

ABSTRACT

Title of Thesis: Cultural Resilience and Lithic Traditions:
Examining Stone Tool Use and Production by
Enslaved Africans in the Caribbean and Africa

Darrell Hardy, Master of Professional Studies,
2024

Thesis directed by: Dr. Matthew M. Palus, Department of
Anthropology

This thesis explores the continuation of African stone tool-making traditions among enslaved Africans in the Caribbean, specifically through case studies in Jamaica and St. Kitts. By examining archaeological evidence, this study argues that enslaved Africans on these islands were not merely passive recipients of new cultural influences but actively maintained and adapted their traditional lithic practices. The findings challenge the narrative that attributes all stone tools in the New World solely to Native American or European origins. Instead, they suggest a more complex picture of cultural persistence and adaptation, with enslaved Africans using their ancestral knowledge to produce and utilize stone tools in novel contexts. This research contributes to a broader understanding of the African Diaspora by highlighting the resilience and creativity of enslaved communities, who maintained cultural continuity despite displacement and enslavement. The study also underscores the need for re-evaluating the cultural significance of stone tools found at archaeological sites in the Caribbean, urging scholars to consider the contributions of African traditions in shaping the material culture of the region.

ADDING A TRADITION TO THE AFRICAN DIASPORA: “CASE STUDIES OF
STONE TOOL USAGES WITHIN THE CARIBBEAN AND AFRICA

by

Darrell Hardy

Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Professional Studies
2024

Advisory Committee:
Dr. Matthew M. Palus, Chair
Dr. Kathryn Lafrenz Samuels
Dr. Paul A. Shackel

© Copyright by
Darrell Hardy
2024

Acknowledgements

I dedicate this milestone to my instructor, Matt Palus, whose unwavering support and belief in me made this journey possible. His encouragement, guidance, and faith in my potential have been instrumental in helping me persevere and achieve the completion of my master's degree.

To my family, thank you for your unconditional love, patience, and encouragement, even when my research seemed abstract. Your support sustained me through this journey, and I couldn't have done it without you.

I am deeply grateful to my thesis committee members, Kathryn Lafrenz Samuels and Paul Shackel, for their guidance and valuable feedback. Kathryn's encouragement allowed me to continue my work uninterrupted, and Paul's insights greatly enriched my research.

A special thank you to Fritz Biveridge, Todd Ahlman, Douglas Armstrong, Ann Compton, and others whose work provided the foundation for my research. Without their contributions, I would still be gathering information instead of completing this milestone.

Lastly, I thank SEARCH Inc. for the opportunity to work as an archaeological technician from 2020 to 2021. That experience was pivotal in shaping my research question and inspiring my path forward.

Table of Contents

Acknowledgements.....	ii
Table of Contents.....	iii
List of Tables	iv
List of Figures	v
Chapter 1: Introduction	1
Chapter 2: Interpreting Lithic Practices: Theoretical Perspectives on Acquisition, Manufacture, and Use by Enslaved Africans in the New World.....	6
Chapter 3: Echoes of Diaspora: Unveiling the Archaeology and Heritage of African Displacement and Resilience	13
Chapter 4: Methodological Framework and Challenges in Investigating Ancestral Knowledge of Stone Tool-Making Among Enslaved Africans.....	20
Chapter 5: Interpreting the Past: Results of Lithic Analysis and Oral Narratives in Understanding Cultural Practices	28
Chapter 6: Continuity and Adaptation: Examining the Use of Lithic Tools by Enslaved Africans in the Americas.....	55
Bridging Continents: The Enduring Legacy of West African Lithic Traditions in the Caribbean	70
Bibliography	75

List of Tables

Table 1 Distribution of Lithic Artifacts by Raw Material in Mound 1: Core, Debitage, and Tool Counts	34
Table 2: Lithic Tool Assemblage from Mound 1 - Tool Types, Raw Materials, Dimensions, and Provenience	34
Table 3 Summary of Archaeological Artifacts by Raw Material: Counts and Weights of Cores, Debitage, and Tools.....	36
Table 4 Artifact Inventory: Quartz Tool Assemblage from Structures 7, 10, and 11 at Mound 2	36
Table 5 Summary of Lithic Artifacts by Material: Core, Debitage, and Tool Analysis	37
Table 6 Summary of Archaeological Artifact Measurements and Provenience Data	37
Table 7 Lithic Artifact Distribution Across Sites 1 and 6: Analyzing Core Fragments, Flakes, and Tool Variability	43
Table 8 Distribution of Rock Types Across Selected Locations in the Caribbean and West Africa	52
Table 9 Tool Utilization in Archaeological Practices Across Selected Locations	52
Table 10 Comparative Analysis of Lithic Artifact Assemblages from St. Kitts, Jamaica, and Kranka (Ghana): Presence of Biface, Utilized Flake, Retouched Flake, and Projectile Points	52
Table 11 Variability in Lithic Reduction Strategies Across St. Kitts, Jamaica, and Kranka (Ghana): A Comparative Study of Biface, Multidirectional, Unidirectional, and Tested Cobble Artifact	52

List of Figures

Figure 1 Ancient Stone Grinding found at an Archaeological Site in Ghana..... **Error! Bookmark not defined.**

Figure 2 Traditional Fishing Techniques Using Modified Stone Lances in the Gao and Laloi Lagoons: A Childhood Recollection**Error! Bookmark not defined.**

Figure 3 Five Chert Flakes Exhibiting Diverse Strike Patterns and Edge Modifications**Error! Bookmark not defined.**

Figure 4 Evidence of Repeated Use: Bifacial Step Flakes and Wear Patterns on three Gunflints.**Error! Bookmark not defined.**

Figure 5 Evidence of Repeated Use: Denticulated and Rounded Wear Patterns on three Fire Flint Gunflints**Error! Bookmark not defined.**

Figure 6 Map providing a description and location of an area where an archaeological excavation was conducted.....**Error! Bookmark not defined.**

Figure 7 Stone Hearth Feature: An Arrangement for Cooking within the Excavation Unit**Error! Bookmark not defined.**

Figure 8 Three Fire Flints Exhibiting Use-Wear Patterns Indicative of Traditional Fire-Starting Practices.....**Error! Bookmark not defined.**

Chapter 1: Introduction

As an archaeologist working in cultural resources management on a field project in Kentucky, I was part of a significant discovery of stone tools beneath the slave quarters on a former plantation site. This thesis does not present those specific findings, but the discovery sparked a critical thought: *What if these stone tools were not produced by Indigenous people in the New World but instead produced or used by the enslaved Africans who lived on the plantation?* This idea challenged the most immediate explanation, attributing such tools to pre-contact Native Americans contexts of manufacture and use, and set me on a research journey to explore whether archaeologists or historians had documented or analyzed stone tools found in the vicinity of enslaved African quarters on plantations, whether those tools were discovered on the surface or buried below.

This line of inquiry shaped the focus of my thesis, delving into the relationship between stone tools and enslaved Africans in the Caribbean. It led me to ask: *To what extent did enslaved Africans use their traditional knowledge to create stone tools on plantations in the Caribbean, and what challenges exist in interpreting and attributing these artifacts to African cultural practices?* By conducting research in this area, I aim to broaden the understanding of stone tool production and use beyond conventional perspectives, emphasizing the potential involvement of enslaved Africans in crafting these artifacts.

Even if these tools are not firmly contextually linked to enslaved Africans, encouraging archaeologists and researchers to approach such artifacts with greater

caution and consideration could lead to more nuanced interpretations. It is important to avoid automatically attributing stone tools to Indigenous people in the New World without critically examining their context and potential ties to other groups. This perspective aligns with the broader objective of challenging existing assumptions, such as the belief that enslaved individuals were not involved in weapon-making or lacked cohesive communities.

This thesis also contributes to the African Diaspora narrative by exploring the cultural connections and practices that may have persisted among enslaved individuals transported to the Caribbean. It highlights the agency and resilience of these communities, illustrating how they maintained and adapted their traditions in the face of adversity. The discussion links with an extended exploration of continuations of African tradition in the New World, recognized early on as African survivals or Africanisms (Holloway 1990:10). By shifting the scholarly discourse, this research encourages consideration of the possibility that stone tools found on archaeological sites could be attributed to cultural groups like enslaved Africans, enriching our understanding of the diverse historical contexts and contributions of different populations.

The following chapter delves into the theoretical background surrounding the acquisition, manufacture, and use of lithics by enslaved Africans. It explores various theories of how enslaved Africans could have obtained lithic tools and tool material, including technology sharing with Native Americans, skills passed down from African flintknappers, the preservation of African traditions, African worldviews, and the notion of accidental encounters with natural flaked stone and flintknapping

material during agricultural labor among enslaved people. These theories shed light on the potential ways enslaved Africans obtained and utilized lithics, pointing to the possibility of adopting existing practices, preserving cultural traditions, and demonstrating skill in lithic production. The chapter provides a strong foundation for further research into the cultural dynamics of lithic acquisition among enslaved Africans.

Chapter 3 explores the historic context of the African Diaspora, a complex history of Africans dispersed worldwide due to the transatlantic slave trade and related historical forces. It introduces the field of African Diaspora archaeology, focusing on tangible evidence of African cultural traits outside Africa. The chapter then delves into various cultural practices that have endured, such as basketry, boat building, musical instruments, pottery, woodcarving, quilting, and cultural modification of bodies, all of which demonstrate the preservation of African roots among diasporic African American communities. Additionally, the study examines mortuary practices and stone tool usage in Central Africa, providing insights into ritual life and rites of passage. Overall, the African Diaspora showcases the resilience, creativity, and lasting legacies of the African people, leaving a profound impact on societies worldwide.

Chapter 4 outlines the methodology employed to gather, analyze, and interpret data on the use of stone tools by enslaved Africans on slave plantations. It details how the researcher navigated the challenges of accessing archival sources from St. Kitts, Jamaica, Ghana, and Angola to build a comparative framework that addresses the research questions. Emphasis is placed on the significance of the contexts in which

the artifacts were recovered, highlighting how these contexts are crucial for understanding the specific archaeological sites and their relevance to the study. The chapter also provides an in-depth description of each archaeological site, supported by maps and figures to illustrate the locations and contexts of the artifacts. These visual aids guide the reader through the significance of the assemblages and the connections between African and Caribbean sites. This methodological framework establishes a foundation for the subsequent analysis and interpretation of results, demonstrating how the data will be systematically broken down to explore the continuity and adaptation of lithic tool traditions among enslaved Africans.

Chapter 5 presents the data and findings related to the use and significance of stone tools as informed by both oral traditions and archaeological investigations. It will explore the diverse applications of lithic technology across various cultures, such as the Dangme people in Ghana using ground stones for processing plants and vegetables, and enslaved Africans in St. Kitts and Jamaica repurposing gunflints for fire-starting and as currency. Additionally, archaeological data from Kranka Dada, Ghana, will highlight the craftsmanship and utilization of lithics within a historical context. This chapter aims to contextualize these artifacts within their cultural and historical frameworks, offering a comprehensive interpretation of their role in daily activities, subsistence, and cultural practices, thereby contributing to a broader understanding of our shared human heritage.

Chapter 6 concludes by addressing the continuation of African stone tool-making traditions among enslaved Africans in the Caribbean, challenging assumptions that stone tools on plantation sites are exclusively of Native American or Indigenous

people in the New World origin. It highlights the resilience and adaptation of enslaved Africans, who brought and transformed their lithic traditions in the New World, preserving cultural identities despite the oppressive conditions of slavery. The chapter also examines the methodological and interpretive challenges faced in this research, emphasizing the importance of critically analyzing artifacts and their contexts to avoid prescribed attributions. This work underscores the broader contributions of enslaved Africans to the archaeological record and invites further study into the cultural significance of lithic tools in the African Diaspora.

Chapter 2: Interpreting Lithic Practices: Theoretical Perspectives on Acquisition, Manufacture, and Use by Enslaved Africans in the New World

Introduction

This chapter delves into the theoretical background surrounding the context of acquisition, manufacture, and utilization of lithics by enslaved Africans in New World context. The theories explored in this chapter provide insights into how the presence of lithic artifacts at sites of slavery in the New World has been explained or considered in the past, as well as the preservation of African traditions, the potential for technology sharing among peoples, and the skill development involved in lithic production. These theories have the potential to provide a framework for understanding the presence and significance of lithics among enslaved Africans, contributing to the knowledge of diasporic cultural practices and traditions.

Theoretical Background

This chapter of the thesis will look into theories relevant to enslaved Africans becoming into possession of lithics. Some of these theories will support the narrative that traditions and customs from Africa stayed alive with enslaved Africans through stone tools. On the other hand, there are theories inserted in this chapter that point towards enslaved Africans being taught to make stone tools by another cultural or made use of existing rock tools. Importing these theories allows for a better understanding of determining the correct suppositions for my research.

Technology Sharing

Katherine Holloway theorizes that lithics usage by Africans are “the result of enslaved African adoption of lithic manufacturing practices, through either first-hand observation or direct teaching of the method by skilled indigenous toolmakers” (Hayes 2011:201). Hayes has arrived at this theory from conducting research on Native Americans and enslaved Africans at “Sylvester Manor, a 17th-century plantation site in coastal New York.” Hayes’s research identified similarities amongst the lithic technologies used by Native Americans and enslaved Africans at the historic Long Island plantation site (Hayes 2011:201). Hayes focused on the knowledge level used to create lithics. For example, Hayes noticed a

...switch in raw material (from quartz to ballast flint) was accompanied by a more subtle change in manufacturing practices. Heat treatment of flint cores and greater reliance on expedient flake tools were introduced, while evidence of novice or lesser- skilled stone-knapping techniques (inefficient core use, poorly chosen striking platforms resulting in step or hinge fractures, and wayward percussion marks) on some materials was also observed (Hayes 2011:201).

