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INTRODUCTION

Rethinking Trade and Power in Archaeology

DUST AND DONKEYS' TAILS

Legendary salt, obsidian, and gold trade routes and extensive commodity exchanges structured relationships, created wealth, and drove political reorganization across the ancient world. We have extensive evidence suggesting that elite or state control of long-distance and regional trade routes has led to the development of hierarchical societies and centralized political institutions in Egypt and China. We know less about trade and exchange that was conducted outside the boundaries of the state; the role of flexible trade and exchange conducted by non-elites, the middle class, multiple agents, regional groups, and non-centralized or heterarchical political institutions in ancient trade routes; or their role in the development of internally differentiated polities. Decisions about local or regional trade or politics were not always limited to the state or charismatic leaders. Despite a history that lauds the power and grandeur of ancient kings, it is now clear that flatter, more varied, and more egalitarian or heterarchical power structures existed in many ancient cities and states globally, like those of Bronze Age Europe or Jenne-Jeno in West Africa (Atici 2014;

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Crumley 1995; Cumming 2016; Dueppen 2014; Frachetti et al. 2012; McIntosh 1999; Saitta and McGuire 1998; Wengrow and Graeber 2015).

Understanding ways of life along ancient trade routes helps us fathom these varied political power structures; still, we are hampered by an incomplete picture of the array of participants and the social and physical context of trade. Who were the participants or non-elite agents on trade routes? A better idea of the role of local players in ancient trade and wealth generation has become increasingly central to appreciating competition for resources and commodities in ancient states and to insights into ways hierarchical power and more diffuse egalitarian organization functioned in the ancient world (Brumfiel 1995; Frachetti et al. 2012; McIntosh 1999). Ethnoarchaeological studies of caravan trade can contribute to this pursuit, as they are one of the few areas where archaeologists have investigated specific mechanisms that led to the involvement of multiple agents in ancient trade (Biginagwa 2012; Franklin and Boak 2019; Hopkins 2008; Levi 1999; Nielsen 2001; Tripcevich 2007). I will return to this topic in chapter 2.

Africa has great potential to further our grasp of circumstances in which multiple power structures operated side by side: it has produced powerful Egyptian and Aksumite kings, one of the world's earliest states, egalitarian ancient pastoralists, and internally differentiated Swahili trading communities as well as Sahelian trading cities with diffuse power structures. To critically examine the development of early polities in sub-Saharan Africa, we need to know more about how each agent or element participated in wealth-generating trade systems. We need to understand both the social and geographic boundaries of trade. How did the location of resources determine the participation of and relationships among different traders? Was participation independent? Was it mutually cooperative? Discerning the social relationships among participants in ancient trade and how those relationships connect to power will help reveal the mechanisms that fueled these diverse political systems in Africa and elsewhere.

In *The Boundaries of Ancient Trade*, I challenge conceptions of highly centralized sociopolitical and economic organization and trade in the early Aksumite state in the Horn of Africa. I argue here that there was not just one form of Aksumite social structure—hierarchy—but concurrent structures that were flatter, more complex, and spatially and temporally varied. The Aksumite elite gained wealth and power through their domination of trade in the Red Sea, which connected Africa and Asia, between 450 BCE and 900 CE. This domination of trade helped transform the Aksumite Empire into one of the most powerful complex societies in sub-Saharan Africa (Fattovich 1990, 2010b; Finneran 2007; Munro-Hay 1991; D. Phillipson 2012; Phillipson, Phillips, and Tarekegn 2000). Recent research documents a flourishing rural and urban pre-Aksumite and Aksumite elite with agricultural and trade-based wealth (Harrower and D'Andrea 2014; Harrower, McCorriston, and D'Andrea 2010). However, little is known about the people

