient Europe*, edited by Lisbeth Bredholt Christensen, Olav Hammer, and David A. Warburton, Acumen Publishing, 2013, pp. 305-23.

Puhvel, Martin. *Beowulf and Celtic Tradition*. Wilfrid Laurier University Press, 1979.

Squire, Charles. *Celtic Myth and Legend*. Newcastle, 1975.

Ward-Perkins, Bryan. “Why Did the Anglo-Saxons Not Become More British?” *The English Historical Review*, vol. 115, no. 462, 2000, pp. 513-533. http://www.jstor.org/stable/579665. Accessed 18 Dec. 2018

Williams, Howard. “Monuments and the Past in Early Anglo-Saxon England.” *World Archaeology*, vol. 30, no. 1, 1998, pp. 90-108. http://www.jstor.org/stable/125011. Accessed 18 Dec. 2018.

doi: 10.29173/spectrum59