Hayes goes further with the comparison by using it on ceramics where she noticed a change in ceramic firing temperatures. These abnormalities led Hayes to “point to the task of mortar and plaster production undertaken at the plantation by enslaved Africans. Additionally, skills derived from ironworking or managing sugar boilers may have contributed African knowledge of pyrotechnology to local ceramic firing” (Hayes 2011:201). Hayes’s theory is important to my research since it provides a

possible explanation for enslaved Africans being in possession of lithics, or presenting distinct, diasporic lithic industry. Hayes's research suggests Native Americans may have been exchanging cultural ideas with enslaved Africans, or were giving knowledge to produce lithics, but enslaved African people could also have been given the knowledge to produce lithics by another group of people. For instance, there is a European lithic industry that revolves around manufacture of gunflints and related articles. This idea will allow me to use the latter to argue against the possibility of enslaved Africans having external help, creating space to consider enslaved African people capable of manufacturing flaked stone tools for specific uses, as part of a diasporic cultural tradition.

Like Katherine Hayes, archaeologist Todd Ahlman theorizes that the knowledge to create stone tools may have derived from.

...enslaved Africans [who] were skilled stone masons who shaped thousands of stone blocks used in the construction of windmills, boiling houses, warehouses, and great houses... [Also] [i]t is possible that the enslaved Africans who learned and used these skills translated this knowledge to knap the locally available chert (Ahlman, Braly, and Schroel 2014:19).

This theory is good as it allows me to follow Ahlman's example of setting aside the idea of external influences to associate a lithic industry with enslaved Africans. Indeed, if my research can support the idea that enslaved Africans did acquire flintknapping as a new skill in the New World, then it will put me one step closer to showing that enslaved Africans instead utilized knowledge of an African lithic industry.

Cultural Continuity in the New World African Diaspora

Melville J. Herskovits theorized African survivals as “the continuity of West African carryovers in African-American culture” (Holloway 1990:10). This theory is considered as Africanism. Indeed, Herskovits has “established a baseline theory of African retentions” (Holloway 1990:10). Furthermore, Herskovits’s theory has “confirmed that African traditions had survived in black cultures in the Americas but also revealed the presence of a distinctive African-American culture in the United States” (Holloway 1990:10). This theory is at the forefront of my research, because it makes the connection to a continent where enslaved Africans originate from and have not lost their traditions and culture amidst the Middle Passage, nor while in the New World. This link between traditions in Africa and the traditions of transplanted or enslaved Africans in Caribbean and North America will be used to build up a strong foundation for assessing whether or not enslaved Africans were continuing customs and perpetuating material cultures, which they had practiced prior to becoming slaves. Indeed, if the theory can show that African traditions have remained with them in America, other than tool making, then it is plausible that the tradition of lithic tool making may have stayed with them as well. If “skill in flintknapping is found in the intersection between knowledge and practice the relationship between them changes in terms of experience and the complex interplay of mind and material as each flake is struck” (Bamforth and Finlay 2008:3), archeological data may support the conclusion that traditional practice of tool making did not end in Africa, rather this was resumed on plantations.

Philosopher John Mbiti had put forth a general model of the African Worldview. This position consists of “four broad models of reality that constitute the African worldview. The first is *belief in hierarchies and entities of power*. This is the hierarchical arrangement and entities of power in which God is seen as the ultimate reality, followed by deities, ancestors, and humans. The second is *communalism*. It indicates a conception of the universe where the world of the spirits, human beings, and nature are seen as united in vital or organic communion. The characteristics of African communalism include communal self-respect, interdependence, survival of the community, group assurance, co-operation and harmony, affiliation, and shared duties. Third is *belief in mystical powers*. In this African worldview, human events such as birth, death, health, harvests, and thunderstorms are seen to be primarily controlled by spiritual forces. The fourth is *the concept of time as made up of events defined by relationships* rather than something existing in and of itself” (Ejiaga 2015:155). This theory “can be used for developing a methodology of...cultural studies that stresses the importance of African worldviews in Black Diasporan literature and culture” (M’Baye 2016:1). This theory provided vital information needed to support my research. My interpretation of this theory is that Africans reality revolves around spirituality and their actions are a result of their devotion to their beliefs.

“Plausible Explanation”

Aaron Russell theorizes that the reuse of lithics by enslaved Africans may have occurred on plantations, rather than manufacture of lithics for a specific function.

This theory emerged after Russell had reviewed previous essays on lithics from
enslave Africans and the connection between enslave Africans and lithics being found
at an old estate known as the Hermitage. Russell states that “A more direct
explanation may be that the primary use of these objects was as utilitarian fire-
starters, ready-made from high quality chert and easily collected by African
Americans working in the fields at the Hermitage”(Russell 1997:71). This would
suggest that enslave Africans may have found lithics and utilized them in a function
of their choosing.

Laurie Wilkie theorized that “African-Americans involved in intensive agriculture are
most likely to accidentally encounter lithic artifacts while working” (Wilkie
1995:143). Wilkie supports the theory by making two claims. First, she points to a
new owner “remember[ing] finding arrowheads occasionally while plowing his field”
on a plantation. Second, she suggests that small house gardens represented the extent
of agricultural activities in this area, and persons living in the yard would be less
likely to accidentally encounter such objects than someone participating in full-time
agricultural pursuits”(Wilkie 1995:143).

Peter Bleed discusses what an individual needs to make chipped-stone tools. Bleeds
states

...skill is a kind of knowledge. It refers to the developed ability to
manipulate the vocabulary of techniques, designs, and customary
resources that are available in a particular technology. It is a quality that
can be developed, something that some people “know.” Also, skill...must
be acquired in a process that may include learning discrete information,

but also involves practical mastery. Skilled activity involves knowing how to do something and doing it with routine, dispatch, and efficiency. As such, skill draws on cognitive and motor activities. It may be taught or coached, but it requires development through practice (Bleed 2008:156-157).

Conclusion

In conclusion, the theoretical background explored in this chapter provides valuable insights into the acquisition of lithics by enslaved Africans. The theories discussed shed light on various aspects, including the preservation of African traditions, the potential for technology sharing, and the development of skill in lithic production. These theories offer a framework for understanding the presence and significance of lithics among enslaved Africans and contribute to the exploration of their cultural practices and traditions. The theories have the potential to suggest that enslaved Africans may have adopted lithic manufacturing practices through observation, teaching, or translation of existing skills, and that African traditions and worldviews were preserved and carried over to the Americas. The theories also propose plausible explanations for the use and reuse of lithics, including utilitarian purposes and accidental encounters during agricultural activities. Overall, these theories provide a solid foundation for further research and understanding of the cultural dynamics surrounding lithic acquisition by enslaved Africans.

Chapter 3: Echoes of Diaspora: Unveiling the Archaeology and Heritage of African Displacement and Resilience

Introduction

The African Diaspora is an intricate tapestry of history, culture, and resilience, spanning continents and leaving an indelible mark on societies around the world. The transatlantic slave trade involved the capture and sale of Africans from regions such as West Africa, East Africa, and Madagascar. They were transported to various destinations including South America (Argentina, Uruguay, Brazil, Chile, Peru), the Caribbean, and North America (Mobile, Charleston, Richmond). West Africa, known as the "slave coast," was a major source of enslaved Africans for Europe and the Americas. The Portuguese established plantations on Cape Verde and São Tomé and Príncipe, using enslaved African labor. The mouth of the Congo River and upper Angola supplied a significant number of Africans to Brazil, the Caribbean, and North America. Additionally, the British utilized a convict labor system that included Africans, particularly in Australia. The exact number of enslaved Africans transported is uncertain, but estimates range from twelve to twenty-five million. Brazil received the highest number of enslaved Africans, followed by the British and French Caribbean, Spanish American areas, and North America (Walker 2001:107-108). Stemming from the transatlantic slave trade and other historical forces, the dispersion of Africans has shaped the trajectory of nations and the lives of millions. In this chapter, we embark on a journey through the African Diaspora, delving into the fields of archaeology, historical dispersion, cultural practices, and the preservation of ancestral traditions. Through the lens of African Diaspora archaeology, we uncover

the tangible remnants of a shared past, shedding light on the experiences of enslaved Africans and their descendants. From the bustling ports of the Americas to the enduring cultural practices and material artifacts that have transcended time, this chapter aims to unveil the profound connections, creativity, and enduring legacies that have emerged from the African Diaspora.

1.1 African Diaspora Archaeology

African Diaspora archaeology is a well-established domain within historical archaeology. It was founded by Charles Fairbanks in 1968 (Orser 1998:66). This field was previously “known as plantation archaeology, or “African American archaeology,” because of the field's main focus on slavery and the study of plantations primarily in the southern United States and the Anglo-Caribbean” (Lee and Scott 2019:86). “As initially established, the archaeologists’ contribution to African diasporic studies would be to provide tangible evidence for the continuation of African cultural traits beyond the borders of Africa” (Lee and Scott 2019:86). The principles of the field were aligned with theories derived from Melville Herskovits and Franklin Frazier. Frazier contemplated “whether enslaved men and women retained elements of their original cultures in the New World.” The usefulness of archaeology was evident, because it has the

potential to provide material evidence of African stylistic traits on physical objects made and used outside Africa. This material evidence was considered to support ‘Africanisms’. Indeed, archaeological excavation at sites associated with participants of the African Diaspora

could provide clues about cultural survival as no other discipline could” (Orser 1998:66).

The idea of cultural survivals gives way to broader continuation of African cultural traditions and material cultures present throughout the diaspora.

For example, the coiled-grass basket-making tradition among African American artisans in the United States traces back over three centuries to enslaved Africans on the "rice coast." Despite the challenges of slavery, basket making persisted as a cultural practice and now serves as a symbol of resilience, connecting modern artisans to African ancestry while evolving from utilitarian to artistic expressions (Walker 2001:186-188).

Enslaved Africans, often skilled in watercraft from their coastal origins, played a key role in the southeastern U.S. fishing trade by the mid-18th century. They built and navigated boats like pettiaugers and canoes, blending African, West Indian, and Native American influences, though their shipbuilding roles were typically limited to physical labor (Walker 2001:188-189).

Music was another cultural expression that enslaved Africans preserved through homemade instruments such as gourd fiddles, banjos, drums, and fifes. Despite bans on drumming due to fears of secret communication, they continued to craft and play percussion instruments. The banjo, with its African origins, became a significant musical symbol, though its prominence has shifted over time (Walker 2001:189-192, Deetz 1977). Woodcarving, though less recognized, persisted among African Americans, often incorporating African motifs, such as reptiles symbolizing

supernatural communication. Carved canes and household objects reflected functional and symbolic artistry (Walker 2001:196-199).

Quilting, while not an African tradition, adapted influences from African textiles, such as appliqué and strip designs. African American women developed distinctive quilting styles, with strip quilts offering creative freedom and potentially linking back to African origins (Walker 2001:199-203; Frye 1987). These art forms collectively demonstrate the endurance of African cultural heritage and its adaptation and integration into African American life, showcasing creativity, resilience, and cultural continuity.

In *Uncommon Ground*, Leland Ferguson (1992) explores how colonoware pottery reflects the creativity and resilience of enslaved Africans in colonial America.

Colonoware, a type of handmade, low-fired pottery, is a prime example of cultural blending, or creolization, combining African, European, and Native American influences. Ferguson writes, “colonoware pottery illustrates a form of creolization, where African, European, and Native American traditions blended to create something unique” (Ferguson 1992:95). This pottery was primarily found in areas where enslaved people lived and worked, such as plantation quarters and kitchens. As Ferguson explains, “The presence of colonoware is particularly concentrated in areas occupied by enslaved Africans, such as quarters and kitchens, suggesting its primary makers and users” (Ferguson 1992:122).

Beyond its practical use, Ferguson interprets colonoware as a quiet but powerful way for enslaved Africans to maintain connections to their heritage. The handmade nature of the pottery and its stylistic features often reflect African traditions, even within the

constraints of slavery. Ferguson states, “The production of colonoware reflects a subtle form of resistance, as enslaved individuals maintained connections to African traditions within the confines of slavery” (Ferguson 1992:103). By studying colonoware, Ferguson highlights how everyday objects can reveal the cultural persistence and agency of enslaved Africans, providing insight into their efforts to sustain a sense of identity despite their oppression.

The clay tobacco pipes recovered from Chesapeake plantations highlight a strong connection to African cultural traditions. These "Chesapeake pipes" often feature decorative techniques such as carved lines, stamped motifs, and white fill, which bear striking similarities to craft traditions in West Africa, including those seen in pottery and tobacco pipes from Mali, Ghana, and Nigeria. These design elements suggest that enslaved Africans brought their artistic knowledge to the Chesapeake and integrated it into their work, reflecting the endurance of African traditions even in the context of slavery (Shackel and Little 2014:35-41).

Specific motifs on these pipes, such as the "Kwardata motif" and the "double-bell motif," are directly linked to West African symbolic designs, further emphasizing the cultural heritage of African artisans on plantations. These pipes serve as a testament to how enslaved Africans preserved their identity and traditions through material culture under oppressive circumstances (Shackel and Little 2014:41-43).

1.2.8 Body Modification

Dental modification was a common practice among some African cultures and involved altering the shape of teeth through filing, chipping, or breaking. This practice was particularly prevalent in regions of West and Central Africa and served

as a cultural marker for individuals who were likely born in Africa (Brown et al 2009:47). These modifications were not typically performed in the Americas, making them a key indicator of African origin among enslaved individuals. For example, the remains of a 39–64-year-old woman displayed teeth shaped into hourglass and peg forms, which is a distinctive African tradition. Isotope analysis and low lead levels in her teeth further confirmed her probable African birth (Brown et al 2009:57). The presence of dental modification among the remains of enslaved Africans in the Americas provides important insights into their cultural heritage and origins (Brown et al. 2009:56).

Relating to this last discussion, there is an ethnological literature produced in the early 20th century relating to use of flaked stone tools in the context of body modification among African peoples that mark transitions to adulthood. For instance, among the Ovambo people of modern-day Namibia, the ethnology published by Vedder in 1938 indicates chipped-stone tool utilization in at least one ritualized context. During the stage in which the boys were transitioning into adulthood between the ages of 15 and 20, they were taken to a rite of passage ceremony held in proximity to the chief's dwelling. The ceremony lasted for a duration of 3-4 weeks. Boys from various families within the same age range were housed together in temporary shelters built for this event. Their parents were responsible for providing for them during this time. The boys were circumcised using a sharp stone tool by a proficient practitioner from another tribe. All of the children's clothing were burned and they were given new clothes to wear once they returned home. These children are considered grown men after the ritual (Vedder 1938:70).