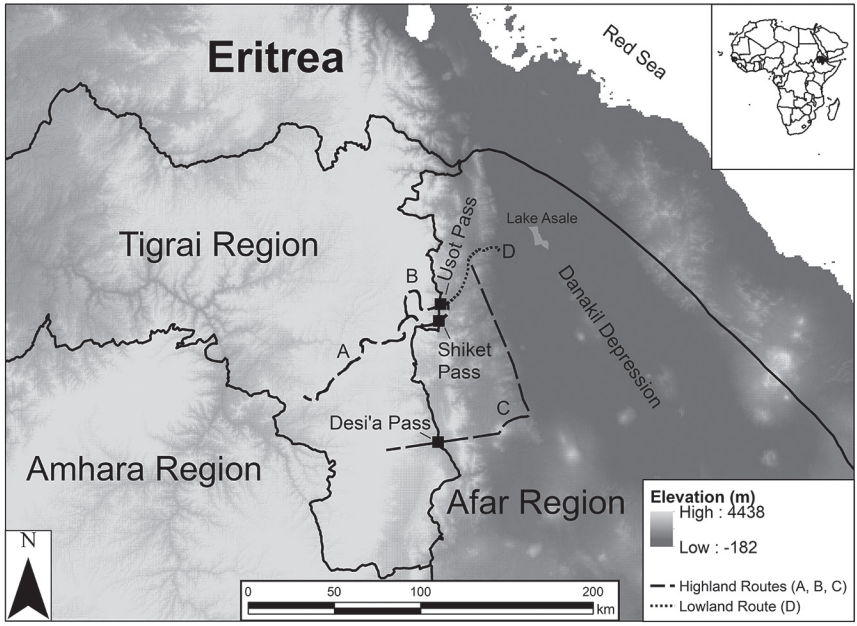

FIGURE 1.1. *The Afar salt trade route*

and power structures involved in Aksumite trade routes. In this book, I demonstrate how an essential comestible—salt—involved commoners as well as kings in Aksumite trade, drawing on integrated ethnographic and archaeological information from the Afar salt trail in northern Ethiopia (figure 1.1).

This legendary salt route is one of the last economically significant caravan-based trade routes in the world. Tigray farmers and Afar pastoralists run caravans of nearly a quarter of a million people and pack animals a year and walk the 132- to 220-km round-trip carrying all the salt for Ethiopia. The trail is extreme, moving from cool high-altitude farmlands of up to 3,000 m in the northern highlands to one of the hottest and most dramatic desert volcanic terrains on earth. Salt is mined from Lake Asale, which lies below sea level in the Afar Rift (figure 1.1)—a place where temperatures often reach 65°C (150°F) by mid-afternoon.

To investigate the organization of salt trade on the Afar salt route, I formed my own donkey and camel caravan train and walked over 130 km following salt trading groups between 2009 and 2012. Mine was the first ethnoarchaeological and archaeological research on the Afar salt route. I documented the route itself, its organization, and its participants. I also recorded three previously unreported Aksumite-period trading towns with churches and caravan campsites. Based on

my findings, I argue that the ancient Aksumite salt trade route provides evidence for state intervention and control of salt trading far from the centers of power. There is also evidence that a complex network of other traders and non-elites existed around this state-centered trade, leading to complex, cooperative power relationships along the trade route. I describe the organization of present-day trade along the route in detail, offering a culturally informed framework for interpreting the organization of the ancient salt route and its role in linking the Aksumite state, rural highland agricultural, and lowland mobile pastoralist populations. The environmental conditions—volcanic terrain, temperature, climate—have not changed over thousands of years, and neither have the methods of caravan travel and salt collection (though caravanners today are linked to global networks). These ethnoarchaeological data help create a *middle-range* conceptual framework that facilitates relational analogies (*sensu* Wylie 1985, 2002). These analogies compare relevant aspects of the present to similar facets of the past and help create hypotheses that we can test using the archaeological record.

