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Collecting Food, Cultivating Persons:
Wild Resource Use in Central African Political Culture, c. 1000 B.C.E. to c. 1900 C.E.

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ABSTRACT**Collecting Food, Cultivating Persons:
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This dissertation traces the influence of Botatwe farmers' hunting, fishing, and foraging activities on economic, political, and social life over the course of three millennia by weaving together evidence from historical linguistics, archaeology, and palaeoclimatology. While the spread and intensification of farming and trade are often used to explain political change in the ancient world, the histories of farming, trade, and politics in central Africa were contingent on developments in hunting, fishing, and foraging—the very activities farming supposedly replaced.

In early periods of Botatwe history, the distinction between farming and using wild resources was not particularly clear and building successful communities required broad knowledge about food procurement. Indeed, a diverse food system remained an important strategy for settlement well into the second millennium among communities in the Kalahari Sands of the western Botatwe region. However, by the middle of the first millennium, some Botatwe peoples in the east worked hard to create a distinction between work undertaken in the fields and in the bush through an elaborate series of innovations around communal spear hunting. At the turn of the first millennium, as the long experiment with farming transformed into a predictable food system, eastern Botatwe people diffused political power by inventing a new politics that focused on reputation-building based on knowledge about bushcraft. Throughout the second millennium, the centralization of some neighboring societies and the intensification of long-distance trade routes supported new means to acquire reputations in bushcraft, transforming

the moral visions and material underpinnings of older kinds of reputations; celebrated hunters were redefined as friends, elders, and companions while new entrepreneurial elephant hunters built great wealth and repute.

Most scholars approach the precolonial African past by historicizing institutions developed to consolidate or contest relationships of power: chieftaincies, kingships, healing cults, and specialist clans. The vocabulary Botatwe farmers used to talk about people with reputations for great skill in bushcraft foregrounds historically contingent modes of being recognized as a skilled individual in the precolonial past. Historicizing the dialectical relationship between ideas about individuality and the institutions to which individuals belong holds great potential for understanding the history of decentralized societies.

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CHAPTER ONE

COLLECTION AND CULTIVATION IN AFRICAN HISTORIES

This is a story about collection—the collection of food and the collections of people, spirits, and ancestors who undertook this work, for, although the histories of farming communities aren't usually told from this perspective, people's investment in food collection propelled the development of farming in many parts of the ancient world. Therefore, this is also a story about cultivation—the cultivation of food and of the people, spirits, and ancestors who saw their novel efforts at growing food to be a worthy life's work. In the savannas of south central Africa, farmers' deep investment in their work sustained further developments in hunting, fishing, and foraging, both to meet nutritional needs when unpredictable rains caused crop failure or constricted pastures and to experiment with new collection technologies when wild foods were merely supplementary to plentiful harvests and productive herds. Indeed, for people speaking Botatwe languages and farming the savannas of south central Africa over the last three millennia, the activities of food procurement that are categorized by scholars as either “collecting” or “cultivating” were only sometimes understood as distinct work, and only for

particular kinds of people.¹ Maneuvers between such distinctions—the ability to keep the categories of hunter, fisher, forager, and farmer in play in different historical eras, annual seasons, and geographical spaces—were at the heart of the development of the distinctly decentralized political culture of Botatwe societies.

The words that are used today by Africans speaking Botatwe languages carry the interconnected histories of collecting, cultivating, and politicking in their multiple meanings and derivational markers. Speakers of Botatwe languages cultivate (*kulima*) the wild greens sprouting amongst legumes, pumpkin vines, and sorghum, millet, and maize stalks. They hunt (*kufwima*) both game and honey and esteem their most successful hunters (*mwaalu*) as elders capable of great generosity, a characteristic of true leadership. The history of how speakers of Botatwe languages developed the overlapping meanings of such words is a history that confounds scholarly approaches to the African past that consider agricultural surplus axiomatic to precolonial political complexity. The *longue durée* history of bushcraft among Botatwe farming communities underscores both the contingencies of political development and the vagaries of its material and social underpinnings.

The story that unfolds below emerges from an eclectic body of historical data. Like many peoples of precolonial Africa, communities speaking Botatwe languages were oral societies. Therefore, documents attesting to the history of this region date only to recent centuries and were, until the late nineteenth century, produced by non-African visitors traveling through the

¹ The Botatwe speaking region encompasses the present day areas of the Central, Southern, and Western provinces in Zambia, the Caprivi Strip in Namibia, the Chobe district of Botswana, the border region of southeast Angola, and the northern districts of Zimbabwe along the Zambezi River. The languages spoken in this region are numerous, with members of the Botatwe family representing only one of a number of other (mostly Bantu) language groups. The Botatwe languages spoken in this region include: Soli, Lenje, Tonga, Ila, Sala, Lundwe, Toka, Leya, Fwe, Mbalangwe, Subiya, Totela, and Shanjo. For more information, see Chapter 2.

area. Historians of Africa have been particularly successful in utilizing innovative methodologies to access the history of Africans who lived centuries and millennia ago, despite a dearth of written records.² Following this scholarship, the narrative presented here weaves together the primary source of evidence, word histories produced through the methodology of comparative historical linguistics, with archaeological and palaeoclimatological data.

Reconstructed words are remnants of ancient discourse, attesting to debate and consensus, especially in the derivational process of naming what is new from what is known. The innovation of words and the histories of their multiple and changing meanings provide information about both the material world (which can be directly tied to archaeological and palaeoenvironmental data) and the historical development of those beliefs and institutions Botatwe peoples invoked when they discussed the material, ritual, and political powers of wild resources.

The advantage of using historical linguistic evidence is great. The development of vocabulary shared by a community provides information about the past of all speakers who used that vocabulary; unlike texts or even oral traditions, word histories are a particularly democratic source for writing social histories of the ancient past. Moreover, in the absence of written records, reconstructed vocabulary of ancestral Botatwe languages provides the data needed to write historical narratives with the words Africans themselves used as they talked about their world centuries and millennia ago.

² See chapter 2 for a discussion of scholarship employing diverse methodologies to access the ancient history of oral African societies.

1.1 Cultivation, Collection, and Theorizing Ancient Political Economies

The *longue durée* history of the hunting, fishing, and foraging activities of Botatwe farming communities reveals a series of contradictions in the way that scholars have studied the ancient past of African societies. The spread and intensification of farming and trade have long been used to explain the spread of Bantu languages (the greater linguistic family to which Botatwe languages belong) across east, central, and southern Africa as well as political change within societies speaking those languages.³ Yet, a story of how Botatwe speaking farmers worked in the bush demonstrates that the spread of Bantu languages and developments in farming, trade, and political culture were contingent on a continued investment in hunting, fishing, and foraging—the very activities that farming supposedly replaced.

Current scholarly inquiry is still hindered by 17th and 18th century evolutionist thinking, which assumed a hierarchically ranked distinction between the activities of farmers and hunter-gatherers.⁴ In Africa, scholars have long since undermined notions that hunter-foragers were unchanging remnants from humankind's ancient past or that such communities were universally

³ The classic statement was developed by Roland Oliver in "The Problem of the Bantu Expansion," *Journal of African History* 7, 3 (1966): 361-376.

⁴ For a history of subsistence-based classification in Western scholarship, see Alan Barnard, "Images of Hunters and Gatherers in European Social Thought," in *The Cambridge Encyclopedia of Hunters and Gatherers*, eds. R. Lee and R. Daly (Cambridge: Cambridge University Press, 1999); R. L. Meek, *Social Science and the Ignoble Savage* (Cambridge: Cambridge University Press, 1976); M. Pluciennik, "Archaeology, Anthropology, and Subsistence," *Journal of the Royal Anthropological Institute* (n.s.) 7 (2001): 741-58; M. Pluciennik, "The Invention of Hunter-Gatherers in Seventeenth-Century Europe," *Archaeological Dialogues* 9 (2002): 98-151; M. Pluciennik, "The Meaning of 'Hunter-Gatherers' and Modes of Subsistence: a Comparative Historical Perspective" in *Hunter-Gatherers in History, Archaeology and Anthropology*, ed. Alan Barnard (Oxford and New York: Berg, 2004); E. Rudebeck, *Tilling Nature, Harvesting Culture: Exploring Images of the Human Being in the Transition to Agriculture*, Acta Archaeologica Lundensia, 8th Series, 32, (Stockholm: Almqvist and Wiksell International, 2000); B. Trigger, *Sociocultural Evolution* (Oxford: Blackwell, 1998).

egalitarian.⁵ Recent scholarship has traced the history of these marginalized people, demonstrating that the pasts of farmers and hunter-foragers were intertwined and that both groups contributed to the development of economic specialization, long-distance trade networks, and regional political cultures.⁶ Yet, many scholars continue to study hunter-foragers as linguistically, ethnically, and even racially discrete groups (albeit with porous boundaries). The trend is to recognize hunting, fishing, and foraging activities as definitive of an ethnic group, rather than as practices developed with farming in an integrated economy.⁷

⁵ The “Man the Hunter” conference, held in Chicago in 1966, was a watershed moment in the history of both hunter-gatherer studies and interdisciplinary research. Scholars sought to develop a universal paradigm of human development and the shift to hunting was understood to be a major achievement distinguishing mankind from animals. Thus, hunter-gatherers could, by analogy, be studied as a source of information about the earliest human societies. The paradigm was popularized by Sherwood Washburn and two of his students, Richard Lee and Irven DeVore, who had initiated the ambitious Harvard Kalahari Project (1963-1974). For the definitive work, see Richard B. Lee and Irven DeVore, eds., *Man the Hunter* (Chicago: Aldine, 1968). For an assessment of the place of this paradigm in the longer intellectual history of western perceptions of pygmy and hunter-gatherer societies, see Kairn Klieman, “*The Pygmies were our Compass*”: *Bantu and Batwa in the History of West Central Africa, Early Times to c. 1900 C.E.* (Portsmouth, NH: Heinemann, 2003), ch. 1. On the “original affluent society” thesis, see Marshall Sahlins, *Stone Age Economics* (Chicago: Aldine, 1972). Scholarship of the 1980s and 1990s produced a series of subcategories meant to account for the diversity of hunter-gatherer societies and economies. Consider J. Woodburn, “African Hunter-Gatherer Social Organization: Is It Best Understood as a Product of Encapsulation?” in *Hunters and Gatherers, volume 1, History, Evolution and Social Change*, ed. Tim Ingold, David Riches, and James Woodburn (Oxford: Berg, 1988), 31-65. For examples following the trend of studying differences between hunter-gatherers societies, consider Robert Kelly, *The Foraging Spectrum: Diversity in Hunter-Gatherer Lifeways* (Washington and London: Smithsonian Institution Press, 1995); S. Kent, ed., *Cultural Diversity among twentieth-century foragers: an African Perspective* (Cambridge and New York: Cambridge University Press, 1996).

⁶ In 1990, Edwin Wilmsen and James Denbow provided an important contribution to hunter-gatherer research when they criticized the timeless approach of Lee’s work on San hunter-gatherers and argued for a historicized view of the development of hunter-gatherer societies and their relationships with neighboring farmers and pastoralists. The work sparked a series of articles and replies in the pages of *Current Anthropology*; this “Kalahari Debate” continues, having produced over 582 publications! Edwin Wilmsen and James Denbow, “Paradigmatic History of San-Speaking Peoples and Current Attempts at Revision,” *Current Anthropology* 31, 5 (1990): 489-524. See also Alan Barnard, *The Kalahari Debate: A Bibliographic Essay* (Edinburgh: Edinburgh University, 1992). Similarly, Kairn Klieman uses linguistic data to carefully reconstruct the historical development of specialists who procured forest goods in specific historical circumstances, historicizing communities identified as hunter-gatherers in the ethnography of the equatorial rainforests. Klieman, “*The Pygmies were our Compass*.”

⁷ Archaeologists in Africa have had the greatest success in investigating the integration of the activities and practitioners of hunting, fishing, foraging, and farming in local and regional economies. See S. Ambrose, “Hunter-Gatherer Adaptations to Non-Marginal Environments: An Ecological and Archaeological Assessment of the Dorobo Model,” *Sprache und Geschichte in Afrika* 7, no. 2 (1986): 11-42; James Denbow, “Material Culture and the Dialectics of Identity in the Kalahari: AD 700-1700,” in *Beyond Chieftdoms: Pathways to Complexity in Africa*, ed. Susan McIntosh (Cambridge: Cambridge University Press, 1999), 110-23; Susan Kent, *Farmers as Hunters: the*

This history of the role of hunters, fishers, and foragers in Botatwe communities identified as “agricultural” or “pastoralist” sidesteps the association of wild resource use with ethnicity by bringing into a single analytical field the range of activities and resources available to people involved in the political work of building relationships and accumulating wealth, status, and power in the precolonial past. The histories of Botatwe words for bushcraft shift the focus from *distinctions* between farmer and hunter-gatherer societies to *overlaps* in the practitioners, activities, products, and political opportunities of bushcraft and farming. Indeed, this history challenges scholars to explain the processes by which wild resource use came to be a definitive characteristic of ethnicity.

Despite extensive archaeological data confirming the combination of farming and wild resource use in the Botatwe region and in farming communities throughout Africa (past and present), scholars ignore the contributions of wild resource use to political developments. Rather, studies of precolonial south central Africa trace the processes by which small, diffuse communities gradually accumulated cattle, spread crops into new environments, and monopolized trade networks in order to explain political change. These historical interpretations are consistent with theories of ancient political economies that associate political complexity with farming, sedentism, and food surplus. In theories of corporate strategies of power-building, leaders monopolize farming surplus from plentiful harvests and productive herds to finance monuments, ritual activity, and feasts that stress group well-being and reciprocate contributions of food and labor. In exclusionist strategies, elites attract supporters by monopolizing “foreign”

Implications of Sedentism (Cambridge: Cambridge University Press, 1989); Francis Musonda, “The Significance of Pottery in Zambian Later Stone Age Contexts,” *African Archaeological Review* 5, 1 (1987): 147-158; K. Sadr, “The Neolithic of Southern Africa,” *Journal of African History* 44 (2003): 195-209; J. Terrell *et. al.*, “Domesticated Landscapes: The Subsistence Ecology of Plant and Animal Domestication” *Journal of Archaeological Method and Theory* 10, no. 4 (2003): 323-368.

exchange networks to accumulate and then redistribute prestige goods and exotic knowledge. These strategies emphasize individual achievement in building networks of followers and successfully limiting others' opportunities to do the same.⁸

Scholars using these models to understand ancient political economies debate whether corporate and exclusionist strategies can coexist, yet it is the interplay between the two that allows us to ask interesting questions about the past. Botatwe hunters, fishers, and foragers were political actors who used corporate and exclusionist power strategies in varying combinations in the face of leaders who employed corporate and exclusionist strategies deriving from the economic activities of farming and trade. Wild resources like meat, honey, skins and ivory functioned as subsistence and prestige goods and the skills used to acquire them were tied to other politically potent activities like warfare and healing. Those members of Botatwe farming communities who could skillfully hunt, fish, and forage had access to alternative sources of wealth and prestige with which to challenge or support the political ambitions of leaders.

1.2 The Study of Ancient Politics in African Historiography and Archaeology

Early historical research on African societies identified the development of states as the central historical problem of precolonial Africa and this important topic has retained the attention

⁸ Richard Blanton, Gary M. Feinman, Stephen A. Kowalewski and Peter N. Peregrine, "A Dual-Processual Theory for the Evolution of Mesoamerican Civilization," *Current Anthropology* 37, no. 1 (1996): 1-14; Robert Carneiro, "The chiefdom as precursor of the state," in *The Transition to Statehood in the New World*, eds. R. Cohen and E. Services (Cambridge: Cambridge University Press, 1981), 39-79; Elizabeth DeMarrais, Luis Jaime Castillo and Timothy Earle, "Ideology, Materialization and Power Strategies," *Current Anthropology* 37, no. 1 (1996): 15-31. Timothy Earle, *How Chiefs Come to Power: the Political Economy in Prehistory*, (Stanford: Stanford University Press, 1997); Timothy Earle, "The Evolution of Chiefdoms." In *Chiefdoms: Power, Economy, and Ideology*, ed. Timothy Earle (Cambridge: Cambridge University Press, 1991), 1-15; Kristian Kristiansen, "Chiefdoms, States, and Systems of Social Evolution," in *Chiefdoms: Power, Economy and Ideology*, ed. Timothy Earle (Cambridge: Cambridge University Press, 1991), 16-43.

of scholars.⁹ Most scholars approach the precolonial African past by historicizing institutions developed to consolidate or contest relationships of power: chieftaincies, kingships, healing cults, and specialist clans. Indeed, much important work has been done to historicize the institutions first identified and described by anthropologists in the early 20th century as the organizing principles of social and political life. However, this focus on centralization and institutions of resistance to the centralization of power elides political processes that diffuse power.

Since the 1990s, a few scholars have turned their attention to heterarchy, describing forms of political organization in which competing institutions (often organized internally through the principle of hierarchy) diffused power between themselves, resisting the centralization of power around the leader of any one institution.¹⁰ For example, Njila speaking communities living in west central Africa (west of the Botatwe speaking area) around the turn of the first millennium C.E. were organized around kin groups and lived in vicinages, small aggregates of villages. Then, between the eleventh and seventeenth centuries, inhabitants of the region invented two new ways to organize their societies: corporate matrilineages within villages and sodalities whose age and gender-based membership cross-cut ties of matrilineality, connecting people living in different vicinages. Initiation into these sodalities and their elaborate masking ceremonies dominated social life and diffused pools of wealth and power. Some of the

⁹ The historiographic focus on the histories of precolonial states began in the 1960s with the goal of developing a “usable past” for newly independent African nations. T. O. Ranger, *Emerging Themes of African History* (Dar es Salaam: East African Publishing House, 1968).

¹⁰ Indeed, the principle of heterarchical socio-economic organization may prove to be the most important contribution of African societies to the study of ancient political economies. For the definitive exposition of this concept in African studies, see Susan K. McIntosh, “Pathways to Complexity: An African Perspective,” in idem, *Beyond Chieftoms: Pathways to Complexity in Africa* (Cambridge: Cambridge University Press, 1999): 1-30.

Njila societies that were organized into vicinages, matrilineages, and sodalities later bolstered the authority of vicinage leaders to form chiefdoms; however, many Njila societies retained the diffused organization of competing territorial, kinship, and sodality-based ties.¹¹ Heterarchical politics in ancient societies of the inland Niger River delta in West Africa were supported by a high degree of economic specialization as a strategy for distributing the risks of extreme and unpredictable climate oscillation. In the equatorial rainforests of Central Africa, personal wealth, competition, and charismatic leadership diffused power between the households of Big Men.¹²

This small but promising body of scholarship argues that the cultivation of individual talent and personality were central to political developments in precolonial Africa, but little is known about historically contingent modes of being recognized as a skilled or unique individual in the precolonial past. The study of individuality in ancient Africa remains overshadowed by a focus on the groups to which individuals belonged, a legacy of anthropological research on African social and political institutions and early attempts to trace their origins and historical development. Scholars studying the history of precolonial African institutions of governance have provided an important corrective to scholarship that sees political complexity as an evolutionary development from simple to complex with increasing scales of hierarchical

¹¹ Like Botatwe, Njila is a linguistic, rather than political or ethnic, definition of historic communities. Jan Vansina, *How Societies are Born: Governance in West Central Africa before 1600* (Charlottesville and London: University of Virginia Press, 2004), chapter 5.

¹² On the inland Niger Delta, see Roderick McIntosh, *The Peoples of the Middle Niger: the Island of Gold* (Malden, MA: Blackwell, 1998); idem, *Ancient Middle Niger: Urbanism and the Self-Organizing Landscape* (Cambridge: Cambridge University Press, 2005); Susan McIntosh, "Modeling Political Organization in Large-Scale Settlement Clusters: a Case Study from the Inland Niger Delta," in *Beyond Chiefdoms: Pathways to Complexity in Africa*, ed. idem (Cambridge: Cambridge University Press, 1999), 66-79. For the equatorial forests, see Jan Vansina, *Paths in the Rainforests* (Madison, WI: University of Wisconsin Press, 1990). This ambitious history inspired a revision of the wealth in people paradigm that stressed the importance of personal knowledge and skill in the political work of composing successful communities. See Chapter 9 a more detailed analysis of this literature. Jane Guyer and S. Eno Belinga, "Wealth in People as Wealth in Knowledge: Accumulation and Composition in Equatorial Africa," *Journal of African History* 36, 1 (1995): 91-120.

organization.¹³ Yet, our understanding of the development of institutions is incomplete until we historicize the dialectical relationship between ideas about individuality and the institutions to which individuals belonged.

The vocabulary Botatwe farmers used to talk about people skilled in hunting, fishing, and foraging highlights the ways in which reputed skill in bushcraft, seasonality, mobility, and personality coalesced to create dynamic relationships of power between adept individuals (especially successful hunters) and the networks of people making claims on such skilled persons through the institutionalized ties of kin, clan, marriage and ritual leadership as well as the affective ties of friendship, respect, and love. The ways in which Botatwe speakers redefined those skilled in bushcraft as “friends” and “elders” speaks to the centrality of personal reputation and the affective dimensions of power in shaping the political landscape negotiated by leaders. Contestation and change in recognizing uniquely capable individuals—a history of reputation in bushcraft (and other skills)—has great potential to explain the historical contingencies surrounding the continuity of *decentralized* political organization in Botatwe societies, a continuity that does not mean a lack of change in social, political, or economic life.