Conclusion

In conclusion, the exploration of the African Diaspora has revealed the profound impact of the transatlantic slave trade and the dispersion of Africans throughout the world. Through the field of African Diaspora archaeology, we have gained insights into the experiences of enslaved Africans and their descendants, shedding light on their cultural resilience and the continuity of African traditions beyond Africa's borders. From the enduring traditions of basketry, boat building, musical instruments, pottery, woodcarving, and quilting, we see the preservation of cultural practices and the connection to African roots among African American communities. Additionally, the study of mortuary practices and the examination of stone tool usage in Central Africa provide glimpses into ancient rituals and rites of passage, highlighting the cultural significance and spiritual connections of these practices. The African Diaspora is a testament to the resilience, creativity, and enduring legacies of the African people, leaving an indelible mark on societies worldwide.

Chapter 4: Methodological Framework and Challenges in Investigating Ancestral Knowledge of Stone Tool-Making Among Enslaved Africans

This chapter delves into the methodologies employed to gather data and tackle the research question regarding the potential utilization of ancestral knowledge by enslaved Africans in crafting stone tools on slave plantations. Through a comparative analysis, the aim is to gain comprehensive insights, drawing from existing research on stone tools. The central inquiry of this thesis revolves around whether enslaved Africans leveraged their ancestral knowledge to fashion stone tools in the context of slave plantations. To achieve this objective, data interpretation and analysis will be conducted based on reports from various regions, including St. Kitts, Jamaica, Ghana, and Angola, using published data on lithic artifacts from these various contexts. However, this research encountered significant challenges stemming from geographical disparities and linguistic barriers, which inevitably influenced the collection of data, its interpretation, and subsequent analysis, potentially impacting the outcomes. This section will thoroughly examine these complications and their implications on the research findings. The artifacts under scrutiny span from the 12th to the 19th century, encompassing a significant historical period crucial for understanding the evolution and adaptation of stone tool-making practices among enslaved Africans.

Methods

My approach for this research has been multifaceted, relying primarily on published data from peer-reviewed sources. I gathered data from studies focused on regions such as Central Africa, West Africa, and the Caribbean islands of St. Kitts and Jamaica. This geographic diversity was essential to addressing my research question and allowed for a comparative analysis. Archaeological and ethnohistorical data on historic-period African lithic industry is necessary to characterize the tradition that would become diasporic African material life and heritage in New World contexts, providing a nuanced understanding of the contexts in which stone artifacts were used. a nuanced understanding of the contexts in which stone artifacts were used.

Due to the global scope of this study, it was not feasible to physically examine the stone artifacts described in the literature. Instead, this research relied on previously published data collected by scholars such as Todd Ahlman, Douglas Armstrong, Anne Compton, Fritz Biveridge, and Heinrich Vedder. A significant portion of the data comes from Todd Ahlman's extensive research, which served as a cornerstone for this study.

The significance of stone tool usage in different parts of Africa is pivotal for understanding the purpose behind similar artifacts unearthed in St. Kitts and Jamaica. Examining and interpreting these findings required consideration of both the material and cultural contexts, as well as an analysis of regional similarities and differences in stone types and their potential uses. This comparative approach highlights the technological and cultural exchanges across regions and offers insights into the adaptive strategies employed by communities in diverse historical settings.

strategies employed by communities in diverse historical settings.

This study's findings illuminate the material culture and lived experiences of enslaved individuals across West and Central Africa, as well as in Caribbean territories such as St. Kitts and Jamaica. By focusing on the analysis of peer-reviewed data rather than archival records, this research integrates existing scholarship to build a broader understanding of the use and significance of stone tools in these contexts.

Ghana

Kranka Dada

Anne M. Compton's dissertation, "Shifting Trade Networks: Sub-Saharan to Atlantic Exchange in Central Ghana 1355-1725 CE," explores how global, continental, and regional processes shaped the Bono Manso region of central Ghana. Focusing on the village of Kranka Dada, the study investigates how daily household activities were influenced by integration into broader political, economic, and trade networks from the late 12th to mid-18th centuries (Compton 2014:XIX). By integrating archaeological, historical, and oral data, the research reveals the complexities of socio-political and economic development in the region, demonstrating the interconnectedness of local and global dynamics during the transition from sub-Saharan to Atlantic trade eras (Compton 2014:1). The research involved extensive fieldwork, including pedestrian surveys, systematic excavations, and the collection and analysis of material culture from various excavation units and mounds at the site (Compton 2014:110-113). A total of 48,255 artifacts—such as ceramics, stone tools, faunal remains, and smoking pipes—were recovered, providing a detailed "bottom-

up" analysis of how local communities interacted with larger regional centers like Bono Manso and engaged with global markets (Compton 2014:152).

Dangme-land

This study was undertaken by the Department of Archaeology and Heritage Studies, University of Ghana, explores how indigenous Dangme populations in Segha Hill, Kpone, Prampram, and Shai utilized stones in antiquity (Biveridge 2019:20). These settlements are located along the Gulf of Guinea in Ghana's Greater Accra Region. The research aims to document how these populations exploited stone resources and the methodologies employed (Biveridge 2019:20).

Archaeological methods included surface surveys and excavations at Segha Hill, Kpone, and Prampram, recovering artifacts like stone tools (Biveridge 2019:25-29). Ethnographic data supplemented these findings, gathered from 37 respondents including elders and local experts (Biveridge 2019:30). Historical sources from European accounts were also consulted (Biveridge 2019:20).

Key findings include the identification of cultural materials and structures at the sites, with Segha Hill featuring gridded excavation and statistical sampling techniques (Biveridge 2019:26-27). Challenges included the stony terrain at Kpone and Prampram, influencing excavation strategies and artifact recovery (Biveridge 2019:28-29).

Ethnographic interviews provided insights into traditional practices and cultural significance associated with stone tools, highlighting continuity in cultural practices despite modern influences (Biveridge 2019:30-31).

Ovambo Tribe (Angola)

Heinrich Vedder, a German missionary, ethnologist, and historian, authored *South West Africa in Early Times* based on his extensive experience living and working among the indigenous communities of Namibia. His deep understanding of local languages, cultures, and traditions enabled him to create a unique narrative that blends historical events with ethnographic insights. Vedder describes his work as more of a narrative compilation than a strict scientific history, aiming to preserve the heritage of South West Africa for those with a strong interest in its past (Vedder 1966: V.VII.VIII). His intention was to capture the cultural and social dynamics of the indigenous peoples like The Bergdama, The Hottentots, The Hereros, The Ovambo tribes, using folklore and traditions to bridge gaps in historical records. The English edition, first published in 1966, was condensed to focus on the broader historical and cultural context by omitting some original documents from the German edition (Vedder 1966:VI.VIII).

St Kitts

Site 1 used to be a plantation where they grew sugar and raised cattle from 1720 to around 1850. Over time, the number of enslaved people working there decreased from 58 to 49 between 1817 and 1829. Most of the enslaved people either took care of the cattle or worked in the fields and as servants. When archaeologists investigated the site, they found a total of 4,713 artifacts, including some stone tools and a few pieces of glass, mainly from two areas: a cellar and a midden (a trash area) near a building. They didn't find any ancient artifacts from before Christopher Columbus's time (Ahlman, Braly, and Schroel 2014: 7).

Site 6 was a smaller piece of land occupied from the 1770s to the 1820s. It had some foundations, maybe where buildings used to be, and signs of possible structures where slaves might have lived. Archaeologists dug up six small areas and cleared a larger area to find artifacts. They didn't find any ancient artifacts either. Among the 1,596 historic artifacts they found, 113 were stone tools discovered near or under one of the possible slave buildings. These two spots produced more than half of all the artifacts found, including most of the pottery made by people of African descent and only a small amount of pottery made by Europeans (Ahlman, Braly, and Schroel 2014:8 and 9).

Jamaica

Douglas V. Armstrong is a distinguished historical archaeologist and professor who has extensively studied the Caribbean, particularly the archaeology of slavery and plantation systems. His research at Drax Hall Plantation focuses on uncovering the everyday lives of enslaved Africans, the structures they built, and the material culture they left behind. He aimed to provide a detailed view of how these communities maintained aspects of their cultural heritage while adapting to the harsh realities of plantation life (Armstrong 1990:1).

In "The Old Village and the Great House: An Archaeological and Historical Examination of Drax Hall Plantation, St. Ann's Bay, Jamaica," Armstrong utilizes a combination of archaeological evidence, such as artifacts, building foundations, and spatial arrangements, alongside historical records like plantation ledgers and maps to reconstruct the life at Drax Hall from the late 17th century through the post-emancipation period (Armstrong 1990:3). He reveals how enslaved Africans created a

distinct community within the plantation, maintaining traditional practices while also adopting new strategies for survival under oppressive conditions (Armstrong 1990:15).

His study is significant for its multidisciplinary approach, integrating archaeology, history, and anthropology to explore how enslaved Africans navigated and negotiated their identities and lives within the constraints of the plantation system. Armstrong's work at Drax Hall thus offers a critical perspective on the cultural resilience and adaptation of enslaved communities in the Caribbean (Armstrong 1990:212).

Data

The data for this study was gathered from a combination of published sources focusing on sites in Africa, St. Kitts, and Jamaica. Information pertaining to Kranka Dada was derived from a comprehensive study examining daily life, trade, and ritual in the Bono Manso region. Details regarding Jamaica were sourced from research focused on the Drax Hall Plantation at St. Ann's Bay, which provided valuable insights into archaeological and historical contexts. Data concerning St. Kitts included an analysis of stone artifacts and glass tools from enslaved African contexts on the island's southeast peninsula. Information related to the Ovambo tribe was drawn from historical and archaeological studies exploring early life in Southwestern Africa.

e artifacts and glass tools from enslaved African contexts on the island's southeast peninsula. Information related to the Ovambo tribe was drawn from historical and archaeological studies exploring early life in Southwestern Africa.

Since the archaeological artifacts from these sites were not available for in-person examination, the analysis relied exclusively on published documentation. These data underwent comparative analysis, highlighting patterns and differences in stone tool usage across regions. This process reinforces the notion that a cultural legacy persists through the use of stone tools on slave plantations, offering critical insights into the technological and cultural practices of these communities.

I encountered several challenges while gathering resources for my thesis on stone tools. Much of the research I found focused on Western and Central Africa, spanning thousand-year timelines and focusing on deep historical contexts, rendering those resources unsuitable for my study. Furthermore, online content posed difficulties, with some photographs depicting poorly preserved materials in languages I couldn't understand. Additionally, all lithic assemblages were solely examined in digital documents, depriving me of the opportunity for firsthand inspection. Moreover, some stone tools lacked visual representations and relied solely on textual descriptions provided by the authors, increasing my reliance on their interpretations.

Chapter 5: Results of Lithic Analysis and Oral Narratives in Understanding Cultural Practices

Oral history/tradition serves as a vital link to the past, preserving the knowledge, traditions, and cultural heritage of communities through generations. Through archaeological investigations and firsthand accounts, we can uncover the significance and applications of stone tools in different cultures. From the ancient Dangme people in Ghana utilizing ground stones for grinding plants and vegetables to the enslaved Africans in St. Kitts and Jamaica repurposing gunflints as fire flints and currency, these examples illustrate the diverse uses of stone tools. Additionally, the insights gained from Kranka in Ghana shed light on the craftsmanship and utilization of lithics within a historical community. Through the study of oral history/tradition and archaeological findings, we gain a deeper understanding of how stone tools were essential for daily activities, subsistence, and cultural practices, contributing to the preservation and appreciation of our shared human history.

Oral History/Tradition

Dangme

Fritz Biveridge conducted a multidisciplinary study focused on the Dangme people occupying vicinity of Kpone, Prampram and Segha Hill in southern, coastal Ghana, “to establish and document how indigenous Dangme populations...exploited and used the abundant stone resources in their environment [and] to identify the tool kits, methodologies and techniques employed for their exploitation” (Biveridge 2019:21). The study combined ethnohistory, interviews, and limited archeological excavation,

and the historical and recent accounts of lithic industries among the Dangme are illustrative of the potential for comparing West African and diasporic lithic traditions. Biveridge identified uses of ground and chipped stone tools in archeological and contemporary or ethnographic research contexts. For instance, in addition to recovering archaeological examples of ground stone that was used for grinding a variety of plants and vegetables by the ancient Dangme people (Figure 1), examples being made from gneiss, granite, and quartzite materials (Biveridge 2019:33.34). Biveridge noted that all homes visited by his team for ethnographic research possessed and utilized traditional grinding and milling stones, totally 27 households.



Figure 1 Ancient Stone Grinding found at an Archaeological Site in Ghana

Biverage also recorded oral accounts of chipped stone tool production among the Dangme. One local explains how and why stones are being utilized as tools in Ghana. “According to Nene Abladu Attiope... a respected 82-year-old retired fisherman resident at James Town, a suburb of Kpone, tapering ‘T’ shaped stone hooks made

primarily from water worn pebbles collected from the beachfront constituted an integral part of the tool kit of fisher-folks who plied their trade along the Kpone-Keta coastal stretch in the past.” Also, “...beach pebbles were the preferred media because of their durability which allowed for repetitive usage. It was also relatively harder and heavier allowing them to submerge faster compared to other media like wood and bone (Biveridge 2019.34).