I use analogies in this book as "comparative models, rather than as illustrative devices" (see Stahl 1993, 253; 2001). Archaeologists often use analogies to derive meaning from the archaeological record in the absence of written records; however, the approach is not without critics. One such criticism of analogy is the direct historical approach that assumes that people do not change over time (Cunningham and McGeough 2018; Fewster 2006; Lyons and David 2019; Stahl 1993, 2001). The aim of this study, however, was not to show similarities between the past and the present but instead to document history in the making. The book looks at how the organization of the salt trade functioned within the broader socioeconomic and political framework of northern Ethiopia during different periods: the Aksumite period, the medieval/historical period, and the modern day. To do that, I rely on the intersection of various sources: ethnoarchaeology, archaeology, historical texts, and oral history. I move back and forth in time to show not only a partial view of history making by the contemporary Afar pastoralists and Tigray agriculturalists but also "the fragmentary glimpses of culture-making practices in the past" (*sensu* Stahl 2001, 40). I make clear distinctions between the source side (ethnographic, chapters 4 and 5) and the subject side (archaeological, chapter 6) so as not to conflate temporalizations (Cunningham and McGeough 2018; Stahl 1993, 2001).

Carole L. Crumley (1995, 4) argued nearly three decades ago that hierarchical-heterarchical relationships could be flexible in both time and space—the salt trade and practice of caravan organization in Aksumite polities illuminates this in northern Ethiopian landscapes, where cooperative local relationships and the centralized state operated simultaneously. As such, it contributes to our comprehension of flexible political configurations worldwide. The salt trade is also a compelling setting in which to investigate the organization of ancient trade

because salt holds a unique position as a nutritionally essential food for people and animals as well as a valued and symbolic trade commodity worldwide (Brigand and Weller 2015; Flad 2011; Muller 1984; Parsons 2001). Despite this significance, daily activities related to salt procurement and distribution have not been as widely studied as trade itself (Good 1972). To address this gap, we must first recognize the factors that influence the scale of the salt trade in the remote and extreme Afar region: the availability of drovers, the participants at each node of the trade route, and the supply of pack animals. These factors form a system that empirically demonstrates direct and indirect trade and exchange, the matrix of participants, and the large-scale political control required to support this complex and far-reaching industry.

While the Afar trail is still economically significant in Ethiopia, study of the pack animal route is timely. The heat and terrain have long precluded construction, but roads are now being built for commercial exploitation of the Afar region. Although much about this caravan route at the time I conducted this study differed from the past—modern military enforcement of security, for example—other aspects such as the location of the major passes, physical challenges, and use of pack animals were similar to conditions in medieval and earlier periods. The logistics of local farming and distribution of water also influence seasonal participation in the salt trade by salt caravanners and the location of settlements in ways that help model ancient processes.

Although the Aksumites are well-known for their control of trade in the Red Sea ca. 450 BCE–900 CE and for their wealthy and powerful kings who minted their own currency and erected monumental stelae, we know little about the generation of wealth and the role of centralized hierarchical versus more diffuse power structures in ancient trade in the northern Horn of Africa. Chapter 5 describes a salt-oriented niche economy in northern Ethiopia today that provides rich material for understanding these mechanisms. Niche economies—diversified economic survival strategies developed where political or other conditions are unpredictable (Guyer 1997)—are well-known in Africa. On the salt route today, highland farmers and lowland herders secure a stable livelihood through the salt caravan and other trade, pack animal rental, construction and salt mine labor, redistribution or wholesale of salt and agricultural products, and reciprocity with extended family units and clans in the lowlands. Today's niche economy is affected by variables such as an individual's farmland size, physical strength, entrepreneurship, and social ties like membership in community associations. The central government also influences the economy through taxation and market location. This niche economic aspect of the modern Afar salt trade sheds light on the participation of multiple agents in the formation of early polities.

Ethnoarchaeological data reveal mechanisms that involved multiple agents in the salt trade and suggest models for interpreting archaeological data from

this region and elsewhere. Today, in addition to the caravanners, varied participants are found at each node of the trade route: salt miners, warehouse owners, shop owners, water sack makers, tax collectors, and logistic providers. Through participant observation, I also documented the route itself, the landscape, and the material culture characteristics of caravan groups. Round stones used by caravanners for baking bread were revealed as previously unconsidered indicators of the camping spots of mobile and otherwise ephemeral salt caravans. The presence of these distinctive stones in cooking features allowed me to identify ancient caravan campsites.

