

The excavation of the material record, encompassing everything from fills and features to artefacts and ecofacts, is intrinsic to archaeology and crucial to our understanding of both prehistory and history. Although the lack of literacy and therefore written sources of the prehistoric period, its defining characteristic,<sup>1</sup> means that there is a greater dependence on the material record when studying it, archaeology remains key to the study of the historic period too. Not only is the written record nowhere near as expansive as we'd like, frequently omitting the lower classes in particular, but there are also inaccuracies which can be exposed by the study of the material record. Furthermore, the written record is tainted, if not inseparable from the writer; all written sources need to be questioned and their validity assessed which archaeology allows for since it is more objective. Despite the fact that interpretations of findings in relation to our understanding of the past can allow for some subjectivity, as emphasised by the post-processual archaeologists, it is to a lesser extent than with written sources and thus archaeology provides a crucial degree of objectivity that can alter our pre-conceived ideas of the past.

When considering the historic period, where better to start than with the 'Father of History' himself, or, as some have not altogether unfairly nicknamed Herodotus, the 'Father of Lies'. One of the key problems with relying on written records that is exposed when considering Herodotus is that written works are often deceptive or simply wrong, and archaeology can expose these inaccuracies and provide a more precise understanding. In 'The Histories' Herodotus provides a detailed description of the city of Babylon and claims, among other descriptions, that the city was bordered by walls, and that its circumference was 480 stades<sup>2</sup> which equates to approximately 56 miles if one stade is 185 metres<sup>3</sup>. Previously this dimension was accepted without much questioning in the absence of material evidence and other writing until, in a demonstration of the effectiveness of archaeology in revealing the flaws in historic records, Herodotus's assertion was proven wrong by the excavations of Babylon undertaken by Robert Koldewey in the late 19<sup>th</sup> to early 20<sup>th</sup> centuries.

Due to Koldewey's meticulous use of stratigraphy to differentiate between the natural landscape and mudbrick remains<sup>4</sup>, Koldewey's excavations were remarkably successful compared to the work of his predecessors such as Sir Henry Layard, and he was able to unearth the remains of Babylon's Processional Way, the foundations of the ziggurat Etemenanki, as well as the dimensions of the city's walls. The result of the work on Babylon's walls led to the discovery that the outer walls were not, as Herodotus had claimed, 56 miles in circumference, but just thirteen instead.<sup>5</sup>

Of course, this is not the only example of inaccurate claims in The Histories, but it is an example that highlights two key problems of the historic record which will be returned to through a handful of examples in this essay; inaccuracy and omissions. Herodotus has undeniably described a historic period in his account of the city since Babylon already had a well-established writing system by around 1750 BCE in which the city's law codes were written in cuneiform script<sup>6</sup>, so was certainly historic when the walls were constructed around

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<sup>1</sup> Renfrew, 2007

<sup>2</sup> Waterford, 1998

<sup>3</sup> <https://www.maa.org/press/periodicals/convergence/eratosthenes-and-the-mystery-of-the-stades-how-long-is-a-stade>

<sup>4</sup> <https://www.world-archaeology.com/great-discoveries/koldewey-at-babylon/>

<sup>5</sup> Cottrel, 1957

<sup>6</sup> Renfrew and Bahn, 2016

the turn of the sixth century BCE.<sup>7</sup> Therefore, Herodotus's reporting demonstrates not only the inaccuracy of the historic records, but also the gaps that are present in so much of the record since we had relied on the writings of an outsider who may not have even visited the city instead of cuneiform writings of the Babylonians themselves when considering the city's dimensions. Frequently, written records are lost or destroyed; paper decomposes, Quipu ropes break down and tablets are broken. Although there may have been contemporary writing from the Babylonians describing their own city, we do not have this so there is ultimately a gap in the written record, one that was inaccurately filled by an outside historian, and it was the study of the features of the material record that revealed this.

Therefore, written records alone should not form the basis of our understanding of history since they are not only rare, but aren't necessarily accurate either, although that is not to say that they aren't useful. Due to the difficulties of locating sites, as well as the necessity of forming a hypothesis before an excavation which can be based on challenging an assumption from a written source, a third way is the most effective; the use of a combination of written and archaeological sources. Archaeology can be used to confirm, question and refute the historical sources and when the two are used in conjunction they are at their most effective. This can be seen with the combination of written and material sources used by Andrew Wade and his team when investigating Herodotus's description of ancient Egyptian embalming methods, in particular the insertion of cedar oil into the body to dissolve the guts, and the removal of the brains.<sup>8</sup> Like with Babylon, it is a historic period as Egypt had a well-established full script in the form of hieroglyphics,<sup>9</sup> yet without archaeology we would rely on the writings of an outsider as the primary basis for our understanding which would give a distorted impression as the study proved in 2013. Through studying published descriptions of 150 mummies, as well as using seven 3D reconstructions of mummies<sup>10</sup>, the study's use of both the material and written record revealed that cedar oil enemas were not used as an evisceration method, nor was the brain always removed<sup>11</sup>, and thus provided a more accurate picture of Ancient Egyptian burial practices that would not have been achieved using written records alone.