1.3 Bantu Expansions: the Spread of Language and Farming in Precolonial Africa

This history of the hunting, fishing, and foraging activities of Botatwe farming communities provides a new perspective on themes that have dominated precolonial African historiography: the interrelated narratives of the development of political complexity and the

¹³ Even in the early 21st century, Jan Vansina finds this a compelling intellectual hurdle and an important justification for his research on African institutions of governance in precolonial west central Africa. Vansina, *How Societies*, 3.

spread of farming. The story of the spread of farming in much of sub-Saharan Africa has been linked to the Bantu Expansions, a central problem of precolonial African history.¹⁴ The Bantu Expansions have remained a salient theme in African historiography for well over a century. Observations of the similarity between hundreds of African languages across nearly half of the continent captured the interest of European explorers and, later, missionaries, scholars, and colonial administrators. Early attempts to explain how over 500 related Bantu languages came to cover such a wide expanse of the continent were rooted in the themes Europeans used to explain their own history: exploration, trade, and, conquest. Scholars initially explained the Bantu phenomenon using a model of large-scale migration and conquest, the success of which was attributed to the superior languages and military technologies of Bantu speakers.¹⁵

In the early 1960s, scholarship on the Bantu Expansions changed decisively. As the colonial era came to an end, scholars rejected the “migration and conquest” model that had

¹⁴ For a detailed survey of the literature on Bantu Expansions to the late 1970s, see Jan Vansina, “Bantu in the Crystal Ball, Part I,” *History in Africa* 6 (1979): 287-333; Idem, “Bantu in the Crystal Ball, Part II,” *History in Africa* 7 (1980): 293-325.

¹⁵ The superior attributes of Bantu speakers were initially thought to have derived from contact with lighter-skinned, northern peoples—the Hamitic myth. Early missionaries embraced this view of the relationship between the expansion of Bantu languages and the influence of northern populations because this position easily transferred to Biblical interpretations of the early history of the Middle East and Northeastern Africa. Carl Meinhof, “Das Ful in seiner Bedeutung für die Sprachen der Hamiten, Semiten und Bantu,” *Zeitschrift der deutsche Morgenlandische Gesellschaft*, 65 (1911): 210-19. Idem, “Die Entstehung der Bantu Sprachen,” *Seifschrift für Ethnologie* (1938). See also E. Sanders, “The Hamitic Hypothesis: Its Origins and Functions in Time Perspective,” *Journal of African History* 10, 4 (1969): 521-532; Vansina, “Bantu in the Crystal Ball, I,” esp. pp. 295-8 and 300-303. Sir H. H. Johnston, perhaps the most influential Bantuist scholar of the early colonial era, explicitly linked the success of the spread of Bantu languages and culture to race by arguing that the success of the Bantu migration and conquest was tied to the infusion of “white” blood into their “race” via Fulbe intermediaries. Yet, he also recognized the importance of agriculture and iron to the success of Bantu speakers. These position are best summarized in H. H. Johnston, “Survey of the Ethnography of Africa, and the former racial and tribal migrations in that continent,” *Journal of the Royal Anthropological Institute*, 43 (1913): 375-414. Idem, *Comparative Study of the Bantu and Semi-Bantu Languages*, 2 vols. (Oxford: Clarendon University Press, 1919-1920). The idea that transfers from non-Bantu people were responsible for the success of the spread of Bantu languages and, in contemporary thought, Bantu people, were rejected when Greenburg’s classification of the Bantu languages established their origin within Africa. J. H. Greenburg, *Studies in African Linguistic Classification*, (New Haven: Compass, 1955).

dominated Bantuist scholarship throughout the first half of the 20th century. A new generation of researchers argued that the success of the Bantu Expansions lay in the technological superiority of the Bantu-speakers' farming economy and material culture, rather than their military technology or prestigious languages.¹⁶ In this formulation, the spread of Bantu languages was caused by the demographic advantages of farming and the resultant cycles of population increase, population pressure, and population expansion.¹⁷

The focus on economy and material culture transformed scholarship on the Bantu Expansions because it emboldened archaeologists to enter debates about routes of linguistic expansion. In the 1970s, however, scholars began to question the interdisciplinary feedback between linguists and archaeologists, particularly when it became clear that those aspects of material culture that had been used to identify archaeological sites as "Bantu" had spread independently of one another and, thus, mostly likely did not represent the monumental spread of Bantu speaking peoples. Scholars had lost sight of the fact that "Bantu" was a linguistic, not archaeological, category. By the early 1980s, scholarship on the Bantu Expansions was in a state of disarray. Generally, archaeologists and linguists returned to their respective camps to

¹⁶ Following Franz Boas, Murdock started this trend, establishing a connection between language and culture whereby culture was defined materially. G. P. Murdock, *Africa: Its Peoples and their Culture History*, (New York: McGraw-Hill, 1959). Some scholars maintained that conquest was an important part of the expansion process because parts of the Bantu toolkit, such as iron, had the potential to influence warfare. Christopher Wrigley, "Speculations on the Economic Prehistory of Africa," *Journal of African History* 1, 2 (1960): 189-203.

¹⁷ The best-known iteration was developed by Roland Oliver, "The Problem of the Bantu Expansion." Oliver's thesis was tied to the Malthusian school of colonial ecology, in which population growth stemmed from technological innovation (hence, colonial administrators could combat perceived problems of population stagnation or collapse or augment their labor supply through the application of technology to African farming practices). For a discussion and early critique of the neo-Malthusian school of colonial ecology, see Boserup who argues that population growth drives technological innovation, in a reversal of the Mathusian formulation. E. Boserup, *The Conditions of Agricultural Growth*, (London: George Allan and Unwin, 1965).

reconsider issues of methodology and to study *in situ* developments after the spread of Bantu languages or the material culture associated with farming communities.

Scholars who criticized research on the Bantu Expansions leveled a number of important critiques at archaeologists and historians using linguistic data to reconstruct the spread of Bantu languages. Drawing on archaeological, topographical, and genetic data, John Robertson and Rebecca Bradley question whether the Bantu Expansions even occurred. They argue that scholars fail to consider the challenges of the physical environments through which migrating populations are hypothesized to have moved. Robertson and Bradley see the emergence of archaeological sites with evidence of farming not as the arrival of new peoples but as a local development. Drawing on the rich data for Early Iron Age (EIA) farming sites and Late Stone Age (LSA) hunter-forager rock shelters containing EIA pot sherds in south central Africa, they conclude that these contemporaneous sites do not represent farmer and hunter-forager communities living in a symbiotic relationship, as many scholars have argued from similar evidence.¹⁸ Rather, Robertson and Bradley believe that the same indigenous people inhabited both EIA farming sites and LSA rock shelters. As local foragers slowly adopted farming technologies, women, children, and the elderly worked for most of the year cultivating at so-called EIA farming sites while men used rock shelters identified as LSA sites as seasonal hunting camps, at first bringing supplies in perishable gourd, skin, or wooden containers and, later, using EIA ceramic vessels.¹⁹

¹⁸ Vansina, *Paths*; Klieman, “*The Pygmies were Our Compass*”; Wilmsen and Denbow, “Paradigmatic.”

¹⁹ J. Robertson and R. Bradley, “A New Paradigm: The African Early Iron Age Without the Bantu Migrations,” *History in Africa* 27 (2000): 287-323. For a description of the movement of Bantu speakers with close attention to reconstructing the local environment, see C. Ehret *An African Classical Age*, (Charlottesville, VA: University of Virginia Press, 1998). See also Jan Vansina, “A Slow Revolution,” *Azania* 29/30 (1994/1995): 15-26. Karim Sadr has made a similar argument that the desire to “locate” Bantu peoples in the archaeological record has distracted

Robertson and Bradley challenge scholars to consider farming in combination with the exploitation of wild resources and to understand the seasonal, gendered, and age-based dimensions of these activities. They astutely highlight the influences of local environments on the movement of people and the spread of technologies like agriculture. However, Robertson and Bradley's dismissal of the contributions of linguistic data is problematic, for many of their critiques can be answered with data generated by historical linguistics. For example, detailed vocabulary about flora and fauna can be reconstructed to develop hypotheses about the environments in which languages were spoken; such data would directly engage with the critique that historians talk about the spread of languages and sometimes people across geographic space without any attention to the physical realities of the environment.²⁰

Most scholars who criticize scholarship on the Bantu Expansions, including Robertson and Bradley, seek to attribute historical agency to autochthonous peoples over immigrant Bantu speakers and worry in particular about the contribution of autochthonous peoples to the spread of farming. This perspective ignores the very real process of language spread without the movement of people, which occurs when autochthones adopt new languages, in this case, Bantu languages. Moreover, the reason that the stakes are high in assigning responsibility for the spread of farming to either immigrant Bantu speakers or autochthonous hunter-gatherers is that these critics fall into the trap of the evolutionist paradigm. They, too, accept the shift to farming as an achievement that replaced the use of wild resources because they mistakenly see farming as the primary factor in economic, political, and social innovation. This assumption elides the

archaeologists from recognizing that the data they produced created a different picture of internal innovation. In this case, the innovation was the development of a Neolithic (farming by stone tool users) in Southern Africa. Sadr, "Neolithic of Southern Africa."

²⁰ See Chapter 4 for an attempt to engage with Robertson and Bradley's critiques.

contribution of collected resources to precolonial political economies and obscures overlaps between the work of cultivation and the work of collection.

1.4 Organization

This story is divided into three parts. Part One introduces the diverse methodology employed in producing historical data for the narrative that follows. Chapter 2 describes the process by which scholars classify languages into families and reconstruct vocabulary that attests to the activities and beliefs of people speaking the ancestral forms of modern languages. A new classification of the Botatwe language family takes into account data from previously undocumented languages and provides the chronological framework and settlement history of speakers of ancestral languages of the Botatwe family. In Chapter 3, archaeological and palaeoclimatological data serve as the foundation of two additional, though methodologically distinct, chronologies. Overlapping periods of innovation and continuity in the linguistic, archaeological, and climatic records introduce historical relationships between people, environment, and economy, themes explored more fully in Part Two.

Chapters 4 through 8 (Part Two) present the environmental, economic, and technological histories of Botatwe speakers' hunting, fishing, and foraging activities within the context of developments in farming. Chapter 4 engages with the critiques leveled at historians who ignore the local environmental conditions within which languages were spoken. Reconstructed floral and faunal taxonomies provide information connected to the archaeological and palaeoclimatological data of Chapter 3. Reconstructed taxonomies also historicize the ideas Botatwe speakers invented about the uses, dangers, and importance of different kinds of environments as they developed categories of species attesting to particular environmental

conditions. Therefore, Chapter 4 reconstructs both the environmental conditions in which Botatwe languages were spoken and the ideas that Botatwe speakers invented as they connected new environmental knowledge to older ideas about forests, waterways, flora, and fauna. As Botatwe languages were carried southward, from a homeland in the Katanga region of modern-day Democratic Republic of the Congo as far as the southern hinterland of the Zambezi River Valley, Botatwe speakers created productive settlements in ever drier environments by experimenting with the resources of new microenvironments and learning from neighbors speaking non-Botatwe languages.

The technological and economic histories of Botatwe bushcraft form the subject of Chapters 5 through 8. These chapters describe changes and continuities in the vocabulary of bushcraft at each stage of the divergence of the Botatwe language family and demonstrate an enduring interest in innovating the tools, skills, and organization of hunting, fishing, and foraging, despite parallel developments in farming. These chapters share two themes: the importance of interactions with non-Botatwe communities who had previously settled the lands into which Botatwe languages spread and the environmentally specific contexts of the opportunities Botatwe speakers recognized as they developed new ways to exploit the resources of the bush.

Chapter 5 outlines both the knowledge that the earliest Botatwe peoples inherited from their ancestors and the knowledge they invented and passed down to their children. The linguistic legacy of the earliest Botawe speakers confirms that they fished the swift waterways, brought down game in grasslands, and developed sophisticated tastes as honey consumers. Later, as the last generations to speak Proto-Botatwe learned about farming from cereal croppers to the east, Proto-Botatwe used their successful food system to support families busy experimenting

with growing food. These early farmers made use of all the food procurement strategies available, confounding the distinction between collecting and producing food when they tended weeds and planted traps alongside sorghum stalks. Yet, if the food procurement strategies of Proto-Botatwe speakers demonstrate overlaps in the work of farming and that of getting wild food, some of their descendants worked hard to create distinctions between getting food near villages and along field margins and getting food far from the safety of settlements.

Chapter 6 argues that Botatwe speakers living in the wetlands of the Kafue region between the 6th and 12th centuries defined differences in food procurement not along the line distinguishing domesticated and wild foods, but between the safety of the field and village and the exciting, though dangerous, opportunities of the bush. Eastern Botatwe speakers distinguished those traps laid near fields from those set in the dense, distant bush and those forms of fishing in shallow streams with baskets and poison from those that were undertaken in swift waters. Such distinctions in forms of hunting and fishing confuse their English glosses and require a new conceptualization of wild resource use that is delineated by the knowledge necessary to ensure safe movement outside the security of the village, by the capacity for mobility. Dense populations of gregarious game in the Kafue area supported innovations in communal hunting and specialization, but these innovations were largely dependent on a stable supply of food produced in and around the village through mixed farming and local fishing and trapping. Ideas about gender were woven into definitions of mobility and safety that distinguished modes of food procurement and opportunities for the leadership of communal undertakings and specialization.

Chapter 7 describes the different historical trajectory of Botatwe speakers living in the dry lands to the west of the Kafue region. In the marginal farmlands of the Kalahari Sands

expanse, eclecticism was the strategy of food security. Unlike their neighbors to the east, Botatwe speakers in the west did not specialize in one or another form of hunting. Rather, western Botatwe communities shifted the emphasis of their food system from hunting and herding during the dry centuries of the second half of the first millennium to mixed farming, trapping, and a wide variety of wild resource use in the early second millennium.

By the early centuries of the second millennium, complex webs of regional and intercontinental trade routes spread into the Botatwe region, connecting it to the Atlantic and Indian Oceans. As the centuries unfolded, Botatwe communities were well placed to exploit the regional trade networks of the kingdoms and chiefdoms that encircled the Botatwe region. Chapter 8 uses linguistic data to explore how Botatwe speakers engaged with the opportunities and dangers of the spread of trade and the dawn of new political ideas related to chiefship and kingship. Word histories provide a different historical perspective on well-known stories, including the rise and expansion of various polities, the intensification of the ivory trade, the enslavement of central African peoples, and the migrations associated with the *mfecane* of southern Africa. The invention of new words and the development of additional meanings for old words demonstrate that the historical events of the 19th century in particular were experienced by Botatwe peoples as a new chapter in an older story of interaction and contact but with a specific historical context of violence and political instability that undermined Botatwe speakers' longstanding capacity to absorb strangers into their communities as a political and economic strategy for community well-being.

Developments in the technologies of bushcraft and the demand for bush products came to be tied up in debates about the appropriate social role of skilled hunters. Chapter 9 traces the changing meanings of the vocabulary of skilled hunters, as new terms were invented and an older

word for specialist was used to talk about friends and elders. These semantic transformations suggest the political potential of reputation to attract people and to confound the principles of lineage politics: the sequential, generationally-determined character of age and knowledge. Focusing on seeming human universals—the crafting of one’s identity and the desire for recognition, respect, and honor—foreground how historically situated ideas about reputations shaped the ways in which African peoples defined leadership, social wellbeing, and the content of a successful life at particular moments in the past. This final substantive chapter argues for the place of the history of reputation in the study of the politics of African societies as a means of historicizing the contingent definitions of individuality experienced by people who sought to compose successful communities in precolonial central Africa.

PART

ONE

ON METHODOLOGY

CHAPTER TWO COMPARATIVE HISTORICAL LINGUISTICS: WRITING HISTORY FROM WORDS

Historians, linguists, and archaeologists studying Africa have shared a long and sustained interest in the relationships among Bantu languages.¹ Early research focused on describing and classifying the whole or large portions of some 500 languages that comprise the Bantu field. Recently, historians have explored relationships among smaller subgroups of Bantu languages, undertaking the work of classifying these subgroups in order to develop histories of particular words about social, economic, and political life.²

¹ For an exhaustive history of the interest in Bantu languages see Jan Vansina, "Bantu in the Crystal Ball I," *History in Africa* 6 (1979): 287-333; idem, "Bantu in the Crystal Ball II," *History in Africa* 7 (1980): 293-325.

² Amongst historians, Jan Vansina and Christopher Ehret are responsible for a large volume of the historical scholarship based on reconstructed vocabulary. It is important for scholars seeking to use the work produced by historians using the comparative historical linguistic methodology to understand the intellectual genealogies that connect such historians because the seemingly irreconcilable positions of these two important scholars on matters as basic as glottochronology and the internal classification of the Bantu languages obscures a number of historical points about which they agree as well as a new body of historical scholarship that focuses on lower order branches of the Bantu tree and proposes a more tempered approach to contentious issues like glottochronology. For Ehret's most comprehensive work on Bantu history, see Christopher Ehret, *An African Classical Age: Eastern and Southern Africa in World History, 1000 B.C. to A.D. 400*, (Charlottesville: University Press of Virginia, 1998). Ehret has also left a strong legacy as the supervisor of many dissertations employing the methodology of comparative historical linguistics in writing African history, particularly the history of Bantu speakers. For a sample see Christine Ahmed, "Before Even was Eve: 2200 Years of Gendered History in East-Central Africa" (Ph.D. diss., University of California Los Angeles, 1996); Catherine Cymone Fourshey, "Agriculture, Ecology, Kinship and Gender: A Social

In bringing linguistic methods to bear on historical questions, these scholars worked under the primary assumption of the comparative method: that words are historical documents and that their reconstruction can tell us something about the history of the domains of life they describe. Word histories provide a particularly rich source of historical information, particularly for oral societies, because they speak to change and continuity over the *longue durée* in many facets of human history that are simply inaccessible through archaeology. Moreover, reconstructed roots, their range of meanings, and the processes of derivation through which new words were invented reveal the content of those cognitive categories deployed by speakers as they sought to interpret their world by connecting ideas to one another through shared word roots. Reconstructed words and their changing meanings provide an *entrée* into intellectual,

and Economic History of Tanzania's Corridor 500 B.C. to 1900 A.D." (Ph.D. diss., University of California Los Angeles, 2002); Rhonda Marie Gonzales, "Continuity and Change: Thought, Belief, and Practice in the History of the Ruvu Peoples of Central East Tanzania, c. 200 B.C. to A.D. 1800" (Ph.D. diss., University of California Los Angeles, 2002); Kairn Klieman, "Hunters and Farmers of the Western Equatorial Rainforest: Economy and Society, 3000 B.C. to A.D. 1880" (Ph.D. diss., University of California Los Angeles, 1997); Idem, "*The Pygmies Were Our Compass*": *Bantu and Batwa in the History of West Central Africa, Early Times to c. 1900 C.E.* (Portsmouth, NH: Heinemann, 2003); Robert Joseph Papstein, "The Upper Zambezi: A History of the Luvala People, 1000-1900" (Ph.D. diss., University of California Los Angeles, 1978); Anita Pfouts, "Economy and Society in Northern Namibia 500 B.C.E. to 1800 C.E.: A Linguistic Approach" (Ph.D. diss., University of California Los Angeles, 2003); David Lee Schoenbrun, "Early history in Eastern Africa's Great Lakes region: linguistic, ecological, and archaeological approaches, c. 500 B.C. to c. A.D. 1000" (Ph.D. diss., University of California Los Angeles, 1990); Idem, *A Green Place, A Good Place: Agrarian Change, Gender, and Social Identity in the Great Lakes Region to the 15th Century*, (Portsmouth, NH: Heinemann, 1998). Schoenbrun, whose approach to historical linguistics is particularly influenced by the work of Jan Vansina and Stephen Feierman's careful use of ethnography as a historical source, has also trained a number of graduate students. In addition to this author, consider the work of Edda Fields, "Rice farmers in the Rio Nunez region: a social history of agricultural technology and identity in coastal Guinea, c. 2000 BCE to 1880 CE" (Ph.D. dissertation, UCLA, 2001); Idem, "Before 'Baga': Settlement Chronologies of the Coastal Rio Nunez Region, Earliest Times to 1000 CE," *International Journal of African Historical Studies* 37, 2 (2004): 229-254; Idem, "Untangling the Many Roots of West African Mangrove Rice Farming: Rice Technology in the Rio Nunez Region, Earliest Times to c. 1800," *Journal of African History* 49, 1 (1998): 1-21; Jan Bender Shetler, "Landscapes of Memory: a History of Social Identity in the Western Serengeti" (Ph.D. dissertation, University of Florida, 1998); Idem, *Imagining Serengeti: a History of Landscape Memory in Tanzania from Earliest Times to the Present* (Athens, OH: Ohio University Press, 2007); Rhiannon Stephens, "A History of Motherhood, Food Procurement, and Politics in East-Central Uganda to the Nineteenth Century" (Ph.D. dissertation, Northwestern University, 2007). Jan Vansina's historical scholarship has been equally influential. See Jan Vansina, *Paths in the Rainforest: Toward a History of Political Tradition in Equatorial Africa* (Madison: University of Wisconsin Press, 1990); Idem, *How Societies are Born: Governance in West Central Africa Before 1600*, (Charlottesville: University of Virginia Press, 2004). Vansina's work closely follows that of linguists working at the Linguistics Section of the Research Institute at MRAC in Tervuren, Belgium over the last several decades.

social, political, and economic history, connecting thought, things, and practice across broad spans of time and space.