Survey uncovered a suite of archaeological sites that revealed the role of participants on the salt route during Aksumite times. These include newly recorded ancient trader towns at Agula and Samra at the edge of the highlands and ancient border towns at Usot and Desi'a on the lower reaches of the salt route. The presence of a ruined Aksumite church clearly demonstrated an Aksumite presence on this section of the trail. Important Aksumite and pre-Aksumite elite funerary and ritual sites in higher-elevation towns at Atsbi and Wukro also indicate the participation of the Aksumite polity on the salt route far from the center of state power in Aksum.

Excavation on the perimeter of trader towns allowed me to examine the organization of ancient trade. Ancient caravan camps were situated in locales similar to those used today. Non-elite stone structures, Aksumite highland pottery, and obsidian tools distinctive of the Afar reflect the participation of foothill and lowland groups in ancient trade. Radiocarbon data and ceramic and lithic artifacts provided information on chronology and demonstrated the exchange of commodities such as salt and obsidian from the Afar lowlands to the northern Ethiopian plateau as early as the Aksumite period (450 BCE–900 CE). Data on subsistence strategies indicated that ancient traders relied on wheat, barley, and *te'f*, supplemented with small amounts of meat. This diet was a major signature of settlements that provided logistical support and caravan campsites.

Ultimately, the Aksumites' exploitation of the lowland salt basin and organization of the salt trade resulted in towns and settlements located far from the center of the Aksumite polity along local trails leading to the salt flats and in transition zones between the highlands and lowlands. Based on the strategic location of settlements in the highlands and eco-tonal areas close to the route, the presence of elite and non-elite architecture, and the distinctive artifacts of trading towns in the borderlands between the highlands and the lowlands, I argue that during the Aksumite period, elite Aksumites organized large-scale trade on the Afar route to meet the demand for salt in urban areas. Significantly, the location of foothill towns and the presence of non-elite architecture and ceramics from many regions demonstrate that small-scale farmers and traders moved closer to key trade routes and transition zones to participate in annual trade. The state

stood to benefit from trade in a variety of ways, not least of which was taxation. Through their participation in trade, state actors also provisioned highlanders with salt, which was dietarily significant as well as politically desirable. In return, state traders obtained obsidian, a crucial raw material for producing leather for international trade. Accumulation of wealth by members of the elite who participated in organizing trade caravans may have played a role in the expansion of the Aksumite state. Small-scale farmers and pastoralists also benefited from their participation in the trade by obtaining salt for their herds, households, and villages and the ability to supplement their livelihoods through exchange.

This case study provides insight into the logistics of pack animal–based trade and the complexities of central and regional organization to inform thinking about complex societies globally. What follows is an in-depth exploration of trade and the Aksumite state, contextualization of the research area, data sets, and broader implications of the study.

AKSUMITE ARCHAEOLOGY

The questions driving this research—those surrounding the generation of wealth and the role of centralized hierarchical versus more diffuse power structures in ancient trade in the northern Horn of Africa—are situated in a pivotal period during which the pre-Aksumites (> 800–450 BCE) and Aksumites (450 BCE–900 CE) developed mixed agricultural systems dependent on domestic livestock and Asian and African crops and pulses. During the pre-Aksumite period of early state formation in the Horn of Africa, there is evidence of regional variation in pottery and lithics, access to copper, monumental architecture, and a writing system using Sabean, a South Semitic language. By contrast, the Aksumite period correlates with the establishment of the Aksumite state. At the peak of their power, the Aksumites engaged in extensive long-distance trade over the Red Sea and the Indian Ocean and controlled territory as far away as Yemen and Meroe in the Sudan (Fattovich 1990, 2010b; Finneran 2007; D. Phillipson 2012; Phillipson, Phillips, and Tarekegn 2000). They also enjoyed economic and political contact with the Romans and states and empires in the Mediterranean, the Nile Valley, and South Arabia. Goods from as far away as India and China were shipped through the port of Adulis and northern highland cities, including Cohaito, Matara, Yeha, and the capital Aksum (Fattovich 2010a; Finneran 2007; Munro-Hay 1991; D. Phillipson 2012).