This joint use of the material record with the written record in the historic period has also proved useful in the case of sources in which there appears to be a blurring of myth and reality. Although much has changed in the field of archaeology since Schliemann's excavation of Troy, it still remains one of the most significant steps made from the study of mythological written sources to the reality of the material record<sup>12</sup>, although the Viking voyage to America also demonstrates this well and challenged the existing perception of European presence in the Americas.

The Vinland Sagas encapsulate so many of the problems with written, historic sources; there are contradictory elements, there are omissions, and the source describes actions that occurred long before it was written. It highlights how frequently occurrences of the historic period were not written down; in Iceland at least, oral traditions prevailed, and

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<sup>7</sup>[https://www.ancient.eu/wall/#:~:text=605%2D562%20BCE\)%20built%20three,Wonders%20of%20the%20Ancient%20World](https://www.ancient.eu/wall/#:~:text=605%2D562%20BCE)%20built%20three,Wonders%20of%20the%20Ancient%20World)

<sup>8</sup> Waterford, 1998

<sup>9</sup> Harari, 2011

<sup>10</sup> <https://www.sciencedirect.com/science/article/abs/pii/S0018442X12001278?via%3Dihub>

<sup>11</sup> <https://www.livescience.com/28097-herodotus-mummy-evisceration-wrong.html>.

<sup>12</sup> Charles-Picard, 1972

accounts of the Viking landing in Canada by Leif Ericsson in 1000 CE<sup>13</sup> were handed down by word of mouth before eventually being written down in the 12th and 13th centuries CE.<sup>14</sup> When considering the two distinct works of the Vinland Sagas; The Saga of Erik the Red and The Saga of the Greenlanders<sup>15</sup>, it was hard to separate fact from fiction. The author's 'artistic license' is clear through the vivid, descriptive account, as well as characters such as Freydis and Thorvard who modern scholars dismiss as purely fictional<sup>16</sup>. This, and the somewhat different accounts the two Sagas give of the same event were contributing factors in the rise of the myth that Christopher Columbus was the first European of the historic period to set foot in the Americas following his voyage in 1492<sup>17</sup>, a myth firmly discredited by archaeology at the site L'Anse aux Meadows that instead confirmed aspects of the Vinland myth.

The use of written sources, be it documentation or even written place-names, is often useful in identifying the site in the first place, yet archaeological fieldwork remains the crucial tool<sup>18</sup>. In the case of L'Anse aux Meadows, although the Sagas were vital in the location of the site and subsequent excavation, it was the ground reconnaissance to identify the remains of the Viking settlement that led to its subsequent excavation in the 1960s, undertaken by the Ingstands. Excavations in Newfoundland revealed the site to be a Viking settlement just 100m from the coast<sup>19</sup>, with eight buildings of a distinctly northern European style<sup>20</sup> as well as a handful of personal items of Norse material culture that allowed L'Anse aux Meadows to be confirmed as a Viking settlement, predating Columbus by several centuries in a confirmation of at least some parts of The Vinland Sagas. Subsequent excavations were able to shed further light on the Sagas since the name Vinland derives from the word for wine so therefore describes a region in which grapes could be grown, but the climate of L'Anse aux Meadows renders this impossible. This could potentially be a marketable lie similar to that of the naming Greenland, or more of a symbolic, fantastical element of the story, or it could even suggest that 'Vinland' was further south along the coast of America where warmer climates would allow for the growth of grapes, and the material record from the site certainly suggests that the Europeans did reach further along the coast in a potential corroboration of the written record.

The remains of three butternut squashes were also excavated from L'Anse aux Meadows and although radiocarbon dating could not be used, the stratigraphy suggested they were of Viking origin as they were excavated from the Norse stratum.<sup>21</sup> Significantly, butternut squash does not grow naturally at the site, but is found further south suggesting that the site was used as a base for further exploration<sup>22</sup>, leaving the door open for future Norse

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<sup>13</sup> Brockhampton Press, 1995.