Nene Abladu Attiope elaborates on Abladu Attiope stone tool explanation. Attiope adds:

that the tapering ‘T’ shape was achieved by detaching bits and pieces of flakes off the original pebble by knocking it against another pebble or a hammer head. The purpose was to achieve an almost ‘T’ shaped stone tool with pointed ends and sharp edges at right angles to the long axis. The resulting jagged-edges made a most effective lock-in tool capable of choking, constricting and inflicting injuries inside the throat of fish while it struggled to free itself. The device was secured to vegetal twinges made out of the fibrous branches of *Ulva lobata*, a soft but strong seaweed belonging to the phylum *Chlorophyta*. Locally called *womogmo*, it grows naturally and is abundant along the eastern coastal belt where it is generally considered a nuisance/impediment to fishing. Nene Abladu Attiope further intimate that after harvesting, the branches were tied together at vantage points to achieve a desired length after which it was sun-dried for about two weeks to make it strong. The twinge enabled one end of the ‘T’ shaped stone trap to be

lowered into, or raised from the sea by the fisherman who held onto the other end. The soft fibrous tissue also allowed for tautness to facilitate drawing upwards after it had caught fish. The inedible offal's of mollusks were oftentimes tied to the ends that submerged in water and served as bait to trap some deep sea fish species in the past (Biveridge 2019:34).

Another respondent, Nii Tetteh Angmo ... a 78-year-old indigene of Kpone but currently residing at Prampram, during their childhood years, he and other apprentice colleague fishermen used sharp-edged pointed stone lances secured by vegetal twinges to long wooden poles (Figure 2) to spear freshwater fishes in the *Gao* and *Laloi* Lagoons. To make the tool more effective, the edges of the lancets were sometimes grounded and polished on stone blocks to produce finer and tougher cutting edges than could not be achieved by chipping only (Biveridge 2019:34 to 35).



Figure 2 Traditional Fishing Techniques Using Modified Stone Lances in the Gao and Laloi Lagoons: A Childhood Recollection (Biveridge 2019, used with permission of the author)

There were large ground stones used for sharpening various farming objects according to interviewee Nuumo Tettey Abladu Anson. These stones were used to sharpen “cutlasses, hoes, axes and other tools which required sharp cutting edges to facilitate their effective use” (Biveridge 2019:36), presumably referencing steel cutting tools. Apparently, stone blocks were regularly used by farmers for this purpose. These sharpening blocks are normally located on farms, but they have been discovered in or near regular houses (Biveridge 2019:36 to 37).

Physician Ayah Amouku in Dagme has seen people undergo medical procedures with stone tools. Amouku refer to these surgical instruments as “stone blades”. These blades were being used in conjunction with herbal remedies to make surgical cuts, so the patient can get better. Amouku adds that these stone blades were being used to scratch, etch, burn/brand, pictures or words into the skin. Nonetheless, before these procedures were done, these tools were “steamed in boiling water or overhung over smokeless burning charcoals for several minutes” to make them clean. Furthermore, before the introduction of “Western orthodox surgical procedures”, stone blades were the default surgical instrument due to reputation of them having a greater effect on the patient. For instance, skin is “healed faster and left no physical scars on the affected area after healing” according to Amouku (Biveridge 2019:38).

While Biveridge does not present tabularized data on chipped stone artifacts and implements recovered during archeological investigations conducted as a part of his study, which primarily presents evidence for archeological ground stone implements, oral and ethnohistorical accounts of the contexts of chipped stone cutting implements production and use are important complements to contexts where such data is

available, particularly from contexts of enslavement in the New World, as discussed below.

The following discussion sets up a comparison between lithic artifacts reported from one historic-period archeological site located in Western Ghana, Kranka Dada, and Caribbean plantation contexts at St. Kitts, and Drax Hall in Jamaica. This comparison illustrates the challenges in comparison of published archeological data from African diasporic contexts.

Kranka Dada, Western Ghana

Bono Manso was an old community located in the western region of Ghana. The size of this settlement outnumbered nearby communities with its 568 acres of land.

Kranka Dada is located within this large stretch of land. It was active between the 12th century and the 17th centuries, so it is somewhat earlier than Caribbean sites discussed later in this chapter, an important consideration in comparing these data. Excavations units and trenches were conducted at Kranka Dada. These excavations were part of a multi-season field investigation (Compton 2017:29.31). The research was focused on 14 mounds. These mounds contained structures, which were designated as houses.

Three of the 14 house mounds contained stone tools such as flakes and ground stone: Mound 1, Mound 2, and Mound 5 (Compton 2017:48, 54, 117). These mounds are discussed below.

Mound 1

The excavation at Mound 1 recovered 94 flake lithics artifacts. These lithics consist of “Cores, debitage, and tools” with materials of quartz, quartzite, granite, chert, and unidentified materials (Table 1-2) (Compton 2017:121). From 94 lithic artifacts, 85% of the material is quartz, with chert being the next most common, comprising approximately 12% of the count.

Table 1 Distribution of Lithic Artifacts by Raw Material in Mound 1: Core, Debitage, and Tool Counts

Raw Material	Core Count	%	Debitage Count	%	Tool Count	%	Total Count	%
Quartz	3	100	71	86.6	6	66.7	80	85.1
Granite	0	0	1	1.2	0	0.0	1	1.1
Quartzite	0	0	1	1.2	0	0.0	1	1.1
Chert	0	0	9	11.0	2	22.2	11	11.7
Other	0	0	0	0.0	1	11.1	1	1.1
Total	3	100	82	188.7	9	100.0	94	100.0

Table 2: Lithic Tool Assemblage from Mound 1 - Tool Types, Raw Materials, Dimensions, and Provenience

Tool Type	Raw Material	Weight (g)	Maximum Dimension (mm)	Provenience
Biface	Other	4.2	23.27	Structure 5
Biface	Chert	4.2	23.26	Structure 5
Utilized Flake	Chert	0.6	14.29	Fill
Utilized Flake	Quartz	2	21.46	Structure 4
Retouched Flake	Quartz	1.1	17.89	Fill
Retouched Flake	Quartz	1.7	14.26	Fill

Retouched Flake	Quartz	2	19.84	Structure 4
Retouched Flake	Quartz	6.5	31.85	Fill
Retouched Flake	Quartz	1.6	17.78	Structure 29

Many stone tools in Mound 1 “were created retouched and utilized flakes.” The cores, debitage, and flaked stone tools are similar in appearance; they have “small masses, which were likely related to core size” These stone tools were created mostly from local resources. The analysis of a formal biface tool leads the belief that residents of the area planned to use “sharp and durable raw materials from creating formal tools” This conclusion is a result of knowing the make-up of the biface. The biface was made of chert (Compton 2017:119.120).

Mound 2

Excavations at Mound 2 yielded 84 lithics including cores, formal tools, and flakes or debitage, in a variety of materials (Table 3-4) present the distributions of lithic artifact types within the mound, buy materials. The residents used utilized local and nonlocal lithic materials. The cores reported by Compton are multidirectional and made from quartz. This combination of lithic material and lithic type is evidence of the residence using these lithics as expedient tools. Some of the cores still had intact cortex. This type of lithic shows evidence of these stones being transported there as “complete packages.” Also, some of the primary flakes with cortex were not fully utilized and were saved for later usage. It is believed some of these core types were not used again, because of defects and poor quality (Compton 2017:222).

Table 3 Summary of Archaeological Artifacts by Raw Material: Counts and Weights of Cores, Debitage, and Tools

Raw Material	Core Count	%	Debitage Count	%	Tool Count	%	Total Count	%
Quartz	18	90.0	55	91.7	4	100.0	77	91.7
Granite	0	0.0	1	1.7	0	0.0	1	1.2
Quartzite	0	0.0	2	3.3	0	0.0	2	2.4
Chert	1	5.0	0	0.0	0	0.0	1	1.2
Other/Unknown	1	5.0	2	3.3	0	0.0	3	3.6
Total	20	100.0	60	100.0	4	100.0	84	100.0

Table 4 Artifact Inventory: Quartz Tool Assemblage from Structures 7, 10, and 11 at Mound 2

Tool Type	Raw Material	Weight in Grams	Maximum Dimension in Millimeters	Provenience
Drill	Quartz	4	14.81	Structure 7
Retouched Flake	Quartz	1.6	21.65	Structure 11
Retouched Flake	Quartz	4.5	26.84	Structure 10
Utilized Flake	Quartz	1.6	17.61	Structure 7/Fill

Mound 5

Lithics from Mount 5 at Kranka Dada also included a variety of materials, reduction stages from cores anddebitage to formal and expedient tools (Tables 5-6). Cores with intact cortex may be evidence of lithics being transported to the mound as raw material with complete cortex as unworked stone. One projectile was identified, produced from a shale-like material and was unevenly chipped. The tool may have been previously hafted from its notched base; however, its unevenness and

asymmetry make it suitability as an airborne projectile somewhat dubious (Compton 2017:125 and 126).

Table 5 Summary of Lithic Artifacts by Material: Core, Debitage, and Tool Analysis

Raw Material	Core Count	%	Debitage Count	%	Tool Count	%	Tool Count	%
Quartz	33	97.1	98	97.0	4	57.1	135	95.1
Granite	0	0.0	1	1.0	0	0.0	1	0.7
Other	1	2.9	2	2.0	3	42.9	6	4.2
Total	34	100.0	101	100.0	7	100.0	142	100.0

Table 6 Summary of Archaeological Artifact Measurements and Provenience Data

Table 11.17 Tool Types from Mound 5				
Tool Type	Raw Material	Weight in Grams	Maximum Dimension in Millimeters	Provenience
Biface	Unknown	29.5	59.36	Fill
Biface	Unknown	66.8	53.62	Structure 13
Projectile	Unknown	29.7	61.5	Fill
Utilized Flake	Quartz	0.9	13.7	Structure 17
Utilized Flake	Quartz	3.7	25.27	Structure 18
Utilized Flake	Quartz	1.2	16.49	Structure 20

The analysis of lithics from Kranka Dada is especially detailed and Compton (2017) includes measures in his analysis that is excluded here for lack of comparable data from the Caribbean sites applied to this comparison.

Archeological Data from St. Kitts

Ahlman, Braly, and Schroel (2014) conducted a series of excavations at a series of locations on St. Kitts. Site 1 functioned as a sugar plantation during the early 18th century to 19th century. Archival sources showed that the number of enslaved

individuals working on the plantation declined from 58 to 49 during the years of 1817 to 1829. These enslaved Africans were primarily tasked with agricultural duties. Site 6 on St. Kitts is a small piece of land, which was inhabited from the late 1700s to early 1800s.

Site 1

During archeological fieldwork carried out by Ahlman, Braly, and Schroel on St. Kitts, the excavation locus designated Site 1 functioned as a sugar plantation during the early 18th century to 19th century. The archaeological investigation encompassed a number of excavation units (EU), and mechanical stripping was undertaken at the site to locate subsurface historic features. During these investigations, a total of 4,713 artifacts, including 30 lithic and three chipped glass artifacts were recovered. The excavation was concentrated on two structures housing enslaved people. “Twelve lithic artifacts came from an excavation unit within a cellar with stratified deposits dating between the 1740s and 1820s, while three more came from units just outside of this structure. Eight lithic and two glass pieces came from an excavation unit situated in a midden near a structure” (Ahlman, Braly, and Schroel 2014:7). The remaining materials were found while using heavy machinery. No pre-Columbian artifacts were recovered during the overall investigation” (Ahlman, Braly, and Schroel 2014:7). Ten of the lithics recovered at site 1 appear to show visible signs of excessive usage. 9 of these lithics are considered flakes, while one appears to be a bifacially flaked tool (knife or scraper). The appearance of these artifacts can be seen in Figure 3, below. Artifacts labeled “a” to “d” in Figure 3 shows the flakes, while “e” shows the cutting

tool. The flakes appear to show various striking techniques. Some of these flakes have been unifacially flaked, with flakes removed from one side, while others appear to show removal of flakes from both sides, indicating bifacial reduction. Also, some of these flakes show “small feathered and step flake scars” on them. Flakes depicted in Figure 4 show signs of being curved inward on the tips of them, indicating concave wear. It has been suggested that the concave wear on the flakes is evidence of these flakes being used as “fire flints”. Fire flints is a procedure “where a piece of metal is struck or dragged against a chert flake to create a spark” (Ahlman, Braly, and Schroel 2014:13).



Figure 3 Five Chert Flakes Exhibiting Diverse Strike Patterns and Edge Modifications (used with permission of the publisher)

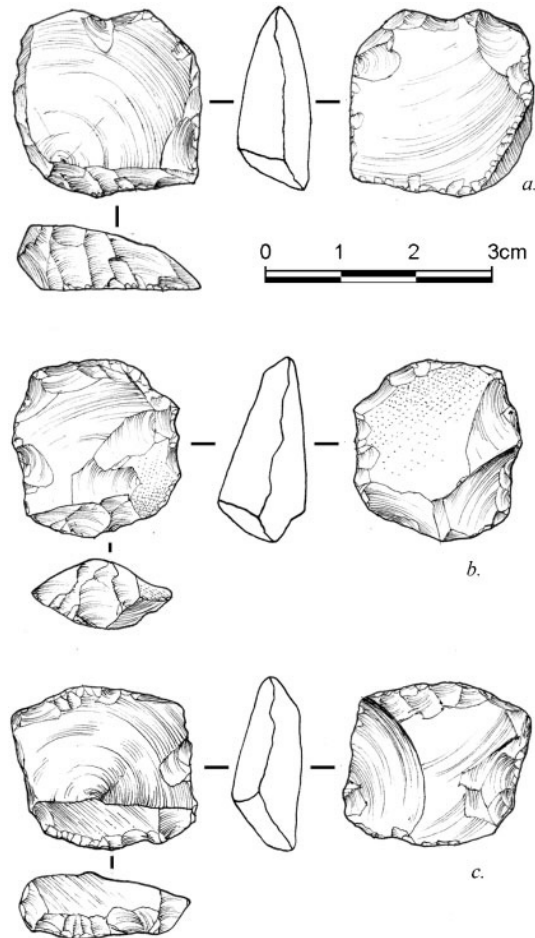


Figure 4 Evidence of Repeated Use: Bifacial Step Flakes and Wear Patterns on three Gunflints (used with permission of the publisher).