The wealth of the Aksumite kings and elite and the development and expansion of the state have been tied to trade in commodities such as gold and ivory (Kobishchanov 1966). Texts from the sixth century CE also mention the existence of salt trade during Aksumite times, which could have constituted a source of local wealth (Kobishchanov 1966; Munro-Hay 1991; Pankhurst 1968) (I discuss this in more detail in chapter 3). Today, the Afar lowlands adjacent to the

Aksumite highlands are the only source of salt in the region. The rugged Afar salt route is still defined today by the location of passes from the lowlands to the highlands (Wilson 1976; Woldekiros 2014, 2019). This project was the first archaeological examination of whether an ancient trade existed on this route and the significance of local trade on the salt route from the southern lowlands of the Afar Depression to the eastern highlands during the Aksumite period. In the following section, I contextualize highland and lowland geographic and cultural areas through which the Afar salt trade (both modern and ancient) passes and describe my data collection methods.

METHODOLOGY

I conducted my research in two ecological zones in northern Ethiopia: the Afar Desert and the north Ethiopian highlands. The Afar Desert is currently occupied by mobile Afar pastoralists who make a living from their herds and the salt trade. The adjacent highlands receive abundant rainfall and support productive agricultural systems but lack salt sources. The variation in altitude, ecology, and distribution of resources, along with the organizational requirements of the Afar salt route, would have presented early agriculturalists and pastoralists with a unique set of options for trade as well as significant geographic constraints.

The evidence for this book is derived from nineteen months of fieldwork I carried out between 2009 and 2012. With my own camel train, I joined the caravanners and followed them for 90 km in the highlands and 72 km in the lowlands: the entire portion of the route that lacks roads even today. I used interviews and participant observation to collect data from 152 caravanners as well as from salt miners, salt cutters, warehouse owners, intermediaries (brokers), shop owners, residents of salt villages, and leather water bottle makers (between 3 and 30 of each). The Afar salt trail begins at the lowland salt source of Lake Asale in the northern Afar Desert and runs from the Afar Depression to the Ethiopian plateau. It travels 3,000 m up a precipitous escarpment following the few available water sources and mountain passes. From Lake Asale, the 162-km route runs through the towns of Hamed Ela and Berhaile to the major highland town Mekelle.

I followed up the ethnographic portion of my study with archaeological research, which led to the documentation of at least three significant and previously unrecorded ancient archaeological sites along the route. During excavation on the perimeter of these sites, I found ancient caravan camps in locales similar to those used today. I also identified Aksumite churches, non-elite stone structures, Aksumite highland pottery, and obsidian distinctive of the Afar. Radiocarbon dates and attributes of ceramic and lithic artifacts provided information on chronology and site use. Ancient activity on the Afar salt route revealed regional exchange in commodities from the Afar lowlands to the northern Ethiopian plateau from as early as the Aksumite period.

SIGNIFICANCE

Until recently, Aksumite archaeology has focused almost entirely on the elite. Scholars have argued for top-down elite control of ancient trade in Aksumite and other ancient polities, in part because of the history of research on monumental architecture and ancient writing (Blanton 2010; Blanton et al. 1996; Brumfiel 1995; Earle 2002; Oka and Kusimba 2008; Wheatley 1975). Data on the ancient Afar salt route suggest that informal economies and local power brokers played a role in regional trade and ultimately in maintaining the state's power. These data contribute to a more complex picture of ancient Aksumite society and current theoretical discussions regarding concurrent roles for hierarchy and more diffuse power structures in ancient states worldwide (more on this in chapter 2).