<sup>14</sup> <https://www.history.com/news/the-viking-explorer-who-beat-columbus-to-america>

<sup>15</sup> <https://www.youtube.com/watch?v=ZloduRX5ygc>

<sup>16</sup> Wallace, 2009

<sup>17</sup> Frankopan, 2015

<sup>18</sup> Renfrew and Bahn, 2016

<sup>19</sup> Wallace, 2000

<sup>20</sup> Scarre, 2009

<sup>21</sup> Wallace, p6-7

<sup>22</sup> Scarre, 2009

finds on the American continent, for example at Point Rosee<sup>23</sup> These aspects of the material record have the potential to shed further light on the historic record since butternut squash could be found in some areas in which grapes also grew naturally, potentially suggesting that 'Vinland', described as a temperate area where wild grape vines could be found in the Sagas<sup>24</sup>, was further south. Therefore, L'Anse aux Meadows demonstrates the necessity of the material record when studying history since, although vital clues were provided by the written source, the Sagas are hardly an accurate account, and proof provided by the material record was necessary in substantiating some of the Sagas and challenging the previous myth of Columbus's 'discovery' of the Americas.

Of course, the most glaring flaw of the written record is the absence of information on ordinary people. Throughout much of history, although there is significant global variation in levels of literacy in the historic period, for the most part a higher proportion of wealthy men were educated than other demographics, so most writing that has survived comes from wealthy or upper-class males, frequently focusing on their own lives with little information on the people at the opposite end of the socio-economic spectrum. Often the lower classes and women leave little impact on the written record, and if they do it is in a description provided by someone else, so the study of the material record provides insight into these forgotten lives and one that, unlike written sources, is not tainted by bias.

To continue with the Vikings, although the use of runes was not rare, it is unlikely that many people were literate in them<sup>25</sup> and it was only the wealthy Sumerians who were literate in cuneiform<sup>26</sup>, hence there are limited written sources available directly from those groups that detail ordinary lives. Similarly, without the means to leave a mark on the written record, the material record has also revealed the impact of the Norman Conquest on the ordinary Anglo-Saxon inhabitants whose mark on the historical record extends little beyond their skeletons. A study in 2020 used a range of methods including bulk isotope analysis, analysis of teeth and organic residues from pottery as well as palaeopathological assessment of human remains<sup>27</sup> to examine the material record of skeletons and pottery from the period prior to and after the Norman conquest in order to observe how diets changed, with the results ultimately suggesting that the impact on the conquest on ordinary people was not as great as had been previously thought or suggested by the limited historic sources. Stable isotope analysis revealed that the ratio of meat to vegetables in peoples' diets remained much the same across the period and that, although the preferences of the elites were influencing the diets of lower economic groups in the long-term as seen through the rise in the consumption of pork<sup>28</sup>, this varied greatly with vastly different individual experiences in the short-term.

More recently, and from a period with a relative abundance of written records, the material record has been key to understanding the lives of enslaved people in the Americas

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<sup>23</sup> <https://www.nationalgeographic.com/news/2016/03/160331-viking-discovery-north-america-canada-archaeology/>

<sup>24</sup> <https://daily.jstor.org/anse-aux-meadows-and-the-viking-discovery-of-north-america/>

<sup>25</sup> [http://www.bbc.co.uk/history/ancient/vikings/evidence\\_01.shtml](http://www.bbc.co.uk/history/ancient/vikings/evidence_01.shtml)

<sup>26</sup> <https://www.historyonthenet.com/mesopotamian-education-and-schools>

<sup>27</sup> Craig-Atkins E, Jervis B, Cramp L, Hammann S, Nederbragt AJ, Nicholson E, et al. p11

<sup>28</sup> <https://arstechnica.com/science/2020/07/archaeologists-study-life-in-oxford-before-and-after-william-the-conqueror/>

since the written record extends little beyond transactional documents or dehumanising descriptions, all of which provide limited insight. At the New River Estate on the Caribbean island of Nevis, excavations and study of the material record revealed significantly more than the written records which predominantly consisted of inventories, wills and maps. The shovel-test pits alone yielded shells and a fishing weight, suggesting that fishing was an activity the enslaved people engaged in, whilst 5% of all artefacts recovered were tobacco pipe fragments, an unexpected discovery that suggests they were also dependent on tobacco, possibly to combat hunger<sup>29</sup>. In combination with other studies of the material record across the island, a more complete picture of the lives of slaves on Nevis is being built up, one that would remain unknown if we relied on the historic written sources alone from wealthy plantation owners who regarded slaves as not only inferior people, but as property and therefore viewed any documentation of their lives as useless. Without the ability to view writings from the slaves themselves, any documentation provided on them would come from outsiders, and would almost certainly be dehumanising or inaccurate, so not only is the material record able to provide information on these people, but it is one that bypasses the racism and bias that would otherwise be present in the written sources.

Therefore, the study of the material record through archaeology is vital in providing a picture of history free from the bias and errors of the written record, although when the opportunity does arise, the use of material and written records together is often the most effective. Nevertheless, without the material record our current perception of the historic period would be entirely different, and it is inevitable that as the field of archaeology continues to develop, future studies of the material record will alter our perception even further, allowing for a more in-depth and accurate understanding of the human past.

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<sup>29</sup> <https://www.liverpoolmuseums.org.uk/archaeologyofslavery/introduction-archaeology-of-slavery>

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