The gunflint drawings show signs of various striking's along the edges. In addition, "The lateral edges of the gunflints are not necessarily crushed or blunted but show use that produced bifacial step flakes generally along one edge. Other edges exhibit slight concave wear. This suggests that the St. Kitts artifacts were not used exclusively as gunflints but were employed just as often as fire flints or strike-a-lights," for lighting matches or creating fire outside the context of operation of firearms (Ahlman, Braly, and Schroel 2014:14.15).

Site 6

Site 6 on St. Kitts is a small piece of land, which was inhabited from the late 1700s to early 1800s. A collection of archeological features was found at the site. These non-moveable elements may represent structures belonging to enslaved people and a concentrated area of artifacts. An archaeological investigation was undertaken at the site. This investigation had involved “six one-meter-square excavation units and the mechanical stripping of 32.4 square meters” (Ahlman, Braly, and Schroedl 2014:8-9). Once the investigation was completed, 816 artifacts were recovered, and 113 of these artifacts are identified as flaked stone including cores and tested cores, core fragments, and debitage. Most of the artifacts found were Afro-Caribbean ceramic ware, while a small percentage of artifacts were European. There was no recovery of pre-Columbian artifacts at the site (Ahlman, Braly, and Schroedl 2014:8-9). The flakes and gunflint at Site 6 show minimum signs of usage. Figure 5, below, is a photograph of the flakes and gunflint from Site 6. The photo shows

wear on one of the two flakes is concave, suggesting its use as a fire flint. The wear on one corner of the gunflint is concave on two sides with almost a denticulated or spokeshave appearance. The other corner is rounded from use. Ballin and Wall (2005) indicate that repeated use of fire flints also can lead to denticulated, and rounded edges as seen on this gunflint (Ahlman, Braly, and Schroedl 2014:13).



Figure 5 Evidence of Repeated Use: Denticulated and Rounded Wear Patterns on three Fire Flint Gunflints (used with permission of the publisher).

The artifacts recovered from Site 1 and Site 6 were separated by their function in Table 7. Table 7 summarizes lithic artifacts from the two sites according to stages of lithic reduction, for comparison of the two sites, with Site 1 yielding 30 lithic artifacts, including four core fragments, three gunflints, two pebble cores, two tested pebbles, and a knife/ scraper, and Site 6 yielding 113 lithics consisting of 68 flakes, 33 core fragments, nine pebble cores, two tested pebbles, and a gunflint (Ahlman, Braly, and Schroel 2014:11).

Table 7 Lithic Artifact Distribution Across Sites 1 and 6: Analyzing Core Fragments, Flakes, and Tool Variability

	Site 1		Site 6	
	n	percent	n	percent
Core fragment	4	13.3	33	29.2
Flake	18	60.0	68	60.2
Gunflint	3	10.0	1	0.9
Knife/scrapper	1	3.3	0	0.0
Pebble core	2	6.7	9	8.0
Tested pebble	2	6.7	2	1.8
Total	30	100.0	113	100.0

Site 1 and Site 6 Discussion

The stone tools present at Site 1 and Site 6 do not resemble lithics prior to colonization on the island. The various manufacturing techniques used on these stone tools and the type of lithic material being used is much different than the lithics from the precolonial period on St. Kitts. This conclusion comes analysis of the pebbles recovered during excavation. The analyses of the pebbles show that these materials were tested and discarded rather than used for making stone tools, according to Ahlman and his colleagues (Ahlman, Braly, and Schroedl 2014:18-19).

A small amount of lithics at Site 1 and Site 6 have their edges damaged. This may be the result of the stone tool's purpose. For example, these stone tools "were either prepared for use, they were the byproducts of manufacturing larger tools, they were used on very soft materials, they had very short use lives, or they represent some combination of these variables" (Ahlman, Braly, and Schroedl 2014:19). Both the parent material of these lithics and the flakes are not big enough for sharpening. Also, it is hard to determine how the stone tools were being applied on other surfaces. It

could have been for “cutting or plan[n]ing soft woods, or cutting leaves, fronds, or reeds are possibilities and it is likely that some served as fire flints” (Ahlman, Braly, and Schroel 2014:19)

Stone tools are usually thrown away after they have been used repeatedly or show signs of heavy wear. But the ratio of expedient tools found are high, rather than finding formal tools. Ahlman and his colleagues believe this is evidence of short-term usage of the expedient lithic implements by enslaved people on St. Kitts. In addition, the informal tools could be the result of flintknappers utilizing the remaining debris from previous formal and informal tools (Ahlman, Braly, and Schroel 2014:19).

The lithics recovered from Site 1 and Site 6 suggest that knappers were not familiar with making tools. It is suggested that either some enslaved Africans had knowledge of making stone tools or they acquired the technique from European colonizers. This technique overall would have been freehand reduction instead of bipolar reduction.

Bipolar reduction, in its basic definition, involves the use of a hammer and anvil for flake production and flake modification. This technique is relatively simple to learn and to transmit, and it allows toolmakers to stabilize smaller cores during flake production (Pargeter 2018:5893). Whereas freehand reduction Freehand reduction refers to the technique of shaping and modifying stone or other materials without the use of a supporting tool or fixture.

Further evidence of freehand technique comes from their craftsmanship on the island. For example, “enslaved Africans skilled stone masons who shaped thousands of stone blocks used in the construction of windmills, boiling houses, warehouses, and great houses seen all over St. Kitts, and they too used freehand reduction techniques” (Ahlman, Braly, and Schroel 2014:19.20). Furthermore, St Kitts has a small supply of stones needed for lithics. This scarcity on the island would result in enslaved

Africans inability to adequality test and make stone tools regularly (Ahlman, Braly, and Schroel 2014:19.20).

According to Ahlman, the inadequate craftsmanship of stone tools and the small quantity of lithics found on St Kitts, indicates that lithic material was intended to be gunflints. These inconsistencies resulted in enslaved Africans producing flint. Indeed, the lithics found at Site 1 and Site 6 would create the fire flint. Furthermore, the production of fire flints maybe correlated by the number of flakes found at the sites (Ahlman, Braly, and Schroel 2014:20).

Ahlman suggest fire flints were made as a currency amongst slaves. Ahlman's belief is based on previous research conducted on other islands in the Caribbean. These fire flints on these other islands were created for exchange for money. Because of this research, the amount of lithics found at site 1 and 6, including the unusual shape and wear, makes him believe these items were created as trade goods amongst the slaves and markets on the island (Ahlman, Braly, and Schroel 2014:20).

Drax Hall

In the late 1700s to early 1900's, an area in Jamaica known as The Old Village was occupied by enslaved Africans. Selected areas within "The Old Village" were called "Negroe House Grounds", because of the slave quarters associated with them. The number of enslaved people at this site were between 100 to 350, according to Armstrong (Armstrong 1990:63-64). The African population ages and gender were diverse. There were men, woman, and children who occupied the grounds. Their ages

range from newborn to 90 years old. Indeed, women were giving birth at the site (Armstrong 1990:40-44).

Excavation units were placed within this area. The map below (Figure 6) indicates where these excavations were undertaken. Each number or abbreviation on the map represents features at slave structures (Armstrong 1990:65). Various stone artifacts were recovered from these excavations, including grinding stones and flaked stone.

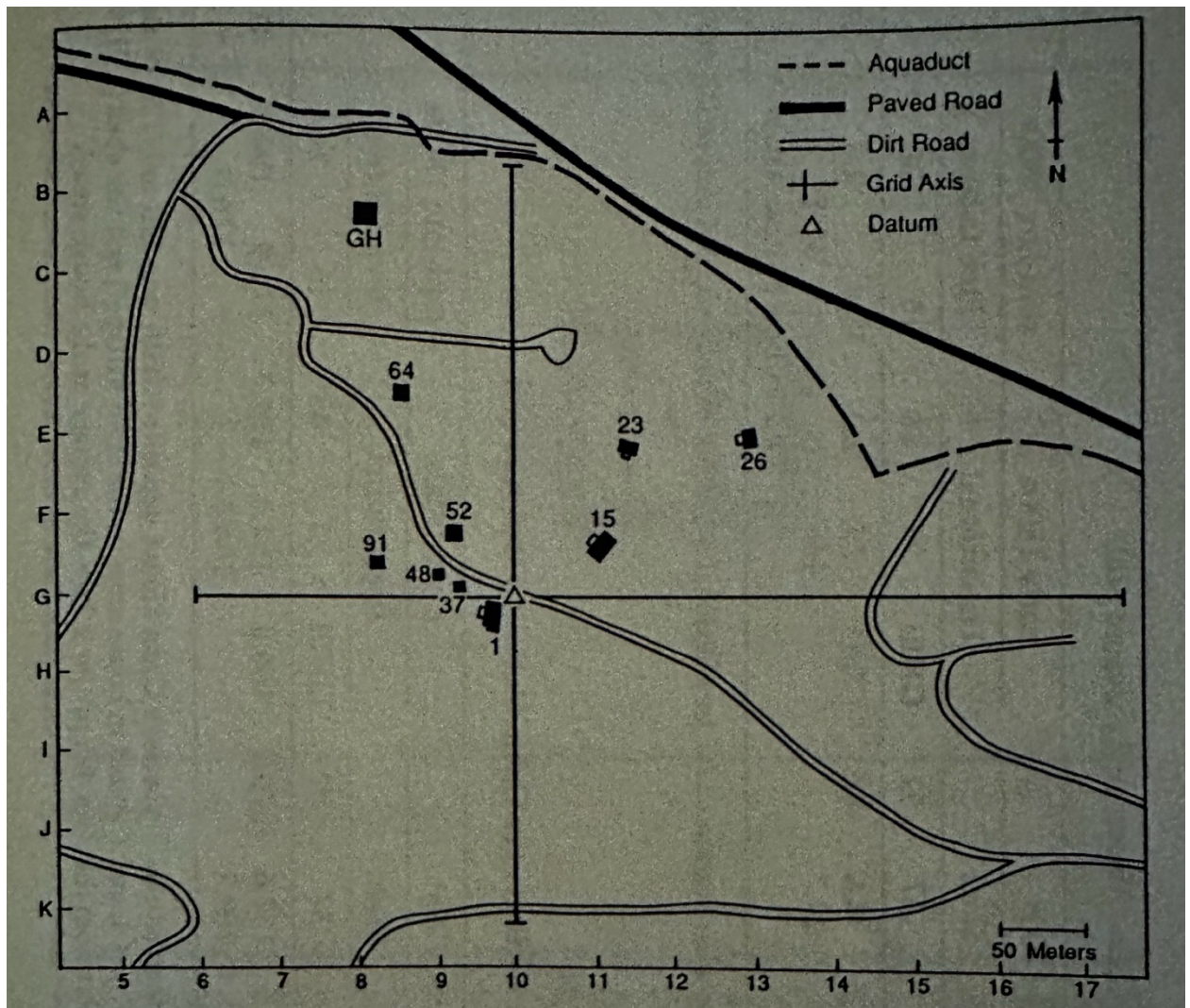


Figure 6 Map providing a description and location of an area where an archaeological excavation was conducted (used by permission of the publisher)

Grinding Stones

Grinding stones were recovered at Feature 1 and Feature 15. Figure 7 shows an open excavation located in the kitchen area, with three grinding stones in it. This kitchen area was behind the house. In addition to the recovery of grinding stones, limestone was found. The limestone “may have may have served as tripod hearths to support round-bottomed cooking pots, as in West African tradition” Other kitchen ware was found such as ceramics and iron pot fragments. These artifacts show evidence of the back yard being used “for subsistence-related activities” (Armstrong 1990:103-105, 121, 168).

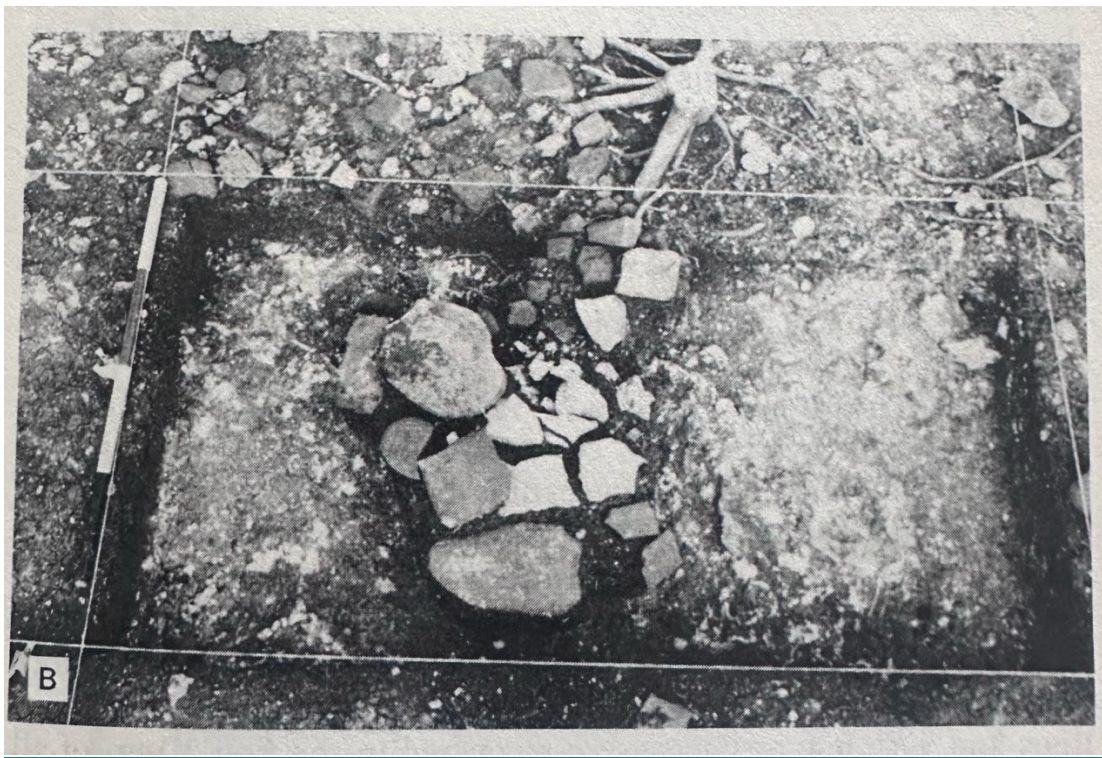


Figure 7 Stone Hearth Feature: An Arrangement for Cooking within the Excavation Unit (used by permission of the publisher)

Lithic Artifacts from Excavations at Drax Hall

Various lithics composed of European flint were recovered from all locations at Drax Hall. The total number of lithics found were 138. One hundred of these lithics including unmodified flakes and multiflaked cores show natural breakage by large domestic animals and from people traversing across the land. However, the remaining 38 flakes did show intentional breakage and were used habitually. These flakes were compared to indigenous stone tools of the area. It was discovered through the comparison that these stone tools did not share similar attributes with each other. Figure 7 provides an image of these flint flakes (Armstrong 1990:193).