One must be clear about the nature of the relationship between word histories and the actual people who lived in the past, however. Word histories provide dense bodies of historical data that can be attributed to particular speech communities, groups of speakers using a particular language in the past. Individuals living in the past could have been—and most likely were—members of multiple speech communities by speaking multiple languages. Yet, speakers could also belong to smaller speech communities that shared knowledge of specialized vocabulary employed in expert domains, such as healing, or even controlled by initiation into particular life stages or secret societies. Word histories do not tell us about the specific actions of particular individuals in the past. Yet, people are still at the heart of these histories because people were doing the speaking that created change and continuity in their languages; people are responsible for the retention, innovation, and borrowing of vocabulary between different speech communities.

Word histories, then, tell a story of people in the past who communicated with each other about the changing content of the thoughts and practices they shared. We can see the outcome of competing interpretations of these thoughts and practices in words that people changed, innovated, or borrowed to talk about community life. Such subtle interactions and contestations contributed to the divergence of old speech communities into new ones as groups of people gradually developed sound and vocabulary changes through internal innovation and cross-language borrowing, changes which accumulated over centuries to distinguish their language and their community of speakers from speakers of other genetically related languages. That is to say, histories from words are histories of communities of speakers sharing and contesting the ideas

represented in their vocabulary within the universal, gradual, and constant context of language divergence.

2.1 The Comparative Historical Linguistic Method: Identifying Proto-Languages

2.1.1 Processes of Vocabulary Change

The reconstruction of words and their changing meanings requires the methodical study of genetic relationships within language families and historical contact between communities of speakers using different languages.³ At any point in the past, a word might be subject to one of three processes: inheritance, internal innovation, or borrowing. Each process is evidence for a different kind of historical argument about human history.

Inherited words attest to the bodies of knowledge that speech communities continued to value as they diverged from their ancestral language. They provide a history of continuity in thought and practice across broad time periods and geographic regions, which must be explained within the context of processes of historical change. Inherited word roots also illuminate both the knowledge and lexicon available to speakers as they invented new ideas and the words needed to talk about them.

Innovated words suggest the simultaneous, related innovation of the idea or thing they signify. Innovations may take place within the speech community, an internal innovation, or take the form of a word borrowed from another speech community. Usually internal innovations build on older ideas; speakers can derive new terms from older vocabulary through compounding

³ For two excellent textbooks on comparative method, see Lyle Campbell, *Historical Linguistics: An Introduction*, (Cambridge, MA: The MIT Press, 1998) and Terry Crowley, *An Introduction to Historical Linguistics*, 3rd ed., (Oxford: Oxford University Press, 1997). For briefer overviews of the method, refer to the methodology statements in any of the works cited in footnote 2, above. For an excellent summary of the place of the comparative historical linguistic method in the writing of African history, see Derek Nurse, "The Contributions of Linguistics to the Study of History in Africa," *Journal of African History* 38, no. 3 (1997): 359-391.

inherited words together, developing nouns from verbs and vice versa, or simply adjusting the semantic domain of an older term. The etymology of reconstructed words foregrounds the cognitive categories developed by speakers as they sought to interpret, organize, and manage their physical and social world; word histories, therefore, provide an important corrective to research questions posed in response to a professional historiography all too often developed outside its subject communities.

Borrowed words attest to historical contacts between speech communities, while simultaneously demonstrating the porous nature of such linguistic borders. Borrowed words indicate that one speech community also borrowed the referent thing, idea, or practice from speakers of neighboring language, either within or outside the genetic language family of the borrowing language. Often languages demonstrate a concentration of borrowed vocabulary within a specific domain of belief or activity, such as the lexicon describing the cultivation of a new crop or the appeasement of a new spirit. Speakers borrowing words acknowledge the prestige, superior knowledge, or technical skill of their neighbors in that domain of life and the advantage of acquiring their neighbors' knowledge and the words necessary to talk about that knowledge for their own communities.

The identification of inherited, internally innovated, or borrowed words requires an exhaustive investigation of the word's distribution both within and outside the genetic language family as well as the phonological history of regional and genetically related languages. The distribution and phonological form of the word reveals when in the history of the language family the word was inherited, internally innovated, or borrowed and, in the case of borrowing, the direction of the spread of vocabulary.

In addition to the sources of words, the derivational processes by which speakers of Bantu languages innovated new vocabulary are also sources of historical information. These processes tell the historian something of the nature of the cognitive connections Bantu speakers sought to exploit in the act of creating new words. The connections speakers perceived in the words they grouped together might vary greatly in their English glosses, but the derivation of related words from the same source root can both demonstrate to the historian unexpected motives for connecting words and also the direction of derivation. Reconstructed words usually follow three common paths of derivation: verb to verb, noun to noun, and deverbatives (often verb to noun). A simple example of such a constellation of words derived from one source root can illustrate how these forms of derivation can tell us something about the surprising connections speakers made as they invented words in the past.

The widespread verb, *-tém-, “to cut, to cut down,” serves as the source root for a number of related nouns.⁴ In many Bantu languages, speakers derived a noun from the verb by adding the suffix *-o and a noun class prefix in order to make a word that referred to the *instrument* of *-tém-, usually glossing as “hoe,” “axe,” or “chisel,” all of which are instruments of cutting. Other speakers made the verb into a noun by adding the suffix *-e to derive a new word, *-témé, which meant “cleared field,” the *object* of the verb. It was also common to add the suffix *-i to the verb to create a noun that referred to the *agent* of the verb, *-témj, “tree cutter.”

But derivational processes also illustrate important connections between verbs and nouns and between actions, actors, and things at the historic periods to which such innovations can be

⁴ Yvonne Bastin and T. Schadeberg, eds., “Bantu Lexical Reconstructions 3,” Musée royal de l’Afrique Centrale, <http://www.metafro.be/blr> (accessed October 2006–October 2008), hereafter cited as “BLR3.” BLR3 2832, 2835, 2836, 2837, 2838, 7469, 7473, and 7474. Malcolm Guthrie, *Comparative Bantu: An Introduction to the Comparative Linguistics and Prehistory of the Bantu Languages*, 4 vols. (Farnborough, England: Gregg, 1967–1971), Comparative Series (henceforth, C.S.) 1705.

reconstructed. For example, some speakers of Bantu languages in zones F and G in East Africa inherited *-tém- but attached a new meaning, “to rule” to the older meaning “to cut.” Some of those languages spoken in the F zone took the innovation a step further, using the *-i suffix to make the agent of the verb, *-témì, “chief.”⁵ These innovations tell us that speakers of some Bantu languages in East Africa innovated a connection between the action of cutting and the work of leading communities. This semantic extension turned on the relationship between cutting new fields for farming and governing the health and welfare of the land, and, by extension, the community. Whether speakers came to be worried about governing access to increasingly scarce farming lands, legitimizing power through firstcomer status and associated land allocation rights, or a combination of the two requires additional, contemporaneous innovations, but the derivational processes that mark inventive connections between known words point to fruitful directions of further inquiry. In order to begin the work of reconstructing words and tracing derivational processes, we must first identify related languages, classify their levels of relatedness, and reconstruct their phonological history.

2.1.2 Language Classification

Languages are related genetically, splitting like cells in the process of mitotic division. The mother cell (or ancestral language) divides into its daughters such that genetic data (or linguistic features)—including mutations and innovations—are carried forward by the new generation of cells (or languages).⁶ Of course, this metaphor only allows for the division of the

⁵ This innovation is attested in zones F and G; see BLR3 2835 and 7469.

⁶ This analogy comes from Raimo Anttila, *An Introduction to Historical and Comparative Linguistics* (Amsterdam: John Benjamins, 1989). I first read it in Gonzales, “Continuity and Change”, 27.

previous generation into two new entities; in linguistic divergence, however, many languages may emerge from the slow splitting of the ancestral language, or protolanguage. A protolanguage is a heuristic device used to delineate a historical entity to which reconstructed lexical, phonological, grammatical, and other linguistic features may be assigned. We do not know exactly what the ancestral language sounded like, its entire body of vocabulary, grammar, etc. We are only able to reconstruct some of its linguistic features, inferring its existence from the linguistic data that we can prove to have been inherited from it.

A linguistic classification, like a family tree, represents a relative chronology of genetic relationships detailing how protolanguages diverged into successive intermediate generations of daughter languages, until the eventual development of extant languages. The genetic classification is, therefore, at the core of all historical conclusions drawn from linguistic data. Genetic relationships between languages may be identified in a number of ways, including the assessment of shared vocabulary, grammatical features, phonology, etc. In fact, the comparative historical linguistic method specifically requires the identification and confirmation of genetic relations between languages based on the demonstration that they have inherited more than one linguistic feature.⁷

Although inherited features of grammar, phonology, and other linguistic attributes are an important part of confirming genetic relationships, lexicostatistics, the measuring of shared core vocabulary, remains the fastest initial measure of relatedness. Unlike phonology, for example,

⁷ Christopher Ehret, "Subclassifying Bantu: The Evidence of Stem Morpheme Innovations," in *Bantu Historical Linguistics: Theoretical and Empirical Perspectives*, ed. Jean-Marie Hombert and Larry M. Hyman (Stanford, CA: Center for the Study of Language and Information Publications, 1999): 43-163; Nurse, "Contribution of Linguistics"; Idem, "Towards a Historical Classification of East African Bantu Languages," in *Bantu Historical Linguistics: Theoretical and Empirical Perspectives*, ed. Jean-Marie Hombert and Larry M. Hyman (Stanford, CA: Center for the Study of Language and Information Publications, 1999): 1-41.

where the number of possible differences is constrained by the number of sounds the human vocal tract may produce, the number of possible combinations of sounds used to refer to specific meanings is nearly unrestricted.⁸ Therefore, it is less likely that shared lexical features are independent, chance resemblances; in other words, the duplication of lexical features is most likely an indication of inheritance or historical contact, to which we will return below.

2.1.3 Counting Cognates and Recognizing Subgroups

With lexicostatistics, we measure the level of relatedness between languages by counting the number of cognates shared by pairs of languages out of a sample of core vocabulary based on the fact that languages attest regular sound changes as they diverge from their ancestral protolanguage. Core vocabulary, also called basic vocabulary, refers to a standard set of one or two hundred terms for universal, culturally-neutral concepts like “sky,” “ear,” “eat,” etc.⁹ The utility of these universal terms is that their basic nature makes them resistant to change and, therefore, a conservative measure of relatedness.¹⁰

To identify cognates in core vocabulary, we must first identify regular sound correspondences among the languages to be tested for genetic relationships. It is only through the rigorous demonstration of regular sound correspondences that we are able to identify words as

⁸ Ehret, “Subclassifying Bantu,” 43-4.

⁹ See Appendix 2 for tables listing Botatwe attestations of the standard 100-word sample of core vocabulary used in this study.

¹⁰ The most comprehensive lexicostatistical study of the Bantu languages used a standard sample of 92 basic words. See Yvonne Bastin, André Coupeze, and Michael Mann, *Continuity and Divergence in the Bantu Languages: Perspectives from a Lexicostatistic Study*, Annales Sciences Humaines, , no. 162 (Tervuren, Belgium: Musée Royal de l’Afrique Centrale, 1999). See also Clare J. Holden and Russell D. Gray, “Rapid Radiation, Borrowing and Dialect Continua in the Bantu Languages,” in *Phylogenetic Methods and the Prehistory of Languages*, ed. Peter Forster & Colin Renfrew (Cambridge: McDonald Institute for Archaeological Research, 2006): 43-55. This study uses 100 words.

cognates created by the process of inheritance, rather than chance resemblances or terms borrowed widely across languages.¹¹ Regular sound correspondences within particular sound environments are the product of a language's phonological history, those sequences of sound changes either inherited from a protolanguage or created in the process of divergence that accumulate over time into ensembles rendering new, emerging languages distinct from and unintelligible to other genetically related languages. It is important to note that subsequent sound changes can reverse or mask earlier changes. Therefore, if the same sound correspondence occurs in attestations of a word in all the languages in an area, for example, it is likely to be an areal borrowing, rather than an inherited change. Therefore, we require multiple examples of regular sound correspondence from different sample words to confirm such changes.¹²

Once sound correspondences have been identified, we then count the number of core vocabulary cognates shared by pairs of languages until each language has been paired and measured against all the others. Cognates have a similar phonological shape, demonstrating regular sound correspondences to account for phonological differences, and share a similar meaning. The cognation rates of pairs of languages provide the first clues about genetic relationships; although languages can be particularly innovative or conservative, in general, pairs with very high rates recently diverged from a common linguistic ancestor and pairs with low cognation rates diverged from a common linguistic ancestor deeper in the past because languages accumulate random changes to core vocabulary at a predictable rate over long periods of time.

¹¹ See Appendix 4 for a listing of sound correspondences identified among Botatwe languages.

¹² Scattered, relict distributions within the major subgroups of a language family, however, often serve as a useful initial hint of the inherited status of a sound change or word.

Cognation rates are used to initially group languages together into the successive levels of subgroups that intervened between the oldest protolanguage under study and the modern-day languages that descend from it. Subgroups consist of clusters of languages that are more closely related to each other than any other language or language cluster; in other words, their cognation rates with each other are higher than with other languages. The internal cognation rate averages of subgroups tend to show regular differences with the internal averages of other subgroups, often within about a ten percent range.¹³ Inconsistencies in these patterns are the result of greater linguistic innovation or conservation, which indicate shorter or longer periods of time during which the subgroup existed in the past. These inconsistencies allow historians to identify periods of language stability and pulses of innovation.

2.1.4 Accounting for the Influence of Contact in Subgroups

Although the genetic relationships identified in the process of classification are an important part of reconstructing language history, languages do not develop in isolation from each other.¹⁴ This is certainly the case among Bantu languages in Africa and especially the case

¹³ Christopher Ehret, "Bantu Expansions: Re-envisioning a Central Problem of Early African History," *International Journal of African Historical Studies* 34, no. 1 (2001): 12.

¹⁴ Scholars have debated the relative importance of genetic relationships (as represented in tree diagrams) and relationships of contact (as represented by the wave model) in the development of languages and their features. In this "trees v. waves" debate, neo-grammarians emphasize genetic relationships, claiming that sound change is always regular and exceptionless. Proponents of the wave model, however, reacted against neo-grammarians' explanations of inherited language change, arguing that each word has its own unique history, which was the result of the input of various languages that came into contact, each depositing different influences into the word's composition. According to wave theory, language change occurs like a pebble dropped into water; successive waves of influence spread out from a center of innovation and overlap waves generated by other centers of innovation as languages come into contact and borrow from each other. Scholars supporting wave theory thought it undermined the possibility of linguistic reconstruction by claiming that each word has a potentially different complicated history from every other word in a language. However, both inherited, regular sound changes and the discontinuities in these patterns influence languages. When we pay careful attention to the patterns of cognation rates and phonological history, we may reconcile the two models of change. For an excellent summary of the debate, see

with the languages of the central African savanna; Botatwe speakers' contact with previous Bantu settlers, neighboring languages, and with each other makes for a particularly complicated language history. Before we can identify the particular influences of contact on both a language's and even an individual word's history, we must first account for the influence of contact and borrowing on the core vocabulary we use to determine genetic relationships between languages. After all, the accuracy of the chronological framework inherent to the classification on which all subsequent linguistically-based historical arguments hinge affects the history we tell from both inherited and borrowed cultural vocabulary.

We can easily identify the influence of historical contact by plotting the distribution of cognation rates within subgroups. Cognation rates measure random change and all truly random change accumulates in predictable bell curve patterns over long periods of time.¹⁵ Thus, the distribution of cognation rates of genetically related languages should form a bell curve with skewed data on one or the other extreme end of the curve.¹⁶ The skewed cognation rates may then be eliminated to identify the core range of cognation rates that define the degree of relatedness within the subgroup.

Skewed cognation rates and the historical contact that they represent are an important part of the history to be told through linguistic data. The historical contact demonstrated by

Campbell, *Historical Linguistics*, chap. 7. For a careful assessment of the place of wave theory in Bantu linguistics and the gradual divergence of proto-languages in the form of dialect chains, see Jan Vansina, "New Linguistic Evidence and 'the Bantu Expansion'," *Journal of African History* 36, no. 2 (1995): 173-195.

¹⁵ For more information on the rate of change in core vocabulary identified in languages across the world, see the section on glottochronology, below. For an interesting, accessible account of the tendency of random change to statistically accumulate into regular bell curve patterns, see Stephen Jay Gould, *Full House: The Spread of Excellence from Plato to Darwin* (New York: Harmony Books, 1996).

¹⁶ See Appendix 3 for charts plotting distributions of cognation rates as well as core cognation rate ranges and medians.

skewed cognation rates can take several forms.¹⁷ Extensive borrowing from non-related languages skews rates below the core cognation range while borrowing among related languages skews rates above the core range. For each specific word, irregular phonology determines the direction of borrowing from one language to another, while phonological and distribution patterns determine when in the classification the contact occurred. Long-term geographical proximity is likely to leave a pronounced mark on both languages, including their core vocabularies. A historical contact that terminated in the past would be obvious because borrowings would be attested in some of daughter languages of the proto-language that had developed contacts with its neighbor and would exhibit the distinct phonological changes characteristic of the daughter languages. Areal influences may be detected with irregular sound correspondences attested in contiguous languages, also called block distributions.

One particularly common process that results in a specific set of skewed cognation rates is the divergence of a protolanguage across geographic space in a chain-like configuration, in which languages spoken at the extreme ends of the chain lose contact with each other but remain in contact with their immediate neighbors, simultaneously influencing each other even as they continued to diverge. This configuration of divergence, a dialect chain, can be identified when a subgroup has higher cognation rates among neighboring languages and lower rates between geographically separated languages. Recognizing particular patterns in cognation rate distributions allows us to develop subgroups while accounting for contacts between speech communities.

¹⁷ It should be noted, however, that unexpectedly high or low cognation rates may simply be the product of particularly innovative or particularly conservative languages.

2.1.5 Confirming Subgroups

We can further confirm the subgroups formulated in comparing cognation rates by identifying other shared linguistic features that occur only within the subgroup. Lexical innovations serve as one form of evidence when they follow the appropriate sound correspondences, are found only within the subgroup, and when one can also identify the word which was replaced by the innovation.¹⁸ Such lexical innovations are particularly convincing evidence when they exist in core vocabulary because these universal words are resistant to change.¹⁹ Once subgroups have been established, they may be arranged into a tree diagram that illustrates their successive divergences, that is, their inherent relative chronology.²⁰

2.2 Glottochronology: Locating Protolanguages in Time

In addition to subgrouping and identifying historical contact, cognation rates perform one final function within the comparative historical method; they may be used to determine an approximate calendar date around which time the gradual divergence of a protolanguage unfolded. In glottochronology, calendar dates are derived from cognate rates using a mathematical formula based on the axiom that the random, unpredictable replacement of core vocabulary accumulates into predictable patterns of change over long periods of time.²¹

¹⁸ Ehret, "Subclassifying Bantu," 46-47; Vansina, *How Societies*, Appendix, n. 4., pp. 273-4.

¹⁹ See reconstructions in Appendix 5 for lexical innovations within Botatwe subgroups. A list with innovations from core vocabulary confirming the Botatwe group and its subgroups will be included upon publication of the classification by the author.

²⁰ For a classification of the Botatwe languages, see Figure 2.2, below.

²¹ The formula to derive absolute dates from cognation rates is:

$$\text{years BP} = \frac{\log C}{\log R}$$

where C is the cognation rate and R is the rate of change, 73-74% retention per 1000 years.

Glottochronology remains a contested methodology for dating linguistic histories.²²

Generally, scholars critique the method for assuming that all languages share regular and predictable rates of change in core vocabulary. Thus, this argument continues, glottochronology obscures historical factors that might make a language more conservative or more innovative than the rate used by glottochronology to generate absolute dates from cognation rates. The misunderstanding is rooted in confusion about what glottochronology actually measures.

Glottochronology assumes random, unpredictable language change because the cognation rates manipulated by glottochronology are measurements of random, unpredictable changes in core vocabulary. However, extensive research in a variety of languages across the globe in close comparison with dated written records confirms the axiom on which glottochronology depends: random, unpredictable changes in core vocabulary accumulate over very long spans of time in a predictable pattern in which 73-74 out of 100 basic words are retained every 1000 years.²³ In other words, the random, unpredictable bursts of change in localized, historically contingent contexts over short spans of time accumulate and average out to occur at a predictable rate over very long spans of time.

²² For assessments of the debates surrounding the use of glottochronology, see Sheila Embleton, *Statistics in Historical Linguistics* (Bochum: Brockmeyer, 1986); Colin Renfrew, April McMahon and Larry Trask, eds. *Time Depth in Historical Linguistics* (Cambridge: MacDonald Institute for Archaeological Research, 2000); Vansina, *How Societies*, Appendix.