The varied environmental and social contexts of ancient sub-Saharan Africa can help illustrate and clarify variability in the organization of complex economies and societies, and the Ethiopian setting represents a compelling case. My ethnoarchaeological and archaeological research in the eastern highlands of Ethiopia and the Afar lowlands moves the discussion to different parts of the kingdom and populations than those of previous research, which has mainly focused on the northern highlands. It is clear that relationships between pastoralists and agriculturalists and between highlanders and lowlanders should not be viewed simply in terms of power relations between the dominant elite and non-elite but also in the context of cooperation and interdependence among participants in the salt trade. These perspectives allow us to depart from the dominant theories of the last 100 years that emphasize vertically controlled hierarchies and to explore new evidence from the region.

This study also contributes to documenting the rich cultural heritage of the salt trade in northern Ethiopia, where for thousands of years, the salt trade has functioned as a sustainable economic strategy. This practice is not only a significant cultural heritage but also reflects indigenous knowledge of the environment and pack animal use passed from generation to generation (Gebreab et al. 2005; Wilson 1991). In many parts of the world, pack animal–based caravans are being replaced by trucks and modern roads; this project may help preserve this ancient tradition of northern Ethiopia.

OUTLINE OF THE BOOK

In chapter 2, I problematize past conceptions of highly centralized and stratified polities and discuss how we can use trade and exchange in everyday commodities such as salt to unravel more complex and internally varied cultural processes. By doing this, I show the importance of using a synthetic approach that employs insights from anthropology, ethnoarchaeology, and archaeology to understand the effects of trade and exchange in consumable goods like salt in human history.

Chapter 3 provides the intellectual framework for my study of the Afar salt caravan trade in Aksumite archaeology. Here, I introduce the people, towns, and political structures of the Aksumite state. I discuss the emergence of Aksumite society; its social, political, and economic organization; and its settlements and towns. Finally, I outline archaeological and textual evidence for the role of the church, ancient trade routes, and the organization of Aksumite long-distance trade in the context of highland geography.

In chapter 4, I introduce the ethnoarchaeological research and the diverse social and ecological settings under which past and present local salt trade networks functioned and still function. I then situate salt provisioning within the socioeconomic and political landscape of the Aksumite state. Identifying the Aksumite socioeconomic and political landscape will indicate why the north Ethiopian and Eritrean highlands were major consumers of salt from the Afar Depression.

Chapter 5 looks at the pattern and organization of the salt trade cross-culturally and regionally. Using the ethnographic case study of the Afar salt trade, I focus on the principle of caravan organization, its participants (including traders), and the distribution of salt. This includes a discussion of caravan members, load preparation, and the journey. I also describe the concept of niche economies in northern Ethiopia, the role of caravanners within the system, and the potential for heterarchical and horizontal peer network connections. In the second part of this chapter, I focus on campsites and material residues of caravans and provide information on the functional and social aspects of long- and short-term campsites, the arrangement of camps, and the towns and villages visited on both outbound and return trips. The section concludes with a detailed consideration of the archaeological implications of the salt trade in the landscape.

Chapter 6 provides archaeological data that speak directly to the organization of the ancient Afar salt trade. It includes discussion and analysis of archaeological features, caravan campsites, churches on the route, and settlement areas near it. I also present archaeological remains that relate to the diet and identity of traders.

The final chapter of the book offers a nuanced view of the role local trade played in the economic organization of early complex societies in the northern Horn of Africa. Here I integrate the environmental, ethnoarchaeological, and archaeological data presented in earlier chapters and consider practices that shaped the organization of the Afar salt trade. I also focus on the relative roles of individuals, local traders, the Aksumite elite, and the ancient state—reflecting on their implications in interpreting the Aksumite political economy and social structure. I conclude by discussing the contributions of this study to Ethiopian archaeology and cultural heritage as well as perspectives offered by the organization of the Aksumite salt trail for understanding variability in ancient political structures globally.