The 38 stone tools that had intentional breakage and repeated usage, still had their original surface, or cortex. The width of these flints ranged from 1.0-3.5 cm and the length was between 2.8 and 5.0 cm. Furthermore, the apparent abrasions on the surface of these flints are indicators of them being manipulated. The unusual form of these stone tools maybe evident that “these were simply knocked off nodule cores and used as strike-a-light fire starters.” Furthermore, it is suggested that the visible wear and striking techniques utilized on these flints, resembles a practice of starting fire by striking with a firesteel.

Moreover, flint is not a stone found locally in West Africa, but “strike-a-lights and gunflints” are common throughout the area. These stone tools were brought into the country by Europeans. Gunflints were used until they were exhausted of their actual function. Once the depletion of the gunflint occurred, the remaining stone i.e., the flint was kept. The flint was used as a fire starter. The evidence of this process is from the visible signs of strike marks found on both sides of the flints. In addition, the

striking patterns on the flints are not specific, instead they show evidence of an unplanned striking method. It has been suggested that these flints could point to a market intended for selling stone tools, specifically European gunflint (Armstrong 1990:195 to 196).

Armstrong's discovery of lithics associated with sites of enslavement at Drax Hall was important in recognizing this aspect of the material lives of enslaved Africans in New World contexts. Armstrong's analysis of material culture presented in his 1990 book *The Old Village and the Great House* utilizes an analytical scheme adopted from Patrick Garrow and Stanley South's artifact pattern analysis (Armstrong 1990:251), a processual analytical approach in historical archaeology that permitted comparison of assemblages between sites, and worked against a particularistic study of individual sites that was not uncommon in early historical archaeology. This approach to representing and analyzing the diversity of artifacts recovered from Drax Hall entailed only a limited presentation of lithic artifacts, classified as "other" under the "activities" functional category. Armstrong's book does not present a more detailed analysis as would permit comparison of the lithic artifacts from Drax Hall with other sites, such as analysis of lithic reduction and proportions of cores, flakes, and formal tools. Comparison of the lithic artifact assemblage from sites of slavery at Drax Hall with other sites as discussed in this thesis may require physical access to the artifacts for reanalysis.

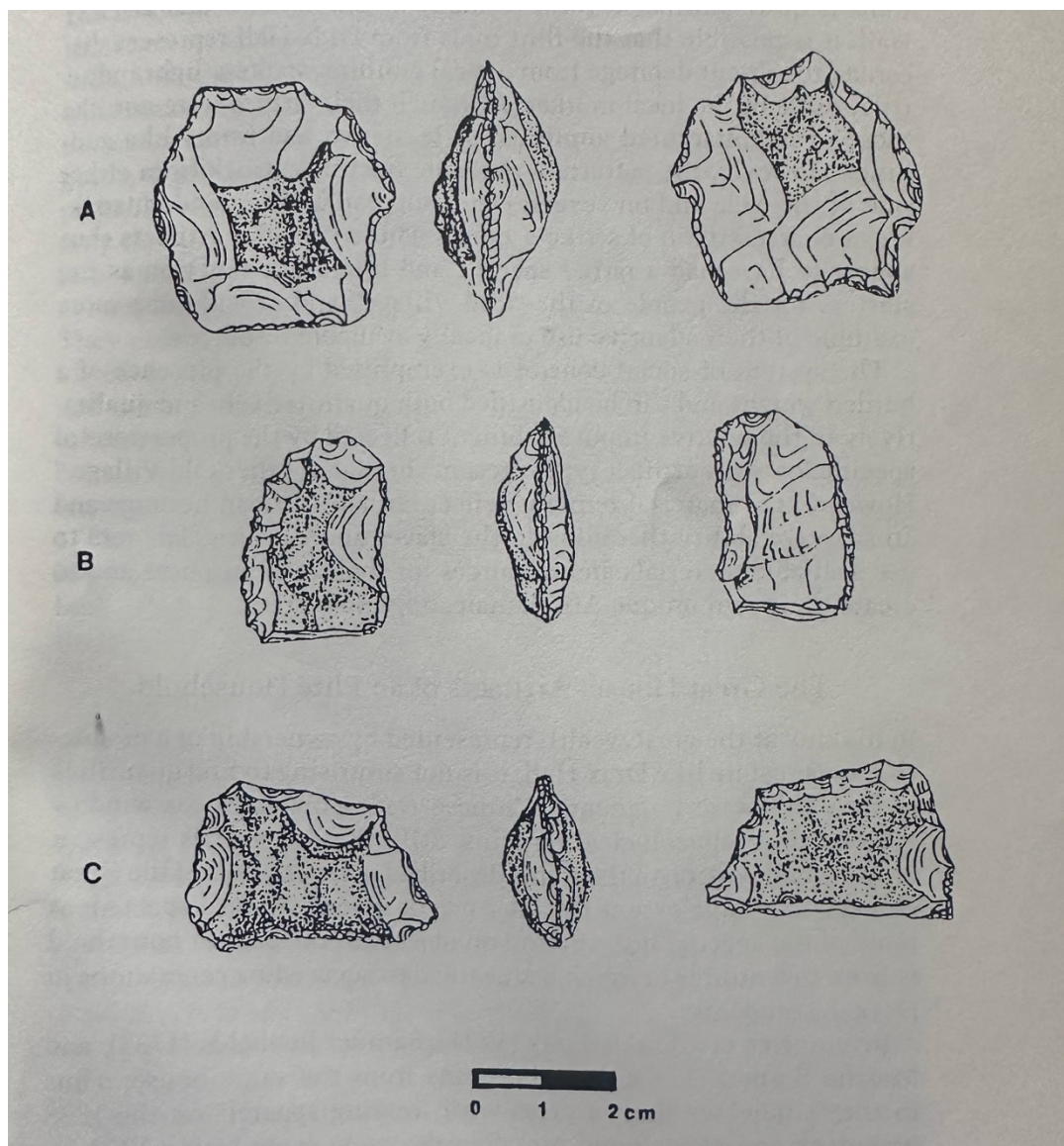


Figure 8 Three Fire Flints Exhibiting Use-Wear Patterns Indicative of Traditional Fire-Starting Practices (used by permission of the publisher)

Discussion

The discussion that follows provides a point-by-point comparison of lithic artifacts and other data from Kranka Dada, St. Kitts, and Drax Hall, in the areas of formal

tools and raw materials present, manufacturing techniques, and aspects of use and distribution of lithic artifacts.

1. Diverse Tool Types and Raw Materials: The tables showcase a diverse array of stone tools, ranging from cores to finished tools like drills and bifaces. What's striking is the variety of raw materials utilized, including quartz, chert, and even unknown stones. This diversity speaks to the ingenuity and resourcefulness of the people in Kranka Dada, who had mastered the art of working with different types of stone to create functional tools for various purposes.

2. Insights into Tool Production Techniques: Detailed attributes of cores, debitage, and finished tools provide valuable insights into the production techniques employed by the inhabitants of Kranka Dada. For instance, the weights, dimensions, and completeness of cores offer clues about the level of skill and precision involved in shaping them. Similarly, metrics like the weight and maximum dimensions of debitage highlight the meticulous craftsmanship required during tool production.

3. Understanding Tool Use and Distribution: By examining the provenience of the tools within the site—whether found in specific structures, fills, or fragments—archaeologists can gain a better understanding of how these tools were used and distributed within the community. This information helps piece together the daily lives and activities of the people in Kranka Dada, offering insights into their social organization, economic activities, and technological practices.

Tables 8-11, below, present a presence or absence comparison of lithic artifacts from the three sites compared here.

Table 8 Distribution of Rock Types Across Selected Locations in the Caribbean and West Africa

	Stone Type				
Locations	Chert	Quartzite	Granite	Unknown	Quartz
St Kitts	Yes	No	No	No	No
Jamaica	Yes	No	No	No	No
Kranka (Ghana)	Yes	Yes	Yes	Yes	Yes

Table 9 Tool Utilization in Archaeological Practices Across Selected Locations

Locations	Expedient Tools	Formal Tools
St Kitts	Yes	No
Jamaica	No	Yes
Kranka (Ghana)	Yes	Yes

Table 10 Comparative Analysis of Lithic Artifact Assemblages from St. Kitts, Jamaica, and Kranka (Ghana): Presence of Biface, Utilized Flake, Retouched Flake, and Projectile Points

	Tool Type			
Location	Biface	Utilized flake	Retouched Flake	Projectile
St Kitts	No	Yes	Yes	No
Jamaica	Yes	No	Yes	No
Kranka (Ghana)	Yes	Yes	Yes	Yes

Table 11 Variability in Lithic Reduction Strategies Across St. Kitts, Jamaica, and Kranka (Ghana): A Comparative Study of Biface, Multidirectional, Unidirectional, and Tested Cobble Artifact

	Core Type			
Location	Biface	Multidirectional	Unidirectional	Tested Cobble
St Kitts	No	No	No	No
Jamaica	Yes	No	No	No
Kranka (Ghana)	Yes	Yes	Yes	Yes

In St Kitts, Jamaica, and Ghana, different types of stones are found, as detailed in Table 8. Chert, present in all three locations, is a common type of stone used for tool-making. Additionally, Ghana uniquely has quartzite and granite, while quartz is exclusively found there and not in St Kitts or Jamaica.

Table 9 distinguishes between expedient and formal tools. Expedient tools, quick and simple for immediate use, are found in St Kitts, indicating a need for practical solutions. However, formal tools, crafted specifically for tasks, are present in Jamaica, suggesting a more deliberate approach to tool-making. Ghana stands out with both expedient and formal tools, reflecting a diverse tool-making culture.

Table 10 outlines the types of tools found in each location. St Kitts exhibits utilized and retouched flakes but lacks bifaces and projectiles. Jamaica has bifaces and retouched flakes but lacks utilized flakes and projectiles. In contrast, Ghana displays all types of tools: bifaces, utilized flakes, retouched flakes, and projectiles, showcasing a comprehensive tool-making tradition.

Core types, as shown in Table 11, vary across these locations. St Kitts and Jamaica do not have specific core types like bifaces, multidirectional, unidirectional, or tested cobble, whereas Ghana possesses all these core types, indicating a more varied approach to tool production.

Additionally, the context suggests that the people who crafted stone tools in Jamaica and St Kitts were likely enslaved Africans from Ghana. This insight highlights a cultural connection and the potential transfer of knowledge and skills across locations.

Conclusion

In conclusion, the study of oral history/tradition and archaeological findings provides valuable insights into the significance and applications of stone tools in different cultures. The examples discussed, such as the ancient Dangme people in Ghana, the enslaved Africans in St. Kitts and Jamaica, and the community of Kranka in Ghana, demonstrate the diverse uses of stone tools. These tools were employed for activities ranging from grinding plants and vegetables, sharpening farming implements, and conducting medical procedures to serving as fire flints and even being used as currency. The craftsmanship and utilization of lithics varied among these communities, reflecting their specific needs and cultural practices. By exploring oral history and analyzing archaeological evidence, we gain a deeper understanding of how stone tools played a vital role in daily activities, subsistence, and the cultural heritage of different societies, contributing to the preservation and appreciation of our shared human history.

Chapter 6: Continuity and Adaptation: Examining the Use of Lithic Tools by Enslaved Africans in the Americas

Introduction

There are records of Africans continuing some of their traditions on slave plantations. However, there is little mention of enslaved Africans utilizing or manufacturing lithic tools. This analysis chapter will review and synthesize material presented earlier in the thesis with the archeological data in the preceding results chapter, to address the following questions: Did enslaved Africans create and utilize flaked stone tools in the Americas? Also, did they use existing knowledge from a time when they were considered as free people in their home lands in West Africa? I will build this argument by establishing that there is compelling archaeological evidence, which expresses other West African traditions and practices that were maintained on the plantations. If this can be achieved, it is highly likely to support the idea that enslaved Africans were continuing an existing, diasporic stone tool tradition during their enslavement at Jamaica and St Kitts, which they have learned from experience with flintknapping techniques and use of lithic instruments from their home countries.

The effects of cultural traditions

Sheila Walker's *African Roots/American Cultures* (2001) provides information about West African traditions actively being practiced amongst enslaved Africans in the New World. In one of these practices, Walker had noted that the owner of these plantations was reluctant to have enslaved Africans embed their African identity on the baskets they were creating, yet they allowed it due to work output improving (Walker

2001:188). Plantation owners throughout the New World are different from one another and their approaches in management of enslaved workers will be different too. Slave owners in the New World could not prevent their workers from infusing their home countries' identities through their work. Could this scenario be applied to plantations at Drax Hall and St Kitts? Could the abundance of stone tools found at these plantations be expressions and continuations of African practices? Is there information to at least suggest this could be possible at these plantations.