²³ Christopher Ehret has argued that the same is true in African languages based on correlations with archaeology as a source of absolute dates. Christopher Ehret, "Testing the Expectations of Glottochronology against the Correlations of Language and Archaeology in Africa," in Colin Renfrew, April McMahon and Larry Trask, eds. *Time Depth in Historical Linguistics* (Cambridge: MacDonald Institute for Archaeological Research, 2000): 373-399; Idem, "Bantu Expansions."

Dates developed from applying glottochronology to cognation rates are approximate at best.²⁴ However, they are certainly more precise than the relative chronology inherent to the classification! The approximate dates obtained from glottochronology allow us to develop correlations with archaeological and environmental chronologies. These alternative chronologies may confirm dates based on cognation rates. Indeed, direct associations between evidence for specific climates, environments, species, tools, and practices across the different streams of historical data can contribute to the methodological debates surrounding glottochronology.

2.3 The Principle of Least Moves: Locating Proto-languages in Space

There are two important factors in locating languages and proto-languages in space: proximity to each other and the principle of least moves. The geographic proximity of languages and protolanguages can often be detected in particular patterns of cognation rates, such as the skews that attest to dialect chains described above. These patterns of proximity can be illustrated by Venn diagrams, which serve as an initial mapping of languages. Such relative locations can be placed in geographic space by applying the principle of least moves.

The principle of least moves takes as its starting point the aphorism that the least complicated explanation is usually the correct one. Thus, to determine where a proto-language was spoken, that is, the approximate location of a speech community in any generation earlier than that of the extant languages, we locate the geographic center of its dispersed daughter

²⁴ Jan Vansina observes that dates derived through glottochronology are too specific, thus obscuring the gradual process of divergence. Vansina, *How Societies*, 280. In fact, one may best represent the very slow process of divergence by converting the two ends of a subgroup's core cognation range into calendar dates, rather than just the median, to convey the *range* of time during which divergence may have begun.

speech communities. For the most recent protolanguage, we determine the geographical center of its extant daughter languages; but as we move further back in time and in the classification, the postulated location of the protolanguage becomes less exact in proportion to time depth because we use the approximate location of intermediate speech communities to approximate their protolanguage's location. Ancient speech communities can also be located by noting the area of greatest diversity as the region of greatest antiquity. Edda Fields-Black has recently argued that one may be used to confirm the findings of the other.²⁵

Early models of the expansion of Bantu languages and the people who spoke them relied on concepts like long-distance mass migration and conquest, explanations that better reflected the recent histories of conquest and colonization by those European societies whose scholars wrote about the expansion of Bantu languages than local African patterns and histories of human settlement. The principle of least moves, however, assumes that communities usually spread as people moved out into familiar parts of the local countryside, often as small groups of frontier settlers. This model of human movement has been widely observed in the archaeological and ethnographic records of Africa and beyond.²⁶

Reconstructed words for plants and animals living in particular environments provide important additional information about the location of the protolanguages to which those words

²⁵ Edda Fields-Black, "Before Baga'." The "greatest diversity" argument has its roots in Greenburg's early classification of Bantu and his proposed Proto-Bantu homeland. Joseph Greenburg, *Studies in African Linguistic Classification*, reprint 7 vols. (Albuquerque, NM: University of New Mexico Press, 1949-1950). This line of argument has been used to trace places of origin among other kinds of genetic families in African history, including agricultural crops. See, for example, J. Harlan, "Agricultural Origins: Centers and Noncenters," *Science* n.s. 174 (1971): 468-474.

²⁶ Klieman, "Hunters and Farmers," 16; Igor Kopytoff, "The African Frontier," in *The African Frontier*, ed. Igor Kopytoff (Bloomington: University of Indiana Press, 1987): 3-84; Jan Vansina, "A Slow Revolution: Farming in Subequatorial Africa," *Azania* 29/30 (1994/5): 15-26. Archaeologists have long argued that Early Iron Age farmers had clear environmental preferences. See Chapter 3, below.

can be reconstructed.²⁷ Correlations with the archaeological record provide a third source of data about locating communities in space. We will return to these additional sources of location data in the following chapters to reshape the narrative of language shift and spread inherent to the linguistic classification.

2.4 Classifying Botatwe: Narratives from Core Vocabulary

2.4.1 Toward a New Classification of the Botatwe Languages

A lexicostatistical analysis of core vocabulary from Botatwe and neighboring languages produces a narrative of divergence, spread, and contact among Botatwe languages and their neighbors through time and space. The matrices below display cognation rates between pairs of languages in the Botatwe family (see Figure 2.1) and with neighboring languages (see Figure 2.2). Wherever possible, the highest cognation rates are arranged along the hypotenuse to ensure that closely related languages are adjacent in the matrices. The core vocabulary cognation rates represented in the matrices define sub-branches of Botatwe and the coherence of the Botatwe group itself. Each branching not only holds to a core cognation range of about ten percentage points, but members of each branch also share closer rates with each other than with languages of other branches, attest cognation rates that represent a similar amount of distance from languages of other branches, and share lexical innovations.²⁸ When cognation rates do not follow these patterns, the skews attest to historical contact (see Figures 2.4A-2.4F).

²⁷ See Chapter 4 for an example of this methodology for locating proto-languages.

²⁸ See Appendix 3 for plotted distributions of cognation rates within Botatwe sub-branches showing core cognation ranges and skewed rates. See Appendix 4 for the sound correspondences within Botatwe. See Appendix 5 for reconstructions listed as lexical innovations within Botatwe subgroups.

Figure 2.1: Matrix of Botatwe Cognation Rates

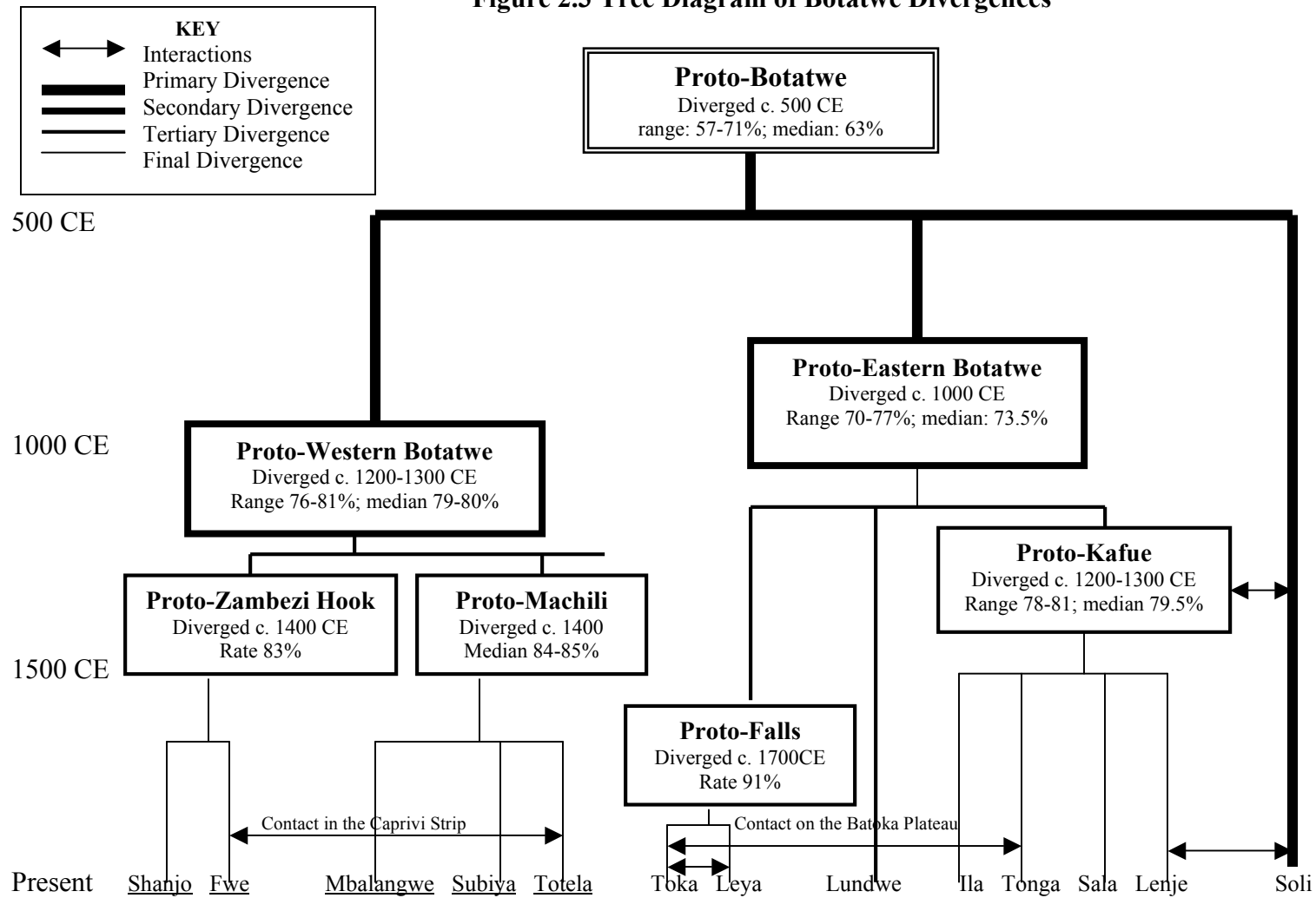
Soli (M62)	<div> <div>Primary, Secondary, Tertiary Divergences</div> <div>(M62) Guthrie/Tervuren reference number</div> <div>(M651*) reference number assigned by author</div> <div>Inconsistencies in BOLD denote skews from sustained interaction</div> </div>									
70	Lenje (M61)									
66	81	Tonga (M64)								
61	78	84	Ila (M63)							
68	79	78	81	Sala (M631)						
55	70	76	82	75	Lundwe (M632)					
63	74	77	73	72	74	Leya (M651*) ²⁹				
60	73	75	73	70	72	91	Toka (M652*)			
59	66	65	71	65	64	67	68	Shanjo (K36)		
57	63	62	67	62	62	65	64	83	Fwe (K402)	
54	67	66	70	64	64	69	67	78	81	Subiya (K42)
58	63	63	66	61	62	68	66	79	81	85 Totela (K41)
53	59	59	62	55	58	62	62	76	81	84 84 Mbalangwe (K401/M60) ³⁰

²⁹ Reference numbers assigned by the author have followed the system developed by scholars at the Linguistics Section of the Research Institute of MRAC in Tervuren, Belgium. See Jouni Maho, “A Classification of The Bantu Languages: An Update of Guthrie’s Referential System,” in *The Bantu Languages*, ed. Derek Nurse and Gérard Philippson (London and New York: Routledge, 2003), 639-651.

³⁰ The Tervuren scholars have assigned Mbalangwe K401 but in an earlier publication, this language was attached to the M60 group to show that it related to the “Tonga-Ila” (Eastern Botatwe) group. See Maho, “Classification,” 647; Yvonne Bastin, et. al., *Continuity and Divergence*, 21.

core vocabulary. Absolute dates derived by means of glottochronology are provided along the left axis of the tree diagram.

Figure 2.3 Tree Diagram of Botatwe Divergences



The subgroups illustrated in the cognation matrices and tree diagram present an initial narrative of Botatwe history that emphasizes genetic relationships. The equally important history of contact between languages revealed in skewed cognation rates can be illustrated simultaneously with the genetic history of divergence by employing either a modified tree diagram (see arrows in Figure 2.3) or Venn diagrams to demonstrate interactions (see Figures 2.4A-2.4F).¹ Interactions between Botatwe groups are illustrated by overlapping circles. Contact with non-Botatwe groups occurred throughout this history; these interactions are represented by the proximity of shaded circles to the appropriate neighboring speech community because overlapping circles would render the diagrams unreadable. Specific examples of these interactions are provided throughout the dissertation.

³¹ For the idea of using Venn diagrams to visually illustrate contact between communities, I am indebted to Rhonda Gonzales. See Gonzales, *Continuity and Change*, 43-45.

Figures 2.4A-2.4F: Venn Diagrams of Botatwe Divergence and Interaction

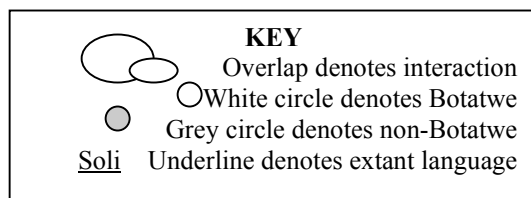


Figure 2.4A: Last Millennium B.C.E to Mid-First Millennium C.E.

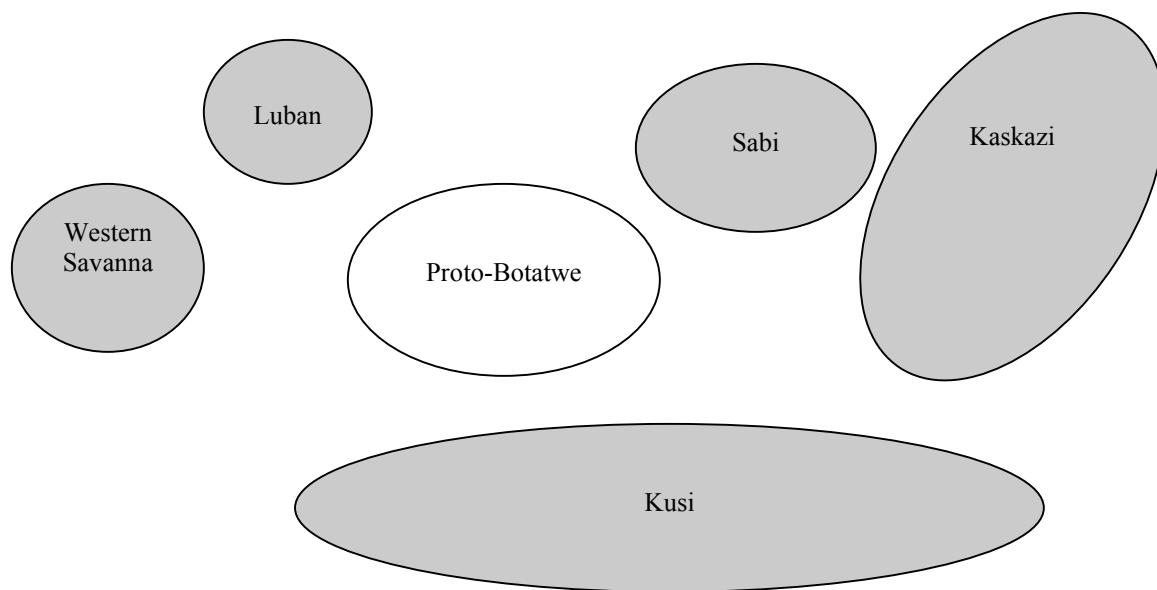


Figure 2.4B: Proto-Botatwe Divergence, c. 500 C.E.

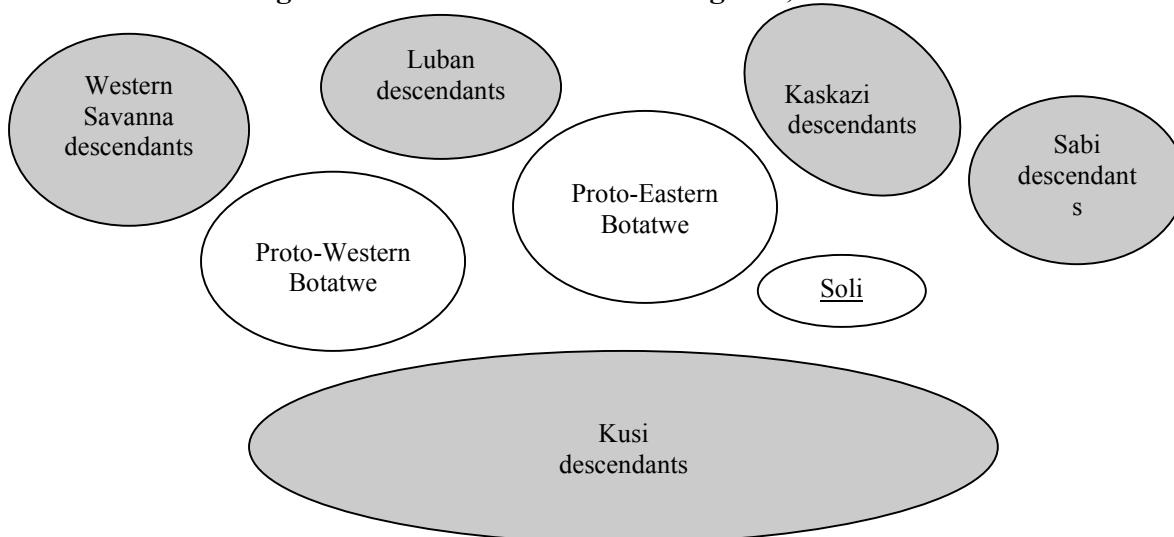


Figure 2.4C: Proto-Eastern Botatwe Divergence, c. 1000 C.E.

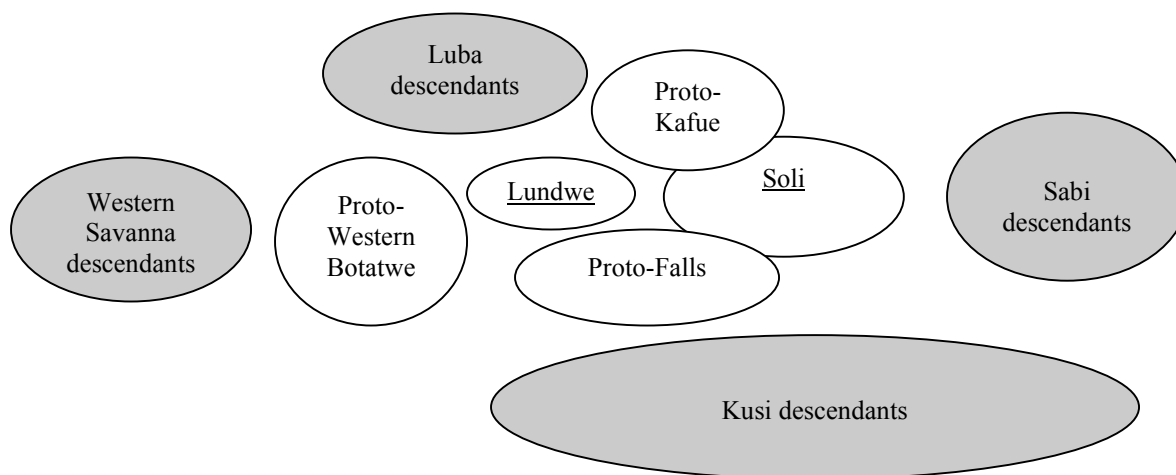


Figure 2.4D: Proto-Western Botatwe & Proto-Kafue Divergence, c. 1200 or 1300 C.E.

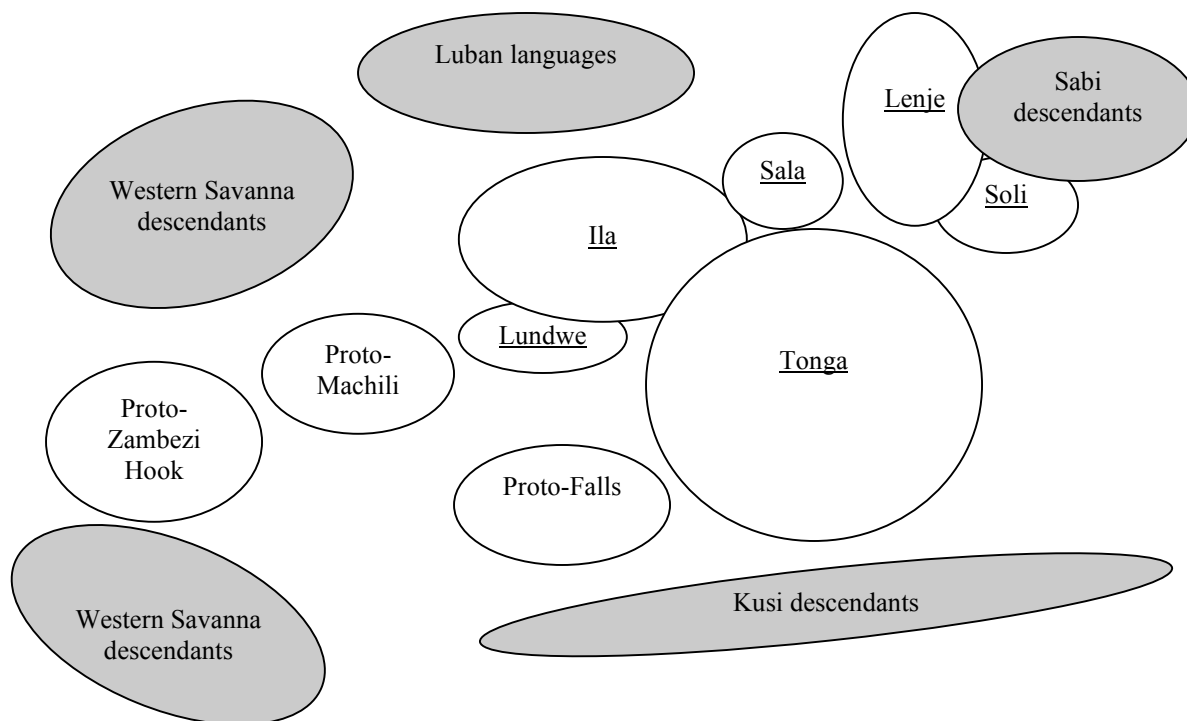


Figure 2.4E: Proto-Zambezi Hook & Proto-Machili Divergences, c. 1400 C.E.