According to Armstrong (1990) the overseers of Drax Hall Sugar plantation had restricted the living arrangements of the enslaved workers by preventing them from interacting with other non-white indigenous groups, and thus assuring they were relying on them for sustenance, yet they appear to allow or just accept them setting up and managing their own community from within the confines of their own settlement. It is noted that as a result of this arrangement, the enslaved Africans resumed practicing their cultural traditions. However, these cultural traditions were undergoing new changes over time. These changes on the plantation appear to have affected the plantation owners (Armstrong 1990:34.35). It is unknown the extent of influence the cultural practices had on the people who oversaw the plantation, but the number of enslaved Africans that were being transported to Jamaica increased exponentially from the time that the first enslaved Africans arrived until the abolition of slavery on the island, which spans a period from 1690 to 1834 (Armstrong 1990:34). How then did the practiced traditions on the plantations affect slave owners? I think these traditions that persisted among enslaved Africans on the plantations were indeed making the crops profitable for the slave owners, because "by the end of the

seventeenth century both slave trade and the production of sugar expanding dramatically, and much wealth was accumulated by a few planters with large slave holdings.” This is typically read as an expression of the brutality of slavery in the Caribbean in extracting labor from the enslaved, but a productive explanation can suggest multiple causes without assuming total control of enslaved people. In addition, slave ships were increasing the amount of people they were transporting to Jamaica. The number of enslaved Africans these slave ships were bringing to Jamaica at the beginning of 1700 was at least two thousand, but as decades pass, this amount had increased five times the original amount (Armstrong 1990:35). Therefore, it can be postulated that the choices by the slave owners or the acceptance or toleration of slaves continuing their traditions in their community, whether consciously or unconsciously, had indeed improved the work flow at the sugar plantation and thus increase the profits from these crops.

St Kitts

Todd Ahlman’s research at St. Kitts suggests a contrasting scenario that is harder to read as tolerance of African traditions and identities, as at Drax Hall on Jamaica. According to Ahlman, Braly, and Schroedl (2002:38), the cultural traditions that were being practiced on St. Kitts were conducted by enslaved Africans as a consequence of the power and prolonged cruel and unjust treatment carried out by Europeans. The slave masters of St. Kitts “attempted to remove or suppress any forms or expressions of individuality or personal identity among their African slaves” (Ahlman, Braly, and Schroedl 2002:39). Africans on St Kitts were basically rejected the fact that they had no control over themselves. Because enslaved Africans resented the wrongful doings

of the people who call them slaves, they had turned to a nonviolent method to threaten the foundation that was so eager to keep them in bondage. This nonviolent method was conducted and expressed through symbolism and handcrafts traditions, which appear to stem from practices in West Africa.

The following section contrasts the contexts and practices at these two sites of slavery, to assess the potential for continuation of a lithic tradition originating in African based on other material cultures and practices held by enslaved people on both islands.

Cultural Traditions

Jamaica

A variety of traditions deriving from West Africa, including cooking, eating, building, and harvesting, may have impacted the choices of the slave owners and management at Drax Hall. Armstrong mentions that each one of these activities showed signs of having West African influence. For example, the ceramics found at the plantation were linked to West Africa due to their different attributes such as being made at low temperatures. They were called “yabbas”, and they had different usages from European ceramics. In addition, when the ceramics were compared with ceramics from the Old King’s House in Jamaica, the results helped strengthen the interpretation that the tradition to make them is linked to Africa (Armstrong 1990:146-147, 150). Douglas doesn’t actually say the slaves at the plantation were using existing knowledge from their original home to make the ceramics, but it would make sense that whoever is making these ceramics must have either witnessed or participated (or both) in the same pottery traditions that are found at the plantation in

the regions of West Africa. Here is a list of the other artifacts that shows evidence of African continuity: the use of glass beads to decorate the body; the use of flint to start fires; placing the cooking area in the back of the house; the tripod hearth in correlation with the diet of Africans; and the harvesting of vegetables that are only found in Africa (Armstrong 1990:272, 274-275). Like the ceramic practices on the plantation, Douglas doesn't specifically say that enslaved people are responsible for them, but these traditions have a striking similarity to traditions in Africa. Therefore, it can be postulated that enslaved Africans at Drax Hall are continuing traditions they have either witnessed or participated in (or both) from Africa.

St Kitts

The archaeological evidence found on St Kitts that supports cultural traditions conducted by the enslaved Africans are in the form of the ceramics. It is difficult to assign the practices conducted by enslaved Africans to a particular West African tradition, because they could represent a number of practices in West Africa (Ahlman 2002:41). For example, the lines that make up the x marks on the ceramics could represent boundaries. These boundaries are distinctive, because one line may be representing the boundary between the living world and that of the dead, while the other line could represent the path of power from below to above (Ahlman 2002:41) it is also possible that the markings on the ceramics could represent ownership to a specific individual or represent different micro groups within the African cultural groups, or ownership (Ahlman 2002:42).

Although, enslaved Africans may be expressing different West African traditions to ceramics found on St Kitts, the ceramics alone are not African in origin. The enslaved

Africans are modifying ceramics made by Europeans by marking them with X's and thus subsuming them into West African tradition (Ahlman 2002:40-41). These ceramics varied from bowls, flatware, mugs, saucers, plates, and soup plates (Ahlman 2002:45). It is interesting to note from the archaeological data that Africans were not restricted by the typical West African standards, which they were required to follow, if they were still in West Africa. Therefore, some of the ceramics modified by enslaved Africans has different meanings associated to them (Ahlman 2002:46-47).

Where did the Africans originate from?

The Africans that were transported to plantations on St Kitts and Jamaica did not come from the same regions in Africa, rather they were taken from different areas such as Western Africa, Central Africa, and Southern Africa (Higman 1995:443-444; Armstrong 2014:35). This data is important as I have reported on stone tool traditions that were and still being practiced in West Africa (Ghana and Nigeria) and Central Africa (Angola). Because enslaved Africans came from these areas in Africa, it is plausible that these individuals may have had the knowledge to continue stone tool traditions on St Kitts and Jamaica. This information contradicts what others have previously put forth as plausible reasons of utilized stones being present on slave plantation. For example, Katherine Hayes suggest enslaved Africans were provided the knowledge to make stone tools by the local Native Americans (Hayes 2011:201). This explanation may be applicable to St Kitts and Jamaica, but the numbers of the native groups (Arawak and Kalinago) dwindled exponentially to the point of extinction due to deadly diseases, which were introduced by Europeans settlers. The remaining individuals of these tribes married the Europeans that have settled on these

islands. By this time, slave ships have already been transporting thousands of enslaved Africans to St Kitts and Jamaica. Therefore, the remaining population of these tribes had little to no contact with enslaved Africans. Also, there is no references of the original inhabitants of St Kitts and Jamaica ever interacting with each other, so the probability of enslaved Africans being taught to make stone tools by Arawaks or Kalinago is very small. However, as I have already mentioned, enslaved Africans did find European ceramics in their immediate area and repurposed it to fit their cultural identity, so it could be possible that enslaved Africans have found lithics they found similar to stone tools they have encountered in their home country and use them for the same purpose they were intended for or change their intended usage.

Like the theory Katherine Hayes has put fourth, Todd Ahlman believes another party were teaching enslaved Africans to make stone tools. However, Ahlman thinks enslaved Africans may have already possessed the skills to make tools as well.

Although Ahlman is divided about how enslaved Africans made the stone tools, he does make it apparent that they are unskilled at producing stone tools, because the craftsmanship of the stones appear to come from a freehand percussion technique (Ahlman, Braly, and Schroel 2014:19.20). Ahlman's analysis of these stones is somewhat contradictory, because he does not attribute the lifeways of the slaves to the making of the lithics. For example, Ahlman mentions that it is possible that the slaves were making lithics as a trade good. These lithics were apparently a part of a secret trade network for slaves to counter the loss of their provisions (Ahlman, Braly, and Schroel 2014:6). If Ahlman was to take this in consideration with the skill level in making stone tools, then he would notice that it would be tricky for the enslaved

Africans to make tools in public, due to strict oversight by management on the plantation. Therefore, the noticeable skill level on the stone tools could have been the result of slaves creating stone tools secretly or covertly. Because the stone tools are being created covertly, it could be possible that the slaves are making these tools with minimal steps in lithic reduction, and without necessary time to invest in individual lithic objects. If this is true, then it would make sense that slaves are making lithics expediently as Ahlman has expressed in his research. Indeed, if slaves are facing time constraints, while producing stone tools secretly, then it is plausible that slaves were eliminating steps and rushing to make some stone tools, rather than taking their time to make these stone tools. This explanation for the poor-quality stone tools will likely be the reason for Ahlman to suggest that the knappers who made them are not experienced. Also, this would suggest that enslaved Africans did possess the knowledge to create good quality stone tools, and instead adapted for the sake of expediency and to minimize friction and receiving discipline from the master's representatives. But how could enslaved Africans make poor quality stone tools, while being skilled at making stone tools. Archaeologist Douglas Bamforth and his associate Nyree Finlay have suggested that stone tool creators must have great knowledge and experience of their practice, which Ahlman uses to support his inference regarding the level of competence in making tools (Ahlman 2014:19)(Bamforth and Finlay:2008.3). But if the people who are creating tools could in fact be skilled at their tasks, while under the same pressures as I have put forth, then it will be likely that enslaved Africans would create low quality level products

for the sake of expediency and to minimize conflict, while still obtaining functional articles.

In Jamaica, there is no mention of slaves creating poor quality lithics. Although there is no mention of lithics being made poorly, this does not mean there is no evidence to point towards it. This just means it either hasn't been noticed by the person analyzing them, or the person recording the artifacts failed to render and include a judgement of lithic tool quality with the archeological data. The other possibility is that the stone tools on Jamaica do not show signs of poor craftsmanship.

If the enslaved Africans were not taught to make stone tools by the local inhabitants of St Kitts and Jamaica or by the Europeans, then where could this existing knowledge to create stone tools have come from? It may have been knowledge and skill acquired prior to becoming enslaved. This will also support Todd Ahlman's and Douglas Armstrong claim that the lithic artifacts do resemble traditions from Africa. The evidence to support this is available from Sheila Walker's documentation on slavery in the Americas. Walker had documented traditions in the form of songs, dance, basketry, boatbuilding, making musical instruments, pottery, woodcarving, quilting, which she argues are derived from Africa (Walker 2001:164.165.183-204). Walker argues that these crafts did not stop with enslavement. If enslaved Africans are continuing a wide range of traditions from Africa in the Americas as presented by Walker, then I argue that the stone tools found on plantations on St Kitts and Jamaica are another form of African tradition being practiced by enslaved Africans, and hence be added to the existing traditions that Walker have documented.

St Kitts and Jamaica contain enslaved Africans who derived from Angola. The age ranges for these men, woman and children span all age categories. Also, the enslaved African men and woman on these islands were creating families. Therefore, it is possible that the lithic artifacts on these islands could be related to stone tool ceremonies from the Ovambo tribes in Angola. The stone tool ceremonies in those tribes were used to mark the transition of teenager to adulthood and hunter (Vedder 1966: 70.84.85).

Indeed, families are being made on the plantations on St. Kitts and Jamaica, and throughout contexts of New World slavery, and sons conceived. In addition, some of the enslaved Africans are from Angola. We can postulate that when they reach a certain age, they could be invited to a ceremony like in Angola, where they will become a man, hunter, or both. The same process will apply for the children who have been transported to those islands and grew to adulthood among enslaved African communities, provided that the adults of the community continued the tradition, and it is important to note the intergenerational communities of enslaved Africans on both contexts, with families and elderly people. In addition, these ceremonies were being conducted during certain times of the year as indicated by Heinrich Vedder (Vedder 1966:84). This would suggest that some of the stones on St Kitts and Jamaica are not being made regularly throughout the years, rather they are being made and used during a specific time of the year. Also, the children's clothes were being burned as a result of the completion of their circumcision and hence if burned clothing was ever to be documented on these islands, then it could point to these ceremonies. In addition, the stone knives used in the African context appear to be an expedient tool,

being made for use in male circumcision and then discarded rather than retained as an important object for use across ceremonies (Vedder 1966:94). However, there is no mention of the size of the stone knife on Angola, but it has to be big enough for the user to have a grip on it and sharp enough to make incisions. The stone tools in the Caribbean are no more than 2 inches in length and 1 ½ inch in width, yet they are capable of being gripped by two fingers, so they be used as a cutting instrument. (Ahlman, Braly, and Schroel 2014:15; Armstrong 1990:194-195).

Chert is the main material source being used to make the stone tools on the Caribbean, noting that Armstrong describes material at Drax Hall being flint. Both materials are adequately glasslike and suitable for cutting flesh. The durability and the intended purpose of these stones, and the fact that some of the enslaved Africans are from Angola, could be considered evidence of slaves utilizing stone tools to make incision on children during ceremonies on St Kitts and Jamaica.

Like the stone tools on Angola, some of the stone tools in southern Ghana were used for cutting parts of the body as well. For example, these stone implements were used for permanent body and facial modification, opening areas of the body for inserting medicine, and were used to physically reach into a subject's body in order to investigate or treat pathological conditions such as disease or injury, to alter bodily functions, to improve appearance, or to remove/replace unwanted tissues or foreign bodies (Biveridge 2019:39). Unlike the lack of physical dimensions of the stone knife on Angola, the stone tools on Ghana are stated to being a little over 3 inches in length and 1 ½ inches in width. The stones recovered on St Kitts and Jamaica are no more than 2 inches in length and 1 ½ inch in width but are generally similar in size and

feasible suitability for surgical applications (Ahlman, Braly, and Schroel 2014:15; Armstrong 1990:194-195).

The differences in these stone tools are their length, but the width of these objects are alike. There is no mention of how the stone blades in Ghana were created, but their function and makeup does indicate the technique used to create it. These stones are sharp enough to function for different purposes.

There were other stone tools made by the people in Segra Hill, Kpone, Prampram and Shaim which had other functions. For example, people would use a combination of polishing and strikes to produce stone in the shape of a T. The purpose of the tool was to bait fish and or kill fish (Biveridge 2019:34.35). Like the knapping technique the people of Segra Hill, Kpone, Prampram and Shai had used to create tools for making cuts on people's bodies, they have used the same technique to make these stone tools for fishing. Because of these similarities, including the fact that some of the enslaved Africans on St Kitts and Jamaica are from different areas throughout Ghana, it is possible that the enslaved used stone tools for other areas in life, rather than solely making cuts on bodies, and we can infer that they were versatile flintknappers, allowing that no chipped and ground stone fishhooks were found in the lithic assemblages from St. Kitts and Jamaica discussed in this thesis.

Plus, the differences of the stone tools may just be evidence of enslaved Africans modifying their stone traditions from Ghana like Ahlman suggested for the ceramics on St Kitts (Ahlman 2002:46.47). The sizes of the stone tools in the Caribbean are not big enough for two hands or big enough to haft for throwing, so they may not have been used to kill fish, but their sizes and their durability make them perfect for cutting

fish and possibly baiting fish. In fact, fishing was one of many activities performed by slaves in the Caribbean to meet their dietary needs. These stones can be used on hard and soft materials and therefore making them perfect for prepping fish or catching fish. Armstrong notes that fishing spears were found in slave houses on Jamaica (Armstrong 1990:95), but they are not noted by Ahlman, Braly and Schroel (2014) on St. Kitts. There is no description of the fishing spears in Armstrong's 1990 book, it is easy to assume they are iron spears provided to enslaved people for provisioning themselves with fish, but due to their location, time of usage, and the people whom are using them, it is possible that these spears functioned and were made similar to the fishing spears in Ghana, with worked stone heads, but there is no archeological evidence for this in the assemblages discussed from St. Kitts and Jamaica.

The lithic assemblage from Drax Hall does include bifacially worked stone (Ahlman, Braly, and Schroel 2014:93), which we can postulated can be considered bifaces or biface cores. Bifaces are tools flaked on both sides, instead of more expedient unifacially-flaked tools, and removal of flakes from a lithic core in a bifacial pattern produces a biface core, which can be used effectively for chopping and cutting (Andrefsky 2005:22-23). Archeological investigations at Kranka also identified bifaces, which were made from chert as well (Comptom 2017:121). Bifaces are not uncommon and have broad representation in most lithic industries. While the data reported from Drax Hall does not indicate presence of bifaces, illustrations from the Armstrong's 1990 book appear to depict both biface cores and biface tools. The ability to make these type of cores and tools will take patience and time, and are less expedient than lithics as seen in the assemblage from St Kitts. In addition, the flints

from Drax Hall were retouched (Ahlman, Braly, and Schroel 2014:193), the result of modifying an existing stone tool by “retouching or chipping the flake to form a certain kind of edge, surface, or shape”(Andrefsky 2005:79), especially for resharpening a worn cutting tool.

Like Jamaica, the sites at St Kitts could have been the destination for the people brought out of Ghana. St Kitts has a mixture of informal and mostly formal tools. Formal tools from the site consists of one biface, which is classified as a knife. (Ahlman, Braly, and Schroel 2014:13). Comparison of the proportion of formal and expedient tools recovered from St. Kitts and the Kranka site is suggestive: the formal tool count from Site 1 at St Kitts has 1 biface, while Kranka contains 2 biface and 1 stone drill. Also, St. Kitts and Kranka share a similar proportion of informal tools to formal tools: Site 1 at St. Kitts contains 30 expedient tools and site 6 contains 113 expedient tools, while the amount of expedient tools recovered at Kranka is 320 (Ahlman, Braly, and Schroel 2014:11; Comptom 2017:118). Although the people from Kranka Dada and St. Kitts manufactured expedient tools more frequently formal tools, the example from Ghana is focused on free people, who are not chattel and are presumably more free to invest their labor in manufacture of more formal tools as appropriate to the task; there may be pressure in the context of enslavement to rely more heavily on expedient tools and to value and maintain or retouch formal tool to a greater degree.

The ground stones that the ancient group of Kpone, Prampram and Segra Hill in Ghana had produced, could be seen in archeological data on Jamaica. These ground stones and milling stones in Ghana is made from either from grinding stones or a

mixture of wood, mud, and stone. These stones do not have a definite shape, yet they appear to have rectangular in form, with dimensions reported earlier in this thesis (Biveridge 2019:32-33). Also, these ground stones were used for sharpening tools and grinding vegetables and plants (Biveridge 2019:36.37). Ground stones were recovered in Jamaica as well. Douglas Armstrong had suggested these ground stones are evidence of West African tradition (Armstrong 1990:121). Also, Armstrong does provide photographs to support his claim. There is no mention of physical grooves on these ground stones like in Ghana (Biveridge 2019:33). My examination of the photographs of *in situ* grinding stones from Kranka Dada in Ghana, and Drax Hall in Jamaica suggests the stones are similar in size. The image and the description of the stones provides little detail to determine if they are being used for grinding food as Armstrong suggested (Armstrong 2014:168). But giving their location i.e., in the back yards of the slave house, the image provided for them, and the fact that some of the slaves on the plantation were from different areas of Ghana, there is enough evidence to support Armstrong's theory that these ground stone traditions have originated from West Africa. However, there is an issue with my conclusion; the enslaved Africans on Jamaica are from different areas of Africa, so the stone tool tradition could have derived from Central Africa, Western Africa, or both.

Bridging Continents: The Enduring Legacy of West African Lithic Traditions in the Caribbean

This thesis has explored the continuation of African stone tool-making traditions among enslaved Africans in the Caribbean, specifically questioning the long-held assumption that stone tools found on plantation sites are exclusively of Native American or Indigenous people in the New World origin. The inspiration for this research stemmed from my work as an archaeological technician at Fort Knox, Kentucky, in 2020, where I observed the recovery of stone tools beneath the quarters of enslaved Africans. These tools were initially attributed to Indigenous people in the New Worlds, but something about this conclusion didn't feel right to me. I began to wonder: Could these tools have been made by enslaved Africans, reflecting their cultural traditions rather than Native American practices? This question set the stage for my research, which aimed to challenge assumptions about the origins of these artifacts and explore the deeper cultural implications of material culture in understanding the African diaspora.

Through this research, I have shown that many stone tools found in the Caribbean closely resemble those used in West and Central Africa, suggesting that enslaved Africans brought their stone tool-making traditions with them and adapted these practices in the New World. These tools were not just practical items for survival but also symbols of cultural resilience and adaptation, providing enslaved Africans a way to preserve their identities despite the erasure of their culture by the systems of

slavery. The persistence of these traditions challenges us to rethink the ways material culture, like stone tools, is interpreted in the archaeological record. These tools are not simply products of a particular time or place but reflections of the people who created them; of their agency, creativity, and endurance.

However, this research also highlights significant challenges. Data access proved to be one of the most prominent difficulties. With the geographical spread of this study spanning St. Kitts, Jamaica, Ghana, and Angola, much of my analysis relied on secondary sources, often introduced with bias or incomplete perspectives. The language barriers; many archival resources were in German or a Local African language, further complicated my ability to access the full range of primary materials. These limitations in data access presented an inherent challenge in making broad, definitive claims about the origins and cultural significance of the tools.

Methodological challenges were also evident, particularly in comparing stone tools from Africa and the Caribbean. The different archaeological methods used in each region meant that direct comparisons between African lithic traditions and those found in the Caribbean were difficult. The diversity of approaches across geographical regions, combined with the absence of direct excavation in many cases, further complicated the interpretation of these tools and their cultural context. In many instances, I had to rely on incomplete or poorly documented excavation records, which made drawing clear connections between the artifacts and the people who used them a complex task.

A major challenge that emerged in this study was the difficulty of dating stone tools. Stone tools cannot be easily dated using traditional methods like radiocarbon dating,

making it nearly impossible to determine their precise age or when they were created and used. This uncertainty complicates our understanding of the historical timeline in which these tools were made and used by enslaved Africans, which is key to understanding their cultural significance. Without a reliable timeline, interpreting these tools becomes even more difficult, as we cannot be certain when they were crafted or how they fit into broader historical contexts.

Interpretive challenges also arose, particularly in the difficulty of attributing these tools to specific cultural traditions. While many tools resemble African lithic practices, the possibility of Native American or European influences cannot be ruled out. The challenge, therefore, was in interpreting these tools without making overly broad assumptions or misattributing their cultural origins. The need to avoid knee-jerk reactions in associating artifacts with particular groups is a central issue in this study; material culture does not equal people. Pots and tools are not inherently tied to the identities of the people who used them, and archaeologists must be cautious in making direct associations without fully understanding the context. This point underscores a broader problem in archaeological studies: too often, material culture is associated with particular groups of people without sufficient evidence or critical analysis. This erasure of the full context; the failure to question assumptions about what material culture means; limits our ability to understand the true nature of cultural survival and adaptation.

By confronting these challenges and questioning these assumptions, this thesis emphasizes the importance of critical thinking and rigorous research in archaeology. We must question the easy interpretations that assume material culture can simply be

attributed to the people who made or used it. Instead, we must ask deeper questions about how these artifacts functioned in their cultural contexts, how they were adapted across time and space, and what they truly tell us about the lives of the people who used them.

The key takeaway from this research is the need for archaeologists to critically examine the origins of artifacts and resist the impulse to immediately associate them with Native Americans, Indigenous people in the New Worlds, or other established groups. Instead, we should look for connections to African traditions, particularly in contexts involving enslaved Africans, and consider the adaptations and continuities that may have occurred in the New World. As Dr. Paul Shackel suggests, sites occupied by freed or emancipated African Americans may also offer important clues about the ongoing adaptation and survival of African cultural practices, reflecting a continued connection to the past.

This thesis has demonstrated the significance of studying African stone tool traditions within the context of the Caribbean plantation system and the broader African diaspora. The research process has also illuminated the difficulties inherent in working with incomplete data, poor preservation, and the challenge of interpreting material culture without falling into easy assumptions. However, despite these challenges, the research opens the door to further studies that can re-examine lithics at sites of slavery, emancipation, and beyond, offering new ways to understand the cultural contributions of enslaved Africans.

In conclusion, this thesis challenges long-standing assumptions about the origins of stone tools and their cultural meanings. By showing that these tools likely represent a

continuity of African traditions in the Caribbean, this research offers a more inclusive and nuanced understanding of the African diaspora and its cultural resilience. The study of these tools is not just about survival—these artifacts are symbols of cultural identity, persistence, and pride. Acknowledging these contributions allows us to reframe the historical narrative, moving beyond simplistic interpretations and embracing a more complex, diverse understanding of history. By questioning assumptions and carefully interpreting material culture, we can better appreciate the resilience and ingenuity of enslaved Africans and their descendants, reshaping the historical narrative in a way that honors their contributions to the Americas.

Bibliography

Ahlman, Todd M. (2002). The maintenance of cultural and personal identities of enslaved Africans and British soldiers at the Brimstone Hill Fortress, St. Kitts, West Indies. *Historical Archaeology*, 38-47.

Ahlman, T. M., Braly, B. R., & Schroedl, G. F. (2014). Stone artifacts and glass tools from enslaved African contexts on St. Kitts' Southeast Peninsula. *Journal of African Diaspora Archaeology and Heritage*, 8-193

Andrefsky, Jr., W. (2005). *Lithics: Macroscopic Approaches to Analysis* (2nd ed., Cambridge Manuals in Archaeology). Cambridge: Cambridge University Press, 22-79.

Bamforth, Douglas B., & Finlay, Nyree. (2008). Introduction: Archaeological approaches to lithic production skill and craft learning. *Journal of Archaeological Method and Theory*, 3

Bleed, Peter. (2008). Skill matters. *Journal of Archaeological Method and Theory*, 156-157

Compton, A. M. (2014). Shifting trade networks: Sub-Saharan to Atlantic exchange in Central Ghana 1355–1725 CE. PhD Dissertation, University of Michigan, XIX-152.

Compton, A. M. (2017). *Excavations at Kranka Dada: An Examination of Daily Life, Trade, and Ritual in the Bono Manso Region*. University of Michigan, 29-222.

Ejiaga, R. (2015). African worldview. In M. Shujaa & K. Shujaa (Eds.), *The SAGE Encyclopedia of African Cultural Heritage in North America*. SAGE Publications. <https://doi.org/10.4135/9781483346373.n50>. 155

Frye, Gladys-Marie. (1987). Harriet Powers: Portrait of a Black quilter. *Sage: A Scholarly Journal on Black Women*, 11-16.

Hayes, Kathryn. (2011). Occulting the past: Conceptualizing forgetting in the history and archaeology of Sylvester Manor. *Historical Archaeology*, 201

Higman, B. W. (1995). *Slave Populations of the British Caribbean, 1807–1834*. University of the West Indies Press, 443-444.

Holloway, Joseph E. (1990). *Africanisms in American Culture*. Bloomington: Indiana University Press, 10.

Joseph, J. W. (2011). 'All of Cross'—African potters, marks, and meanings of folk pottery in Edgefield District, South Carolina. *Historical Archaeology*, 134-135.

Lee, N. K., & Scott, J. N. (2019). Introduction: New directions in African diaspora archaeology. *Transform Anthropology*, 86

M'Baye, Babacar. (2016). The significance of John S. Mbiti's works in the study of Pan-African literature. *African Studies Review* , 1

Orser, C. E. (1998). The archaeology of the African diaspora. *Annual Review of Anthropology* <http://www.jstor.org/stable/223363>. 66-67

Pargeter, J., de la Peña, P., & Eren, M. I. (2019). Assessing raw material's role in bipolar and freehand miniaturized flake shape, technological structure, and fragmentation rates. *Archaeological and Anthropological Sciences* <https://doi.org/10.1007/s12520-018-0647-1>. 5893

Russell, Aaron E. (1997). Material culture and African-American spirituality at the Hermitage. *Historical Archaeology*, 71

Shackel, P. A., & Little, B. J. (2014). *Historical Archaeology of the Chesapeake*. Percheron Press, 35-43.

Vedder, H. (1938). *South West Africa in Early Times*. London: Humphrey Milford, V-94.

Walker, Sheila S. (Ed.). (2001). *African Roots/American Cultures: Africa in the Creation of the Americas*. Lanham, MD: Rowman & Littlefield Publishers, 186-206.

Wilkie, Laura A. (1995). Magic and empowerment on the plantation: An archaeological consideration of African-American world view. *Historical Archaeology*, 143

Volume 5: *The New York African Burial Ground: Unearthing the African Presence in Colonial New York*. Howard University Press, 47-57