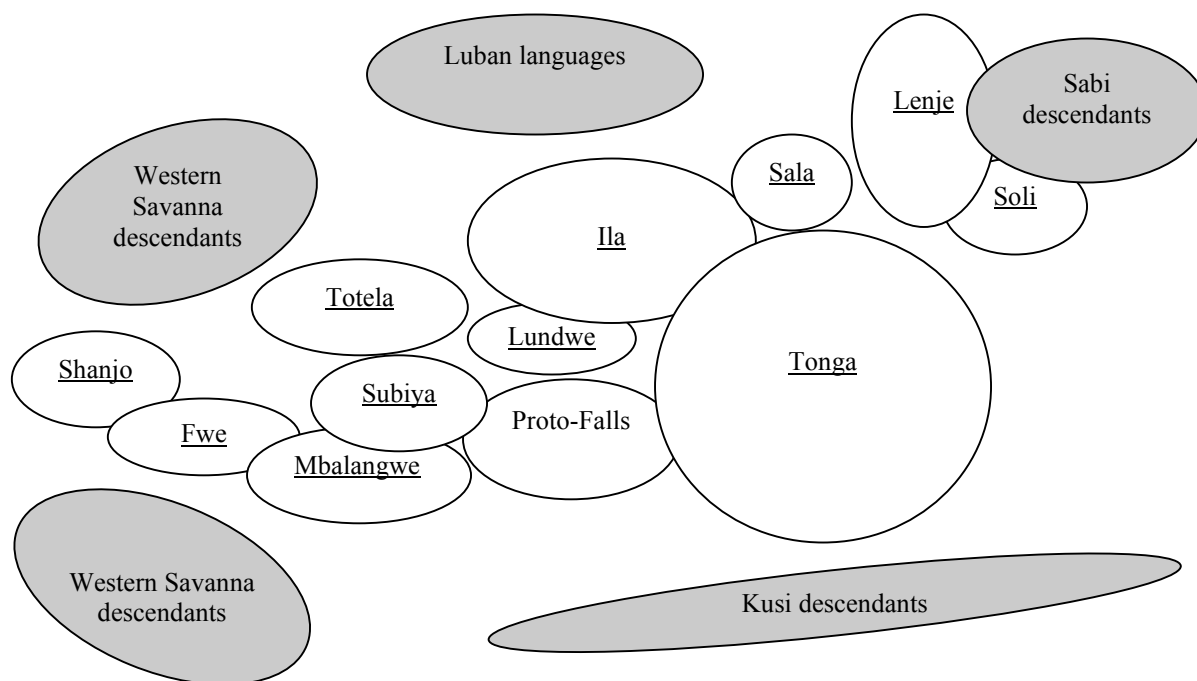
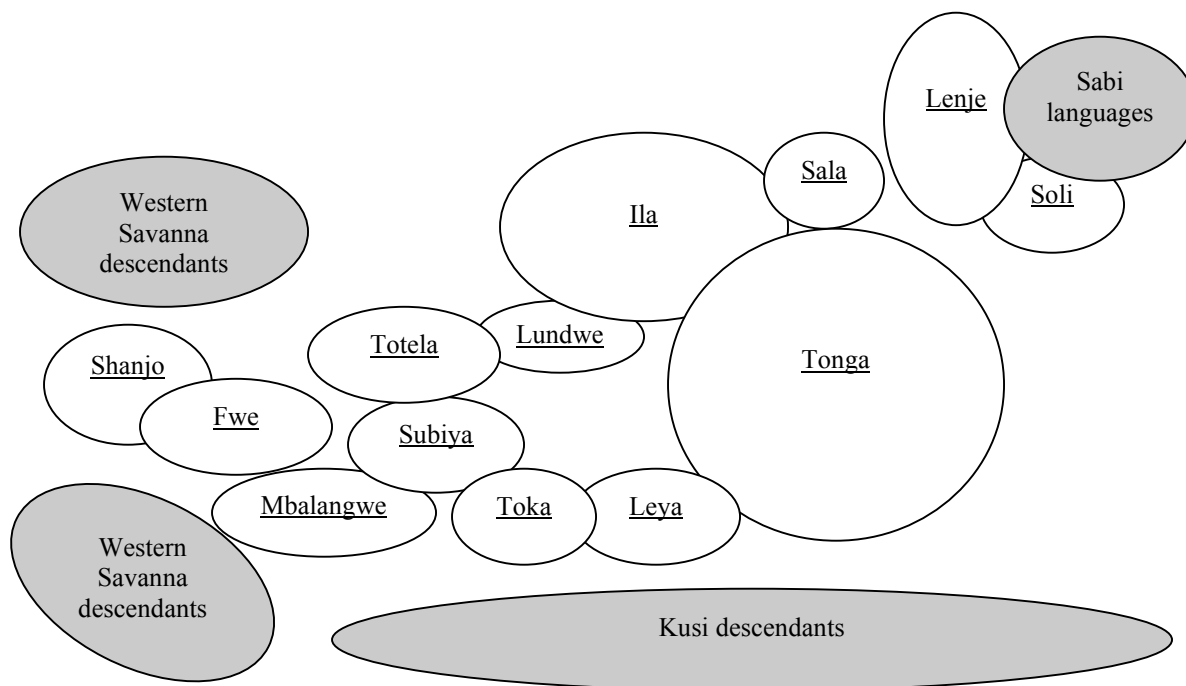


Figure 2.4F: Proto-Falls Divergence, c. 1700 C.E.



2.4.2 Previous Classifications of the Botatwe Languages

The classification and patterns of divergence and contact outlined in the above matrices and diagrams build on previous classifications of Botatwe languages. Father Julius Torrend first identified the Botatwe languages as a related group early in the 20th century and published a comparative dictionary with the assistance of several other linguistically-minded missionaries in the first decades of the twentieth century.² The language family was named for a shared innovation, *-otatwe* for the number “three” and *Bantu Botatwe* for “three people.” Over the course of the twentieth century, missionaries, colonial administrators, and Africans themselves came to use the phrase “Bantu Botatwe” as an ethnonym for various groupings of people speaking these related languages. Following the conventions of the day, Torrend had privileged the largest communities speaking Botatwe languages as the “original” Bantu Botatwe and others as offshoots speaking Botatwe dialects. As a result, other Europeans used a literal interpretation of “Bantu Botatwe” and assumed that Torrend’s phrase referred to Lenje, Tonga, and Ila, those groups he identified as speaking the supposedly original Botatwe languages. Quickly, the cluster of communities who represent the “true” Bantu Botatwe became—and remain—a matter of heated local debate. Indeed, Torrend’s invention of the category Bantu Botatwe and its manipulation by speakers of Botatwe languages during the fight for independence may be one reason scholars left the western branch out of the Botatwe classification until the 1950s.³

³² Julius Torrend, *An English-Vernacular Dictionary of the Bantu-Botatwe Dialects of Northern Rhodesia* (Natal: Mariannhill, 1931). Torrend includes Ila, Tonga, Soli, Lundwe, Lenje, and Kafue Twa in the Botatwe group.

³³ On the mobilization of the category “Bantu Botatwe” to political ends by speakers of languages classified in this study as “eastern Botatwe,” see Elizabeth Colson, “The Bantu Botatwe: Changing Political Definitions in Southern Zambia,” in David Parkin, Lionel Caplan, and Humphry Fisher, eds., *The Politics of Cultural Performance* (Providence, RI and Oxford: Berghahn Books, 1996): 61-80.

Recent researchers have used the comparative method to classify the Botatwe languages, confirming the place of Soli in the Botatwe group despite its heavy borrowing from neighboring Sabi languages, working to classify smaller Botatwe languages, and including languages of the K40 zones spoken in western Zambia, the Caprivi, and northern Botswana in the Botatwe group.⁴ The present work is the first effort to systematically classify all the Botatwe languages in one study and to utilize lexical innovations to confirm subgroups.⁵

2.5 Toward a History of Botatwe Settlement

The data presented in this new classification impart a chronology from core vocabulary and lexical and phonological innovations that form the foundation upon which all reconstructed vocabulary depend. Approximate calendar dates are assigned to the chronology of divergence and contact derived from core vocabulary cognation through glottochronology. The relative

³⁴ Fortune amended Torrend's classification to include Sala but did not include Soli; Bryan classified Lundwe as a Tonga dialect and Kafue Twa as a Lenje dialect. More recent work by Lehmann in the Kafue Basin confirms the placement of Sala, Lundwe, and Soli with Ila, Lenje, Tonga, and Kafue Twa. Ahmed confirms the place of Soli within the Botatwe group, which she lists as Soli, Tonga, Ila and Lenje. Finally, Fortune, Baumbach, and Bostoen classify languages of the K40 zone with the Botatwe group. Fortune includes Shanjo and Toka in his classification and refers to Leya. Christine Ahmed, "Before Eve was Eve: 2200 Years of Gendered History in East-Central Africa," (Ph.D. diss., University of California Los Angeles, 1996); Erdmann J. M. Baumbach, "Languages of the Eastern Caprivi," in *Namibian Languages: Reports and Papers*, ed. Wilfrid G. Haacke and Edward E. Edlerkin (Köln: Rüdiger Köppe Verlag, 1997), 309-451; Koen Bostoen, "A Comparative Approach to Historical Sound Change in Shanjo and Fwe (Bantu, K36 and K402, Western Province of Zambia)" (paper presented at the 39th Annual Conference on African Linguistics, Athens, GA, April 2008); M. A. Bryan. *The Bantu Languages of Africa* (London: Oxford University Press, 1959); G. Fortune, *A Preliminary Survey of the Bantu Languages of the Federation* (Lusaka: The Rhodes-Livingstone Institute, 1959); Idem, "A Note on the Languages of Barotseland," in *The History of the Central African Peoples (papers presented to the Seventeenth Conference of the Rhodes-Livingstone Institute, May-June 1963)* (Lusaka: Rhodes-Livingstone Institute for Social Research, 1963); D. A. Lehmann, "Languages of the Kafue Basin: Introductory Notes," in *Language in Zambia*, ed. Sirarpi Ohannessian and Mubanga Kashoki (London: International African Institute, 1979), 101-120.

³⁵ The long rains of 2005-2006 and impassable roads made it impossible to include Kafue Twa, Lumbu, and Mbala, languages spoken along the Kafue floodplain. Kafue Twa scores in the mid-80s with Tonga, Sala, and Ila, according to Lehmann's cognation rates. See Lehmann, 108. Scholars working in Choma at the local museum suggested that Lumbu and Mbala were no longer spoken, *pers. comm.*

proximity and contact zones (illustrated in Figures 2.4A-2.4F) may be plotted in geographic space through the application of the principle of least moves (see Maps 2.1A-2.1G). With the application of glottochronology and the principle of least moves, the rough chronology of core vocabulary cognation rates begins to take the shape of a narrative of Botatwe settlement.

The history of the Botatwe languages begins north of their current locations, in the equatorial rainforest some five to seven thousand years ago as speakers of Bantu languages expanded south from modern-day Cameroon. The divergence of Proto-Bantu into its daughter languages, particularly whether it diverged into co-ordinate eastern and western branches, has been a topic of debate for several decades.⁶ A likely scenario suggests the division of Proto-Bantu into at least two and perhaps several more branches diverging in quick sequence and spreading primarily southward.

Based on lexicostatistics, stem morpheme innovations, and phonological history and recently upheld in an independent study, Christopher Ehret has proposed the large group Savanna Bantu, which slowly emerged around 2000 B.C.E. far to the south as a sub-branch several generations removed from Proto-Bantu, probably following the Congo River southward from the Sangha River area.⁷ Over the next millennia, Savanna Bantu spread southward into the

³⁶ Whilst describing the East/West Bantu debate is beyond the scope of this dissertation, there are many valuable summaries of this scholarship. For an *entrée* into the most recent research on multiple sub-branches of Proto-Bantu, see Bastin et.al., *Continuity and Divergence*; Ehret, “Subclassifying Bantu”; Idem, “Bantu Expansions”; Klieman, “Hunters and Farmers”; Holden and Gray, “Rapid Radiation.” Christopher Ehret has argued that the seeming split of Bantu into East and West Bantu was more likely a product of the affects of borrowing (Bantu from Bantu in the West and Bantu from non-Bantu in the East). Ehret, “Bantu Expansions.” For a summary of some of these positions, see Derek Nurse and Gérard Philippson, ed., *The Bantu Languages* (London and New York: Routledge, 2003). For an early history of Bantu classifications, see Vansina “Bantu in the Crystal Ball.”

³⁷ On Savanna Bantu as a subgroup, see Ehret, *Classical*; Idem, “Subclassifying Bantu.” For a critique of the lexical innovations supporting Ehret’s classification of Savanna Bantu, see Derek Nurse and Gérard Philippson, “Towards a Historical Classification of the Bantu Languages,” in Derek Nurse and Gérard Philippson, eds., *The Bantu Languages* (London and New York: Routledge, 2003): 164-181. For an independent analysis confirming Savanna Bantu as a coherent subgroup, see Holden and Gray, “Rapid Radiation.” For a suggested revision to one sub-group

moist woodland savanna, slowly diverging into either two or three coordinate branches. These sub-groups themselves continued to diverge. In the wooded savannas of what is modern-day southeastern Democratic Republic of the Congo, proto-Eastern Savanna spread and split into a cluster of sub-groups, including Proto-Luban, Proto-Botatwe, Proto-Sabi, and Proto-Mashariki by the last centuries of the last millennium B.C.E. (see Figure 2.5).

of Ehret's Savanna Bantu, see Vansina, *How Societies*, Appendix. On the location of Savanna Bantu see aforementioned sources and Klieman, "Hunters and Farmers," 41.

Figure 2.5: Classification of Proto-Savanna³⁸

- I. Proto-Savanna
 - a. Western-Savanna
 - i. Luyana-Southwest Bantu (K.30, L.60, R.20-40)
 - ii. Lwena (K.10)
 - iii. Lunda (L.50)
 - iv. Pende (L.10)
 - v. Kimbundu (H.20)
 - vi. Ovimbundu (R.10)
 - b. Eastern-Savanna
 - i. Luban (L.20-40)
 - ii. Lega (D. 20)
 - iii. Sabi (M.40-50 and N.41)
 - iv. Botatwe (M.60, K.40 and K.36)
 - 1. Soli
 - 2. Proto-Eastern Botatwe
 - a. Lundwe
 - b. Proto-Kafue
 - c. Proto-Falls
 - 3. Proto-Western Botatwe
 - v. Mashariki
 - 1. Kaskazi
 - a. Lakes (zone J, also called D.40-60 and E.10-40)
 - b. Upland (E.50-60 and E.74a)
 - c. Langi (F.33-34)
 - d. Takama (F zone except F.33-34)
 - e. Northeast Coastal (G.10-40 and E.70 except E.74a)
 - f. Njombe (G.60)
 - g. Kilombero (G.50 and P.15)
 - h. Rufiji-Ruvuma (N.10 and P.10-20, except P.15)
 - i. Mwika-Rungwe (M.10-30)
 - 2. Kusi
 - a. Nyasa (N.20-40, except N.41)
 - b. Makua (P.30)
 - c. Shona (S.10)
 - d. Southeast Bantu (S.20-60 and K.21)
 - c. Mbala (H. 40; possible third branch of Savanna-Bantu)

³⁸ This figure is a synthesis of data presented in various illustrations in Ehret, *Classical* and Idem, “Subclassifying.”

2.5.1 Proto-Botatwe Divergence

Proto-Botatwe probably first emerged as a distinct language spoken along the southern edges of the Upemba Depression and the upper reaches of the Lualaba River in the Shaba region of present-day Democratic Republic of the Congo at the close of the last millennium B.C. E. (see Map 2.1A).⁹ The internal coherence of the Botatwe group is clear from its core cognation range of 57-71%, averaging 10-20 percentage points higher internally than rates with neighboring languages. Over the course of the next few centuries, the Botatwe languages slowly spread southwards. The places in which Botatwe languages were carried and adopted gradually fanned out from the core settlement area of Proto-Botatwe to cover the area straddling the watersheds of the northward-flowing and southward-flowing rivers of central Africa. By the middle centuries of the first millennium C.E., the Proto-Botatwe speech community split through a series of phonological, morphological, lexical, and grammatical changes into three unintelligible languages: Soli to the east near the eastern upper tributaries of the Kafue River, proto-Eastern Botatwe northwest of the Soli, perhaps between the upper reaches of the Luapula and Kafue Rivers, and proto-Western Botatwe furthest west, probably near the source of the Lualaba River (see Map 2.1B).

As each of these three speech communities spread southward into present-day Zambia, they created a complex history of interaction not only with speakers of neighboring Savanna Bantu languages simultaneously spreading southwards to the east and west of the Botatwe languages but also with speakers of Kaskazi and Kusi languages (sub-branches of Mashariki, itself a sub-branch of Eastern Savanna Bantu) who had already settled areas that would later be

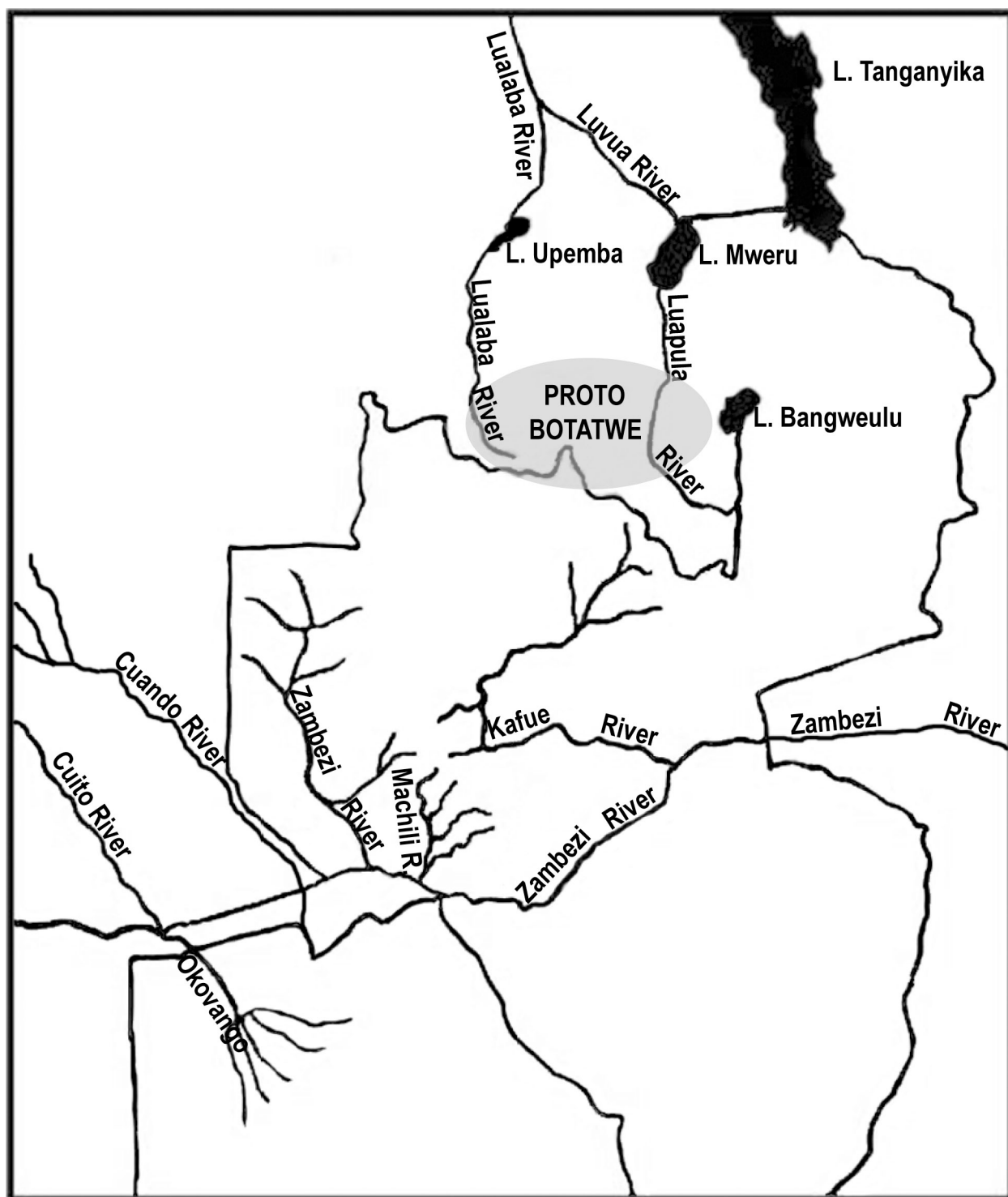
³⁹ Ahmed, "Before Eve," 41; Ehret, *Classical*, 44.

inhabited by Botatwe speakers.¹⁰ The adoption of Botatwe languages by Kaskazi and Kusi speakers and the absorption of these peoples into Botatwe communities probably facilitated the rapid sequence of divergences in the early second millennium C.E. The influence of such neighboring languages will be explored at greater length below.

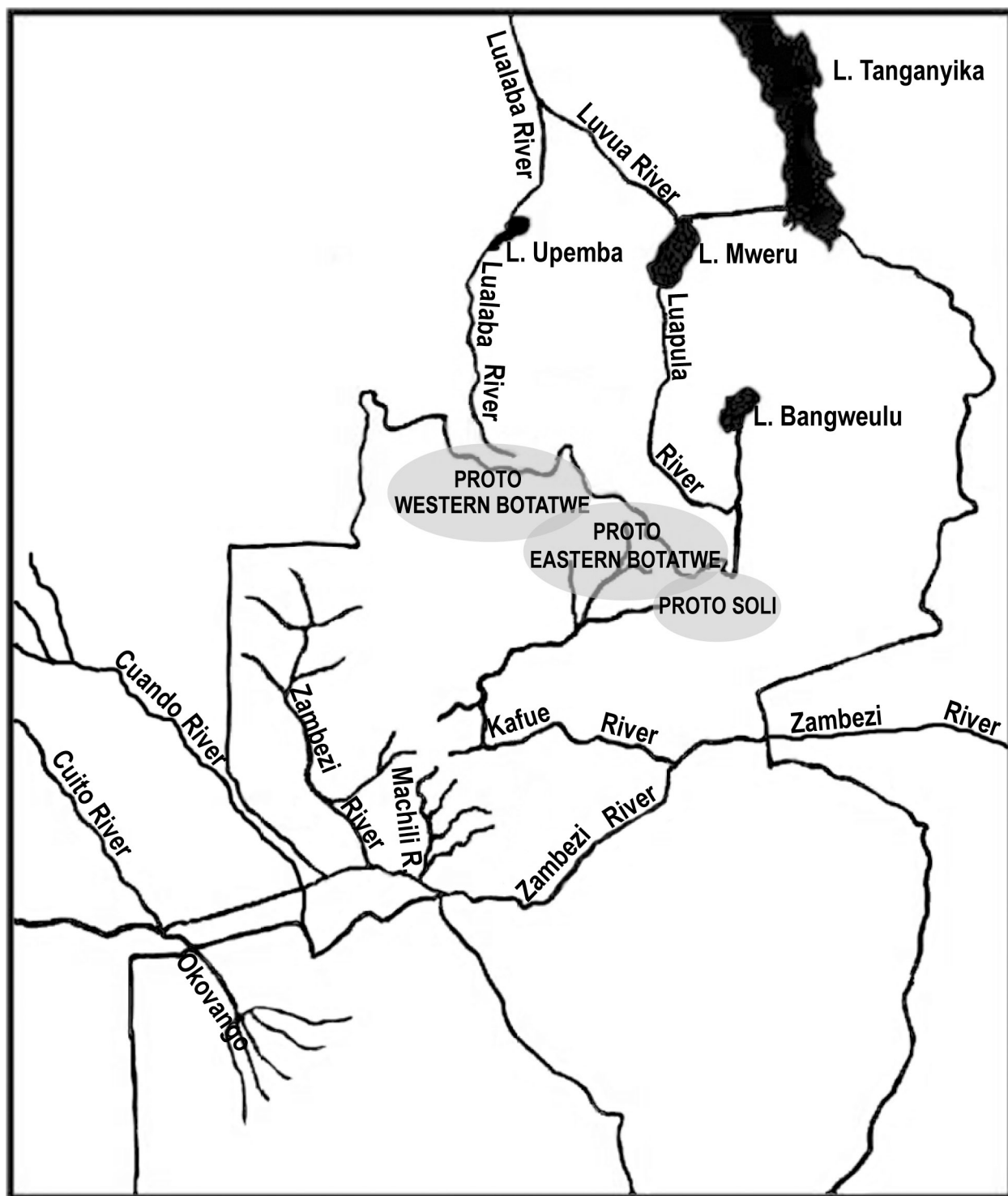
⁴⁰ Ahmed; Ehret, “Subclassifying”; Ehret, *Classical*.

Maps 2.1A-2.1G: Approximate Locations of Botatwe Proto-Languages

Map 2.1A: Last Millennium B.C.E. to Mid-First Millennium C.E.



Map 2.1B: Proto-Botatwe Divergence, c. 500 C.E.



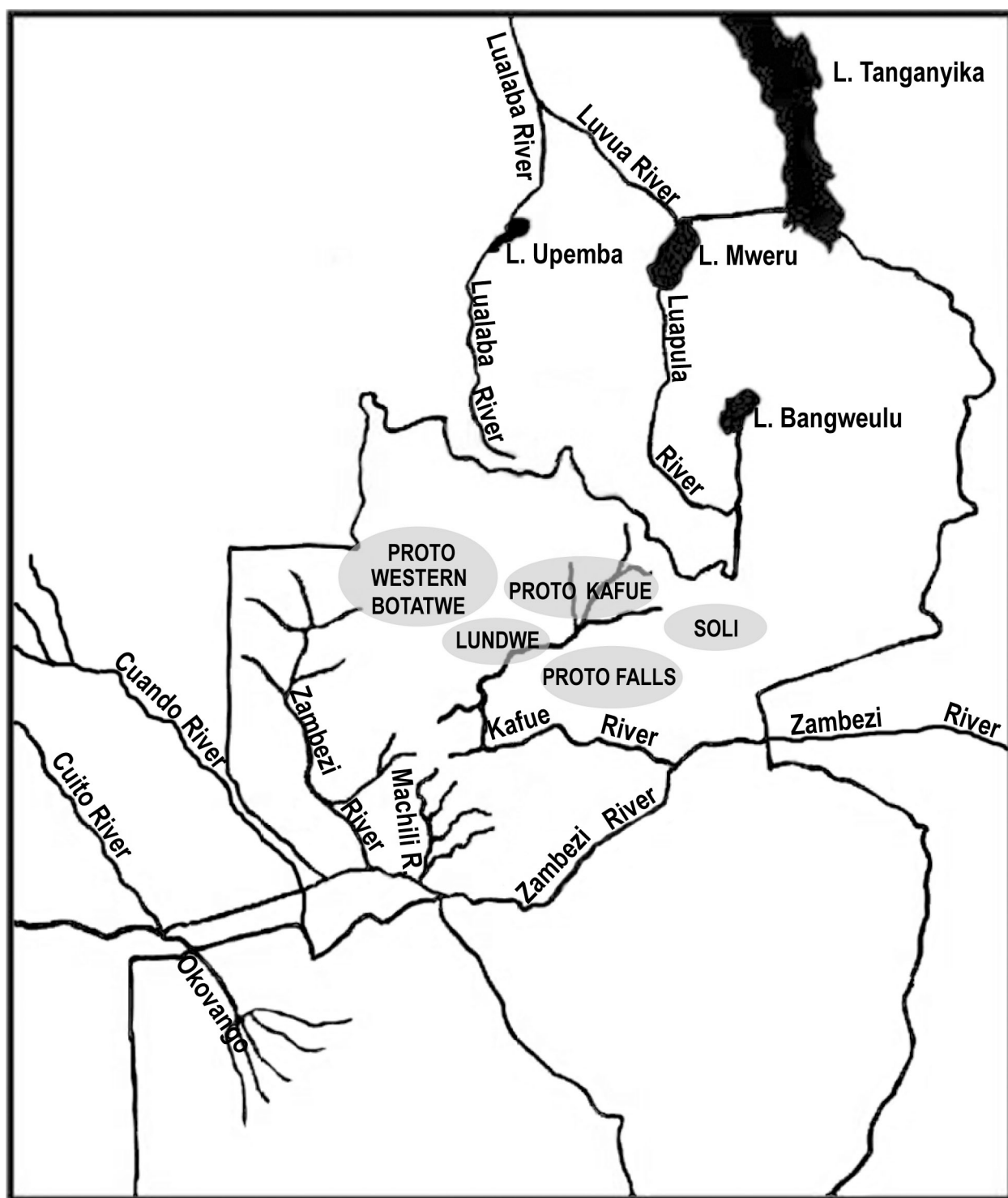
2.5.2 Soli

Soli's cognation rates, averaging in the high 50s to low 60s with the other Botatwe languages, are certainly below the Botatwe average. Yet, its rates with neighboring languages closely mirror those shared by Botatwe speakers, thus suggesting its place in the Botatwe family.¹¹ When we account for the extensive influence of Sabi languages on Soli and its shared lexical innovations with the rest of Botatwe, its place in the Botatwe family becomes clear. In the millennium and a half after its break from Proto-Botatwe, Soli continued to gradually spread southward, probably around the Lukanga swamp, developing a homeland by the late 18th century in the areas to the east and southeast of present-day Lusaka in Zambia.¹² As we can see from the unusually high cognation rates, Soli speakers kept in close contact with Sabi neighbors to the east beginning around the second millennium C.E. Soli speakers borrowed heavily from the core vocabulary of Sabi speakers and, as we will see in subsequent chapters, from their cultural vocabulary as well. In later centuries, Soli spread some of these borrowings to neighboring Botatwe languages to the west, particularly Lenje, Sala, and Tonga.

⁴¹ The lexicostatistical work of the linguists at Tervuren also confirms Soli as a likely primary branch of Proto-Botatwe. See Bastin et. al., *Continuity and Divergence*. See also Ahmed, "Before Eve," chpt. 2.

⁴² P. C. Manchishi and E. T. Musona, *The People of Zambia: A short history of the Soli from 1500 to 1900* (Lusaka: Multimedia Publication, n.d.).

Map 2.1C: Proto-Eastern Botatwe Divergence, c. 1000 C.E.



2.5.3 Proto-Eastern Botatwe Divergence

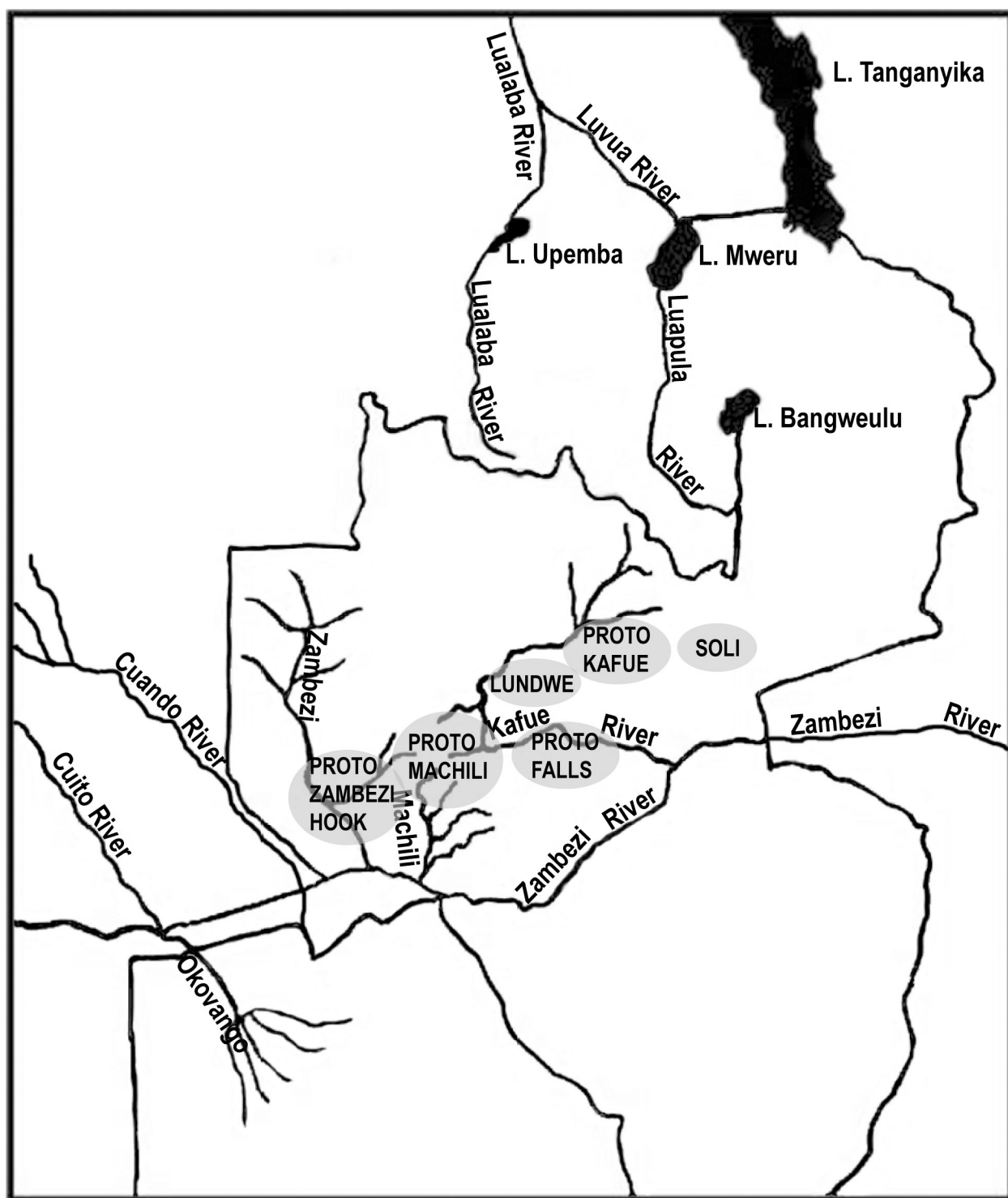
In the last centuries of the first millennium C.E., Proto-Eastern Botatwe spread southward, probably following the Kafue River, slowly giving rise to three distinct speech communities: Proto-Kafue, Lundwe, and Proto-Falls (see Map 2.1C). The divergence of Proto-Eastern Botatwe probably took place around 1000 C.E., according to its core cognation range of 70-77 percent and its median cognation rate percent of 73.5 percent. The Proto-Kafue homeland was probably in the upper reaches of the Kafue, slowly spreading southwards, between the Lukanga Swamps and Kafue Flats. Lundwe would have been spoken to the west and Proto-Falls to the south or southwest.

2.5.4 Lundwe

Lundwe's cognation range of 70-82 percent closely matches the core range of Proto-Eastern Botatwe when we interpret the 82 measurement between Lundwe and Ila as a skew resulting from sustained recent contact.¹³ Thus, after eliminating the high score between Lundwe and Ila, the median of the remaining cognation rates suggests that Lundwe emerged as a distinct language from the Proto-Eastern Botatwe divergence some time after 1000 C.E. As Lundwe diverged from Proto-Eastern Botatwe, it slowly spread southward, across the Kafue River. Eventually Lundwe speakers established their community on the Batoka Plateau, southwest of Ila speakers. In recent centuries, Lundwe speakers were squeezed between expanding Ila communities to their north and Tonga speakers filling in the Batoka Plateau from the south.

⁴³ Lehmann reckons far higher rates between Lundwe (sometimes called Tonga-Ila by Zambians), Ila, and Sala but her personal notes explain that her data for Lundwe was collected from two very young schoolboys in the eastern Ila area near the area where Sala is spoken. Lehmann is, therefore, uncertain about the quality of her Lundwe data. Likewise, her Sala data was limited to some 75 sentences from one speaker outside the Sala area. Lehmann Papers, Special Collections, University of Zambia.

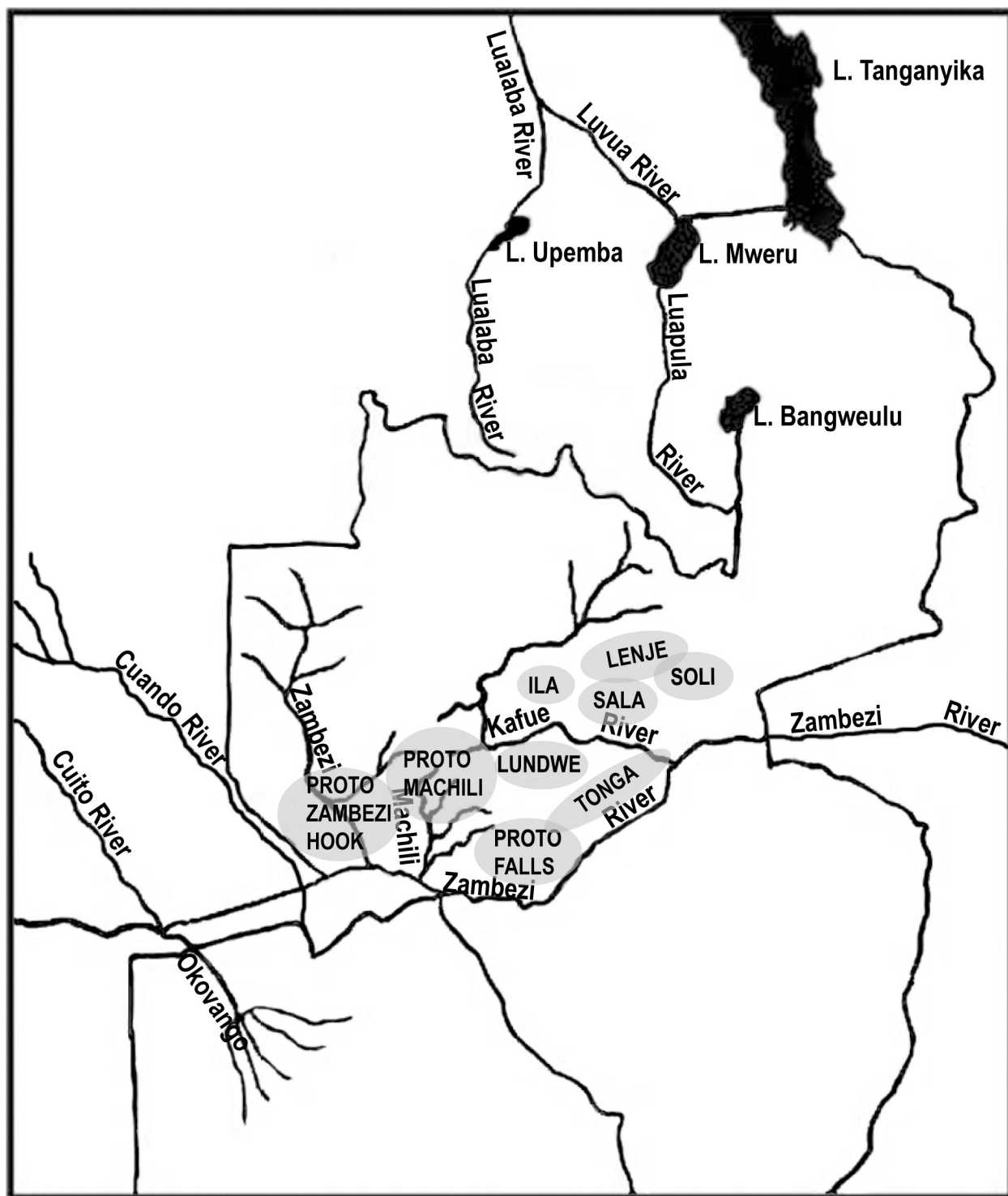
Map 2.1D: Proto-Western Botatwe Divergence, c. 1200-1300 C.E.



2.5.5 Proto-Western Botatwe Divergence

In the last centuries of the first millennium and the early centuries of the second millennium C.E., as Proto-Eastern Botatwe was diverging into Proto-Kafue, Lundwe, and Proto-Falls, speakers of Proto-Western Botatwe, probably poised at the source of the Lualaba river or further south near the Ntemwa wetlands, began to spread southward from that core settlement area along western tributaries of the Kafue, to the west of the Kafue Hook and into the upper reaches of the Machili River system. As Proto-Western Botatwe spread, it diverged into two branches, Proto-Machili in the east in the Machili River system and Proto-Zambezi Hook to the west, perhaps initially near the Zambezi floodplain but subsequently filling in the lands at the hook of the Zambezi River (see Map 2.1D). Proto-Western Botatwe, with a core cognation rate of 76-81% and a median of 79-80% diverged around the 13th or 14th century CE. Indeed, the rapid pulses of linguistic change marked by the divergences of Proto-Eastern Botatwe, Proto-Western Botatwe, Proto-Kafue, Proto-Zambezi Hook, and Proto-Machili in the first half of the second millennium constitutes a historical problem that will be explored in the following chapters.

Map 2.1E: Proto-Kafue Divergence, c. 1200-1300 C. E.



2.5.6 Proto-Kafue Divergence

With a cognation range of 78-81 percent, the Proto-Kafue speech community was particularly short-lived. Speakers of this protolanguage expanded in the first centuries of the second millennium C.E. eastward towards Soli with the divergence of Lenje, southwestward along the Kafue River with the divergence of Ila, and southeast into the Blue Lagoon area with Sala. Tonga seems to have followed the Kafue River to its confluence with the Zambezi and spread up the Zambezi towards the Falls and, subsequently, up from the Zambezi Valley onto the Batoka Plateau. It may be that the “Plateau” dialect of Tonga resulted from an independent, simultaneous spread from the Kafue/Zambezi confluence and/or the Kafue plains onto the Batoka Plateau (see Map 2.1E).

2.5.7 Proto-Zambezi Hook and Proto-Machili Divergences

The divergences of the daughter speech communities of Proto-Western Botatwe were nearly simultaneous, so they are treated together. With a cognation rate of 83%, Proto-Zambezi Hook split into Shango and Fwe around the early fifteenth century CE, in the Kalahari Sands area around the hook of the Zambezi River. Proto-Machili, located within the Machili River system, split almost immediately after, in the early to middle fifteenth century CE, according to the median cognation rate of 84-85% (see Map 2.1F). Shango and Fwe are still spoken around the hook, near and to the north of the border town of Sesheke in Zambia. Some Fwe speakers moved southward across the Zambezi and into the area of the present day Caprivi Strip during the expansion of the Lozi state, first in the 18th and again in the 19th centuries.¹⁴ The languages that

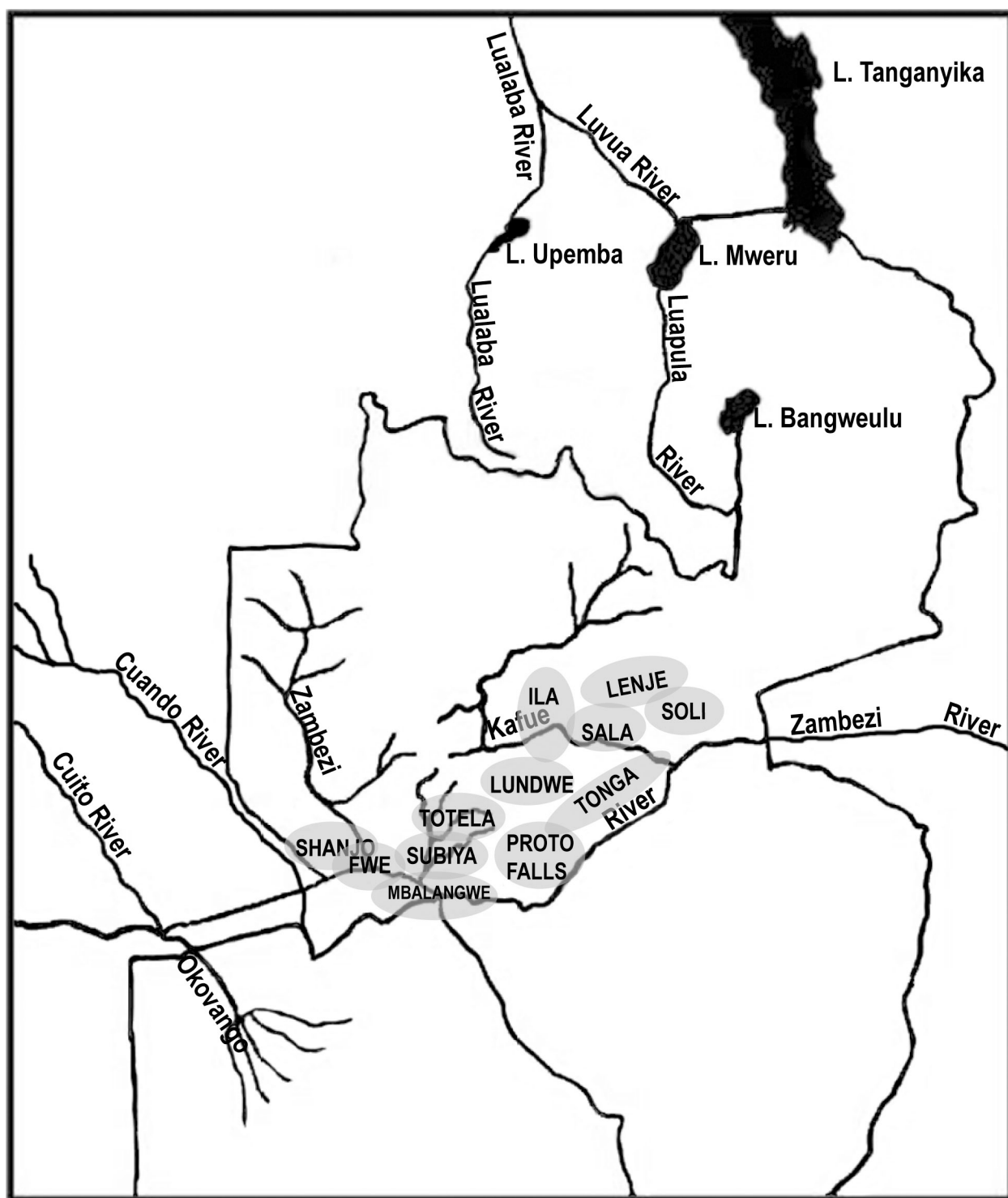
⁴⁴ See Chapter 8 for more on migrations associated with the expansion of the Lozi state.

split off from Proto-Machili filled in the Machili Basin and the lands between the Machili region and the Batoka Plateau (Totela), the Machili region and the Zambezi (Subiya), and the lower Machili region and the Zambezi Hook (Mbalangwe). Like many Fwe speakers, some speakers of these three languages fled the instability created by the expansion of the Lozi state by moving south of the Zambezi River into the swamps of the Chobe and Linyanti Rivers. Others, such as the Subiya living along the river, may have spread across the river not only in flight from Lozi warriors, but also as part of the process of finding new fields to farm.

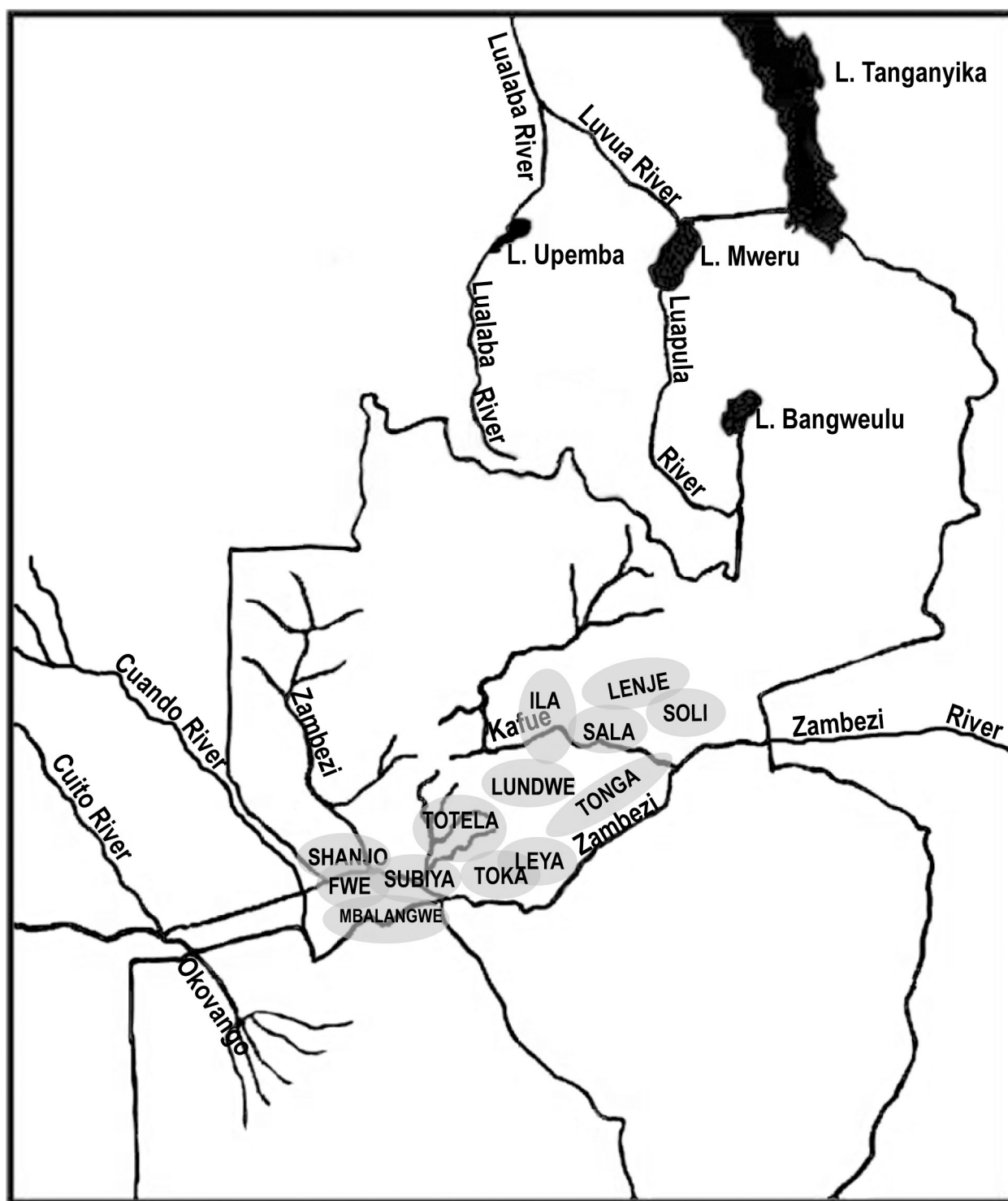
2.5.8 Proto-Falls Divergence

In the second half of the second millennium C.E., the Proto-Falls community located on the northern shores of the Zambezi River to the east and west of the majestic Mosi-o-Tunya waterfall (Victoria Falls) diverged into Toka to the west and Leya to the east. The 91% cognation rate shared by the two languages suggests that they are dialects; however, it is equally likely that this rate has been skewed by continuous contact even as the two communities diverged. It is probable that they diverged deeper in the past than the eighteenth century divergence date derived through glottochronology. Their slightly higher rates with Tonga are probably the result of contact with Tonga speakers spreading throughout the Batoka Plateau and Zambezi Valley to the north and east (see Map 2.1G).

Map 2.1F: Proto-Zambezi Falls and Proto-Machili Divergences, c. 1400 C.E.



Map 2.1G: Proto-Falls Divergence, c. 1700 C.E.



2.6 The Influence of Speakers of Neighboring Languages on Botatwe History

If we use linguistic data to reconstruct the history of the Botatwe communities, we need to better understand the linguistic landscape surrounding Botatwe speakers because these neighboring communities had a significant impact on the development of Botatwe languages, cultures, and thought. Although non-Bantu languages have left their mark on Botatwe languages, this influence occurred almost entirely via other Bantu languages so most of our attention will focus on Bantu-speaking neighbors. The speech communities interacting with Botatwe peoples were numerous and most descended from other branches of Savanna Bantu, the most influential of which were languages of the Mashariki, Sabi, Luban, and Luyana-Southwest Bantu¹⁵ subgroups (see Figure 2.5).

Sabi and Luyana-Southwest Bantu languages spoken on the eastern and western fringes of the Botatwe communities respectively, played a lesser role in Botatwe history because their influence on Botatwe peoples was limited to more recent eras and constricted in linguistic scope to immediately neighboring speech communities. For example, linguistic evidence demonstrates that the Sabi languages on the eastern edge of the Botatwe area, especially Lamba, were in regular contact with two Botatwe languages, Soli and Lenje, and that the majority of this interaction was recent, having been initiated after the divergences that produced Soli, Lenje, and Lamba as distinct languages. This interaction between Botatwe and Sabi communities, then, belongs to the most recent period we are able to elucidate through language history, some time in the mid to late second millennium C.E.

⁴⁵ Vansina produced a modified classification and history of this branch, which he calls the Njila languages. However, Vansina understands Njila to belong to the Western Bantu languages. Vansina, *How Societies*.

People speaking the languages of the Western subgroup of Savanna Bantu, particularly the languages of the Luyana-Southwest Bantu group, had similar interactions with the western Botatwe communities. It seems likely from the sound changes and distributions of attested cognates that this interaction took place over a longer period of time. Some words were innovated out of a period of interaction in the late first millennium and early second millennium C.E. in the region stretching from the east of the great floodplain of the upper Zambezi River to its hook in southwest Zambia. Clusters of communities speaking ancestral forms of western Botatwe and Luyana-Southwest Bantu languages created an areal zone, exchanging words and ideas back and forth across linguistic boundaries, possibly as early as the mid-first millennium C.E. when the Sioma archaeological tradition demonstrating continuities down to present-day Luyana communities first appeared in the floodplain.¹⁶

Later stages of the mutual influence of western Botatwe and Luyana-Southwest Bantu peoples unfolded further to the south, particularly in the last few centuries between speakers of Botatwe languages who had been pushed into the Caprivi Strip with the expansion of the Lozi polity and Southwest Bantu languages already spoken in that area. For example, Yeyi, a Southwest Bantu language spoken in the Caprivi and northern Botswana borrowed heavily from Fwe, Mbalangwe, Subiya, and Totela.

To complicate this history, Kusi and Kaskazi (sub-groups of Mashariki) words spread to Luyana languages and indirectly to Southwest Bantu languages further west and south.¹⁷

⁴⁶ Ehret calls this a northern Kalahari Areal zone, “Subclassifying Bantu,” 52. For the connection between Sioma pottery and Luyana languages, see Nicholas Katanekwa, “The Iron Age in Zambia: Some New Evidence and Interpretations” (paper presented at the Conference on Agricultural Origins in Eastern Africa, Cambridge University, 1995).

⁴⁷ Ehret, “Subclassifying Bantu,” 50-53. See also reconstructions in Chapters 6-9, below.

Although some of these influences could have spread via Botatwe speakers, it seems more likely that they occurred in an earlier era through direct interaction between Luyana peoples and early Kusi speakers on the Batoka Plateau and near the Zambezi hook and with early Kaskazi communities near the Kafue before the Botatwe languages spread into these regions from the north. Other borrowings may be the result of a more recent long-term period of areal exchange along the mid-Zambezi region, occurring in pulses of interaction over the course of the last 1500 years.

The most influential interactions in the development of Botatwe languages and history occurred between Botatwe and Mashariki communities. The influence of Mashariki communities may be isolated to a series of interactions occurring at specific times in particular regions. In the northern fringes of the central African savanna belt during the last millennium B.C.E. and early first millennium C.E., Botatwe, Sabi, and Mashariki speakers exchanged a number of words, probably including vocabulary for metallurgy and cereal agriculture, attesting to either prolonged contact and interaction as an areal zone or, perhaps even a genetic relationship that would group these branches into a Wide Mashariki Bantu group that existed briefly as a branch of Eastern Savanna Bantu before quickly diverging into the distinct Botatwe, Sabi, and Narrow Mashariki communities.¹⁸

Several hundred years later, Proto-Mashariki had diverged into two clusters, Kaskazi and Kusi. Languages belonging to these two groups would come to play an important role in Botatwe history. The heavy borrowing of Kaskazi and Kusi words into both cultural and core Botatwe vocabulary strongly suggests that some outlying Kaskazi and Kusi communities were absorbed

⁴⁸ Ehret, *Classical*, 45; Idem, “Subclassifying Bantu,” 50-51, 52. See also Holden and Gray, “Rapid Radiation.”

into Botatwe communities. This process of absorption was a slow one in which the different linguistic communities probably first lived in adjoining lands, sharing ideas about their surroundings and ways of life and most likely learning each other's languages. If archaeological correlations bear out, peoples from different linguistic backgrounds continued to find it important to make distinct forms of pottery that attest to a few hundred years of living in villages side by side. Slowly, these groups would have settled amongst each other, probably intermarrying and developing bilingual communities. Eventually, speakers chose to communicate using Botatwe languages to the exclusion of other Bantu languages, but the absorption of outlying Kaskazi and Kusi Mashariki communities at different periods in Botatwe history had a profound affect on Botatwe languages, technology, and thought.

By the start of the Common Era, southerly Kaskazi outliers spread southwest into eastern and southern central Zambia, probably reaching into the Kafue region and the Batoka Plateau. These Kaskazi speakers practiced mixed agriculture, investing in cattle keeping as well as the cultivation of grain, root, and seed crops like beans and calabashes.¹⁹ They were also, as we shall learn, particularly knowledgeable about bushcraft. As Botatwe communities spread southwards, they probably lived among their Kaskazi neighbors for several generations, before Kaskazi speakers fully shifted to Botatwe languages. The borrowing of Kaskazi words into Botatwe vocabulary occurred throughout this period of interaction. Some words seem to have been borrowed when Proto-Botatwe still existed as a series of clusters of slowly diverging dialects; however, the bulk of this borrowing seems to be the result of the absorption of speakers of

⁴⁹ Ehret, *Classical*, 234-7, 242.

outlying Kaskazi languages into the Proto-Eastern Botatwe and Proto-Kafue communities in the second half of the first and the early centuries of the second millennium C.E.

Linguistic evidence for interactions between speakers of Kusi and Botatwe languages are far more complicated to untangle and probably occurred over three different periods. The earliest period of interaction began in the mid-first millennium C.E. as Botatwe languages spread into central Zambia, diverging into Soli, Proto-Eastern, and Proto-Western Botatwe. At the same time that speakers of Botatwe languages were in contact with outlying Kaskazi communities to the east, they were also in contact with speakers of different Kusi languages to the south. Like the history of Botatwe-Kaskazi relations, Botatwe-Kusi interaction began as communities lived side by side for several centuries. Eventually, Botatwe languages came to dominate the region and some of the knowledge and vocabulary of Kusi speakers was absorbed by Botatwe-speaking peoples.²⁰ In fact, the great quantity of borrowing of Kaskazi and Kusi words by Proto-Eastern and Proto-Western Botatwe speakers and the likely absorption of those speakers into Botatwe speaking communities was a likely catalyst for some of the rapid pulses of language change that took place in the first half of the second millennium.

Later, as Botatwe languages continued to spread south, speakers of these languages participated in a number of multidirectional exchanges as part of a middle Zambezi areal zone that involved communities on both sides of the river, including speakers of Botatwe, Sabi, Nyasa, and Shona languages. At certain times, these exchanges extended to Luyana and

²⁰ See Chapter 3 for correlations with the archaeological record that support the argument for a mixed settlement and eventually absorption of established communities by new comers based on ceramics as a marker of difference.

Southwest Bantu languages spoken further west.²¹ The exchange of information among peoples of this region was uneven, as participating communities invested more or less energy in interactions along the river at different times. Regardless, this period of interaction was particularly long, extending from the second half of the first millennium CE up to the present day.

The final period of Kusi influence on Botatwe languages is far more recent. The spread of Southeast Bantu languages of the Kusi family as part of the *mfecane* resulted in the establishment of Kololo/Lozi (henceforth, Lozi) as the *lingua franca* in the Zambezi floodplain. The successful expansion of the Lozi polity first in the 18th and again in the 19th century affected a number of western Botatwe, Luyana, and Southwest Bantu languages as communities were dislocated and pushed south to accommodate or escape expanding Lozi influence. During this period of political upheaval, western Botatwe languages borrowed a number of Lozi words into their vocabulary. However, it is clear that Lozi speakers also borrowed vocabulary from existing Luyana, Southwest Bantu, and Botatwe languages as they absorbed speakers of these languages into the expanding sphere of Lozi influence.

To further complicate the identification of Kaskazi and Kusi borrowings with particular periods and areas of interaction, we must take into consideration the influence of these languages on each other. For example, Kaskazi outliers that reached central and southern Malawi had a profound impact on languages of the Nyasa branch of Kusi in the first centuries of the Common Era; when the Nyasa languages later spread into Zambia and participated in the mid-Zambezi areal zone, they carried these Kaskazi words with them. Similarly, Shona languages of the Kusi

⁵¹ Christopher Ehret is responsible for the identification of this areal zone. See *Classical*, 237 and “Subclassifying Bantu,” 51-2. See supporting linguistic evidence in the following chapters, especially chapter 8.

family attest a large number of borrowings from the Nyasa branch of Kusi; it is possible that a Nyasa substrata underlies the Shona languages, indicating the absorption of a Nyasa-related language by Shona speakers on the Zimbabwe Plateau.²²

The complicated linguistic interactions that unfolded between Botatwe speakers themselves and with and amongst their neighbors demonstrate the extent to which Bantu peoples living in south central Africa valued the exchange of ideas and information. These exchanges produced a diverse, cosmopolitan social and linguistic landscape and attest to the constant process of innovation, the readiness of Botatwe speakers and their neighbors to adopt new ideas and practices, producing a history of change and development that confounds the stereotype of conservative, unchanging societies who lived in Africa millennia ago. As we will see in the following chapters, the production and exchange of information about the bush was a particularly important topic in cross-cultural interactions because this exchange of information enabled newcomers to settle successfully and firstcomers to benefit from the constant influx of immigrant peoples with new ideas.

Reconstructed vocabularies illuminate the flow of ideas across linguistic boundaries and allow us to recover social histories of wild resource use with one of the most important tools people use to participate in their social world: words. Yet, two other streams of information help the historian reconstruct the deep histories of oral societies: archaeological and palaeoclimatic data. These additional sources of historical information provide a context for stories based on reconstructed words, transforming a narrative of linguistic change into a history peopled by speakers, crafters of material culture, and shapers of the environment.

²² For more information on these intra-Mashariki influences, see Ehret, *Classical*, 199, 222-234 and “Subclassifying Bantu,” 51-2.

CHAPTER THREE
NARRATIVES FROM THE SOIL:
LANGUAGE HISTORY, MATERIAL CULTURE, AND CLIMATE CHANGE

The historical implications of our new classification of the Botatwe languages, developed from lexicostatistics, lexical innovations, and phonological history and described in the previous chapter as a unfolding narrative of language divergence, can be interpreted alongside other, parallel chains of historical evidence. Although evidence from historical linguistics and its rules of analysis form the foundation of the story explored here, correlations with archaeology, paleoecology, and climate history test the temporal and geographic framework of the narrative developed through the comparative method and contribute evidence with varying levels of specificity to regional historical processes attested in the linguistic data with less geographic and temporal precision.

Even as we compare historical narratives generated by the three different streams of data—linguistic, climatic, and archaeological—we must remember the distinct limitations of

each methodology.¹ As our assessment of the regional histories of climate and environment, material culture and language unfold, there will be moments when the three streams of data suggest corresponding conclusions about human activity. From such solid correlations, we can make more confident arguments about regional history. However, there are instances where conclusions from the data diverge. In addition to attracting skepticism about the data and its interpretation, these instances of divergent data inspire new historical questions. Let us begin the project of connecting our disparate sources of historical data by familiarizing ourselves with the natural setting of our story.

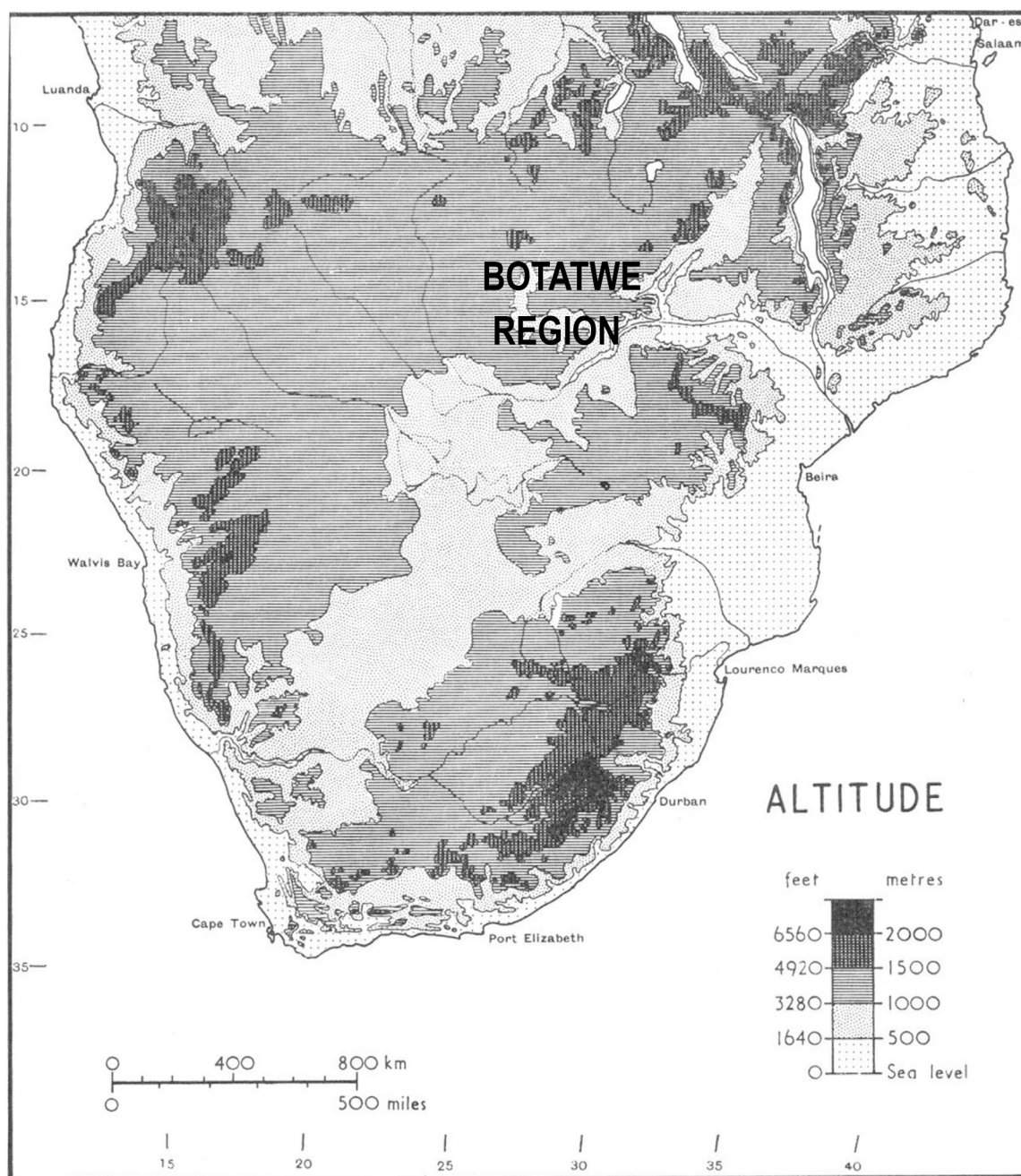
3.1 Topography, Vegetation, & Climate in Central and Southern Africa in the 20th Century

From the savannas separating the Congo and Zambezi River watersheds in southern Democratic Republic of Congo to the southerly fringe of the Kalahari Sands in South Africa, the landscape takes the form of an elevated, basin-shaped plateau. High escarpments form the edges of the basin, reaching 8,000 to 11,000 feet above sea level just inland from the Atlantic and Indian Oceans before gradually running down into the basin's center, most of which lies about 3000 feet above sea level (see Map 3.1). The plateau is dominated by the large expanse of the Kalahari Sands system, which covers the western half of the plateau from about 1 degree North to 20 degrees South in latitude (see Map 3.2). Although the Kalahari evokes images of a dry sand desert, most of the system is covered by scrub vegetation. Local rainfall determines the types of

¹ The scholarship on the Bantu Expansions, a dominant theme in early African history, famously produced an interdisciplinary feedback mechanism in which interpretations of linguistic data shaped the research agenda of archaeologists working in eastern, central, and southern Africa, despite the fact that any notion of the Bantu as a people is a purely linguistic construct. The Bantu Expansions case study serves as a cautionary tale about the challenges of producing interdisciplinary precolonial African history and the exciting possibilities opened up by producing direct associations. See Chapter 1, section 1.3 and citations therein.

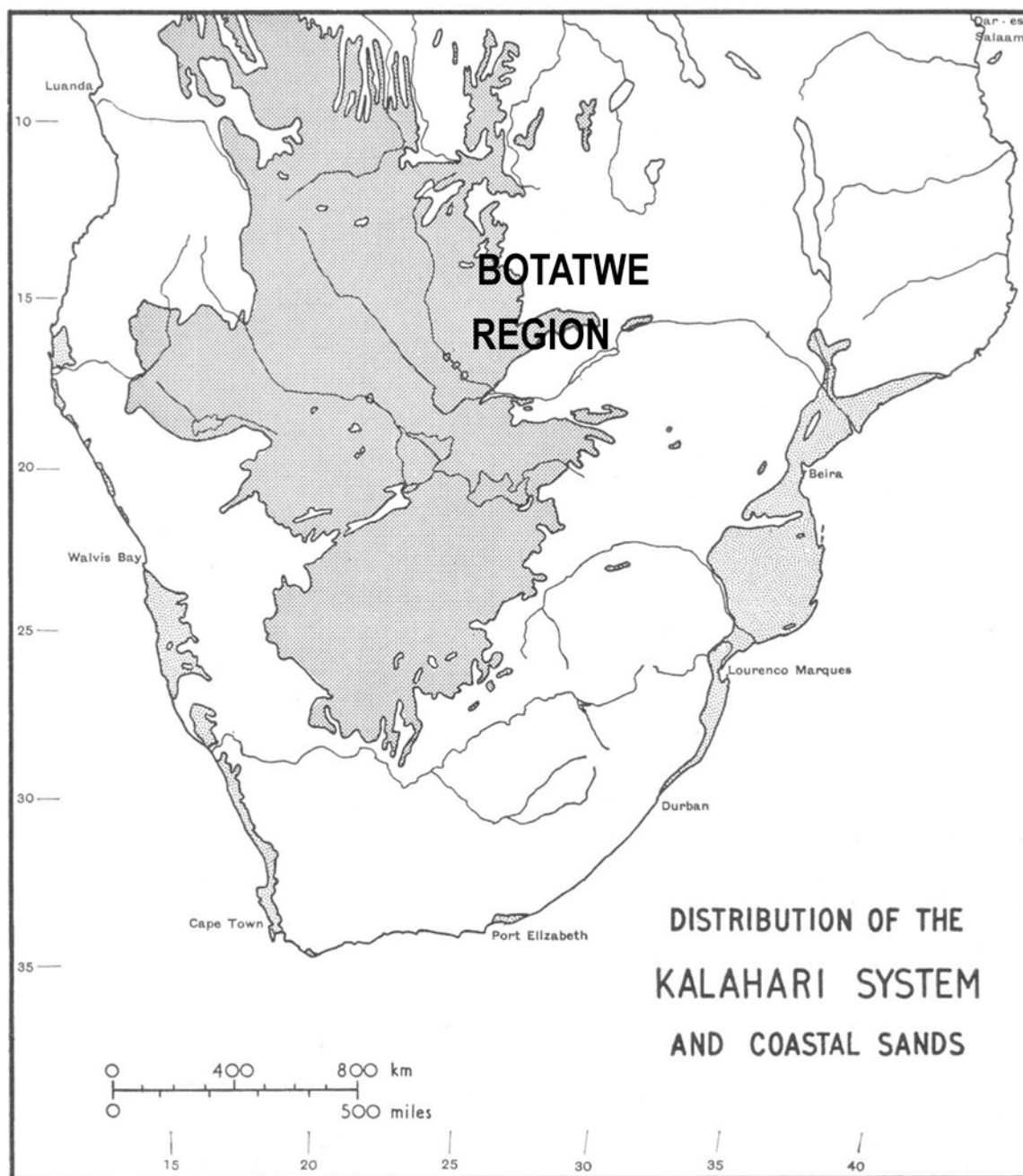
vegetation that grow in the sandy Kalahari soils because there are few surface water systems in the Kalahari Sands area. Therefore, a comprehensive understanding of seasonal and longer-term rainfall patterns is vital to reconstructing regional patterns of historic flora and fauna distributions and their exploitation by humans.

Map 3.1 Topography of Central and Southern Africa in the 20th Century



Adapted from H. B. S. Cooke, "The Pleistocene Environment in Southern Africa," in D. H. S. Davis, ed., *Ecological Studies in Southern Africa*, Monographiae Biologicae 14 (The Hague: W. Junk Publishers, 1964).

Map 3.2 Distribution of the Kalahari Sands in the 20th Century



Adapted from H. B. S. Cooke, "The Pleistocene Environment in Southern Africa," in D. H. S. Davis, ed., *Ecological Studies in Southern Africa*, Monographiae Biologicae 14 (The Hague: W. Junk Publishers, 1964).

Speakers of Botatwe languages have lived in the summer rainfall region of the southern half of Africa for the last three millennia. The weather patterns across this region are created by the annual latitudinal migration of the Intertropical Convergence Zone (ITCZ)², which produces three seasons: a warm rainy season that begins in October and ends around April³, a cold, dry season that begins after the rains and continues until around August or September when the winds pick up and the temperatures rise significantly for the hot, dry season (for average temperatures, see Map 3.3).⁴ This rain regime currently produces an average of 600-800 mm⁵ of rain a year, placing it just on the margin of the 700mm annual minimum required for rainfed agriculture (see Map 3.4).⁶ These averages, of course, shifted over the centuries as the region experienced warmer and wetter or cooler and drier climates, which influenced the distribution of the vegetation communities that thrived in various rainfall patterns.

² For a readable explanation of the ITCZ's effect on weather patterns across southern Africa, see E. M. van Zinderen Bakker, "The Late Quaternary History of Climate and Vegetation in East and Southern Africa" *Bothalia* 14 (1983): 369-375.

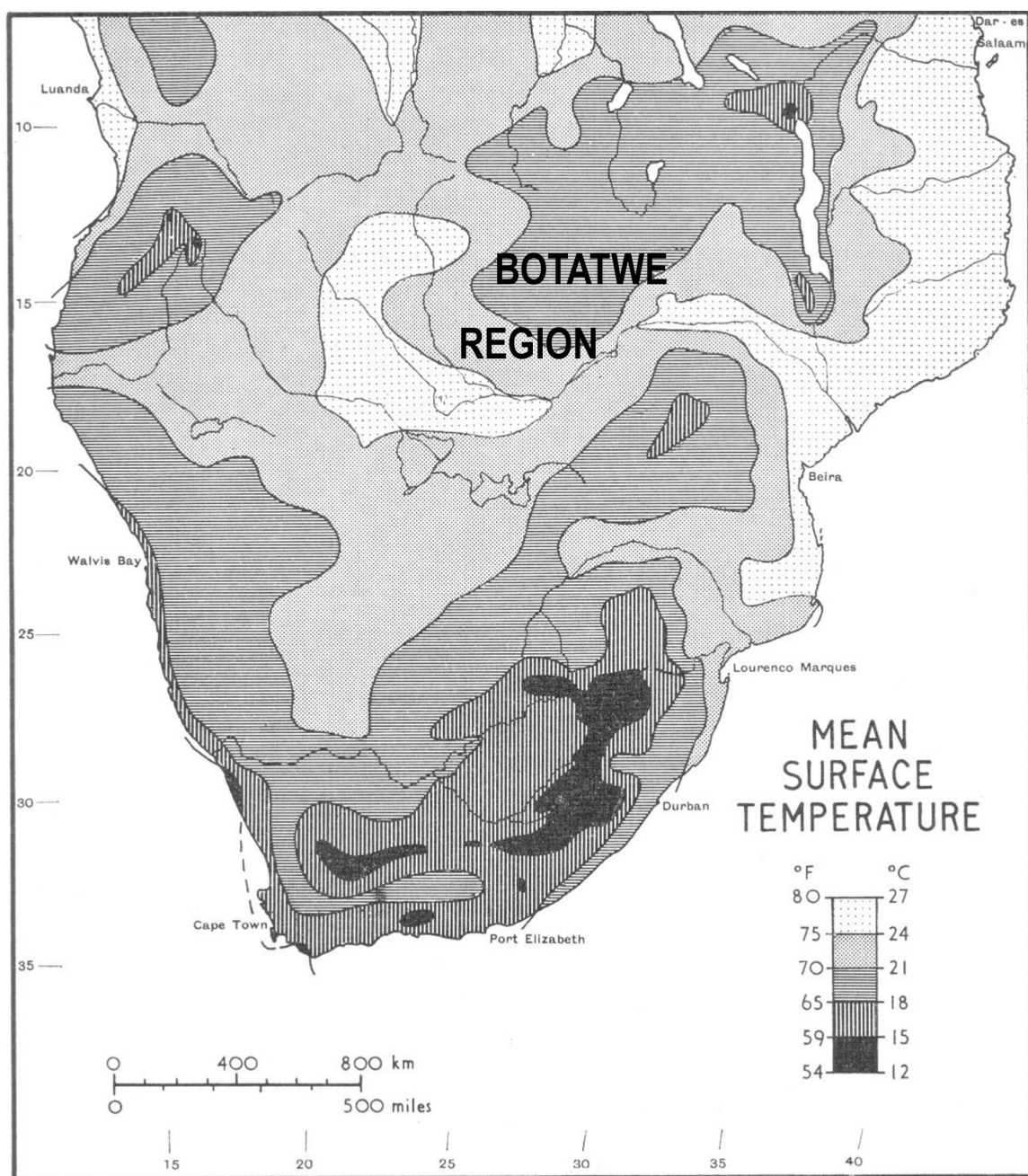
³ Older Zambians explained that the rains seem to be coming later and later each year. In the year I did the fieldwork for this project (October 2005-October 2006), the rains did not begin in earnest until mid-December and continued quite late into May.

⁴ The region in which speakers of the modern-day Botatwe languages live is probably the warmest region of the basin-shaped plateau of southern Africa, especially the lands within in the Zambezi River valley. See Map 3.3 and H. J. Cooke, "The Evidence from northern Botswana of late Quaternary climatic change" in J.C. Vogel, ed., *Late Cainozoic Paleoclimates of the Southern Hemisphere* (Rotterdam: A. A. Balkema, 1984): 265-278.

⁵ Rainfall averages within the basin as a whole range from about 500 to 1000 mm a year. It is the higher elevations, however, that receive the higher rainfall. For example, the hills of Zambia's Northern Province average 1200-1500 mm of rain a year. The rainfall in these high elevations feed the region's major river systems. In other areas, particularly those with woodlands dominated by the *mopane* species, the average is lower, sometimes even 250-500 mm a year. The regions in which Botatwe languages are spoken currently average about 600-800 mm a year.

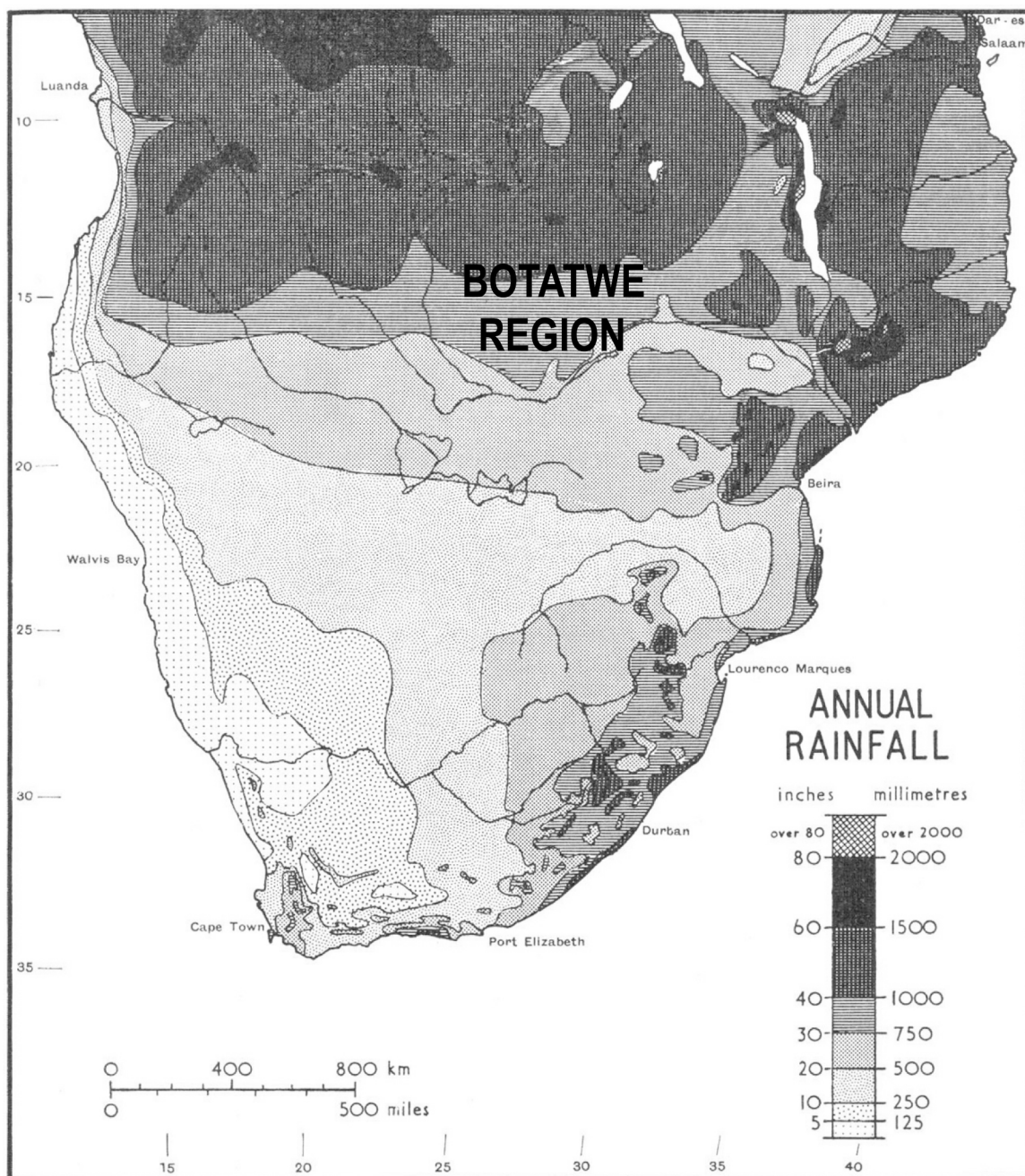
⁶ Jan Vaninsa, *How Societies are Born: Governance in West Central Africa before 1600* (Charlottesville, VA: University of Virginia Press, 2004), 17-18.

Map 3.3 Average Temperatures in Central and Southern Africa in the 20th Century



Adapted from H. B. S. Cooke, "The Pleistocene Environment in Southern Africa," in D. H. S. Davis, ed., *Ecological Studies in Southern Africa*, Monographiae Biologicae 14 (The Hague: W. Junk Publishers, 1964).

Map 3.4 Average Annual Rainfall in Central and Southern Africa, mid-20th Century



Adapted from H. B. S. Cooke, "The Pleistocene Environment in Southern Africa," in D. H. S. Davis, ed., *Ecological Studies in Southern Africa*, Monographiae Biologicae 14 (The Hague: W. Junk Publishers, 1964).

The summer rainfall patterns and three seasons produced by the annual migration of the ITCZ nurture a range of vegetations in the northern half of the plateau's basin, all of which can be broadly described as woodland savanna, sometimes also called wooded grassland. This woodland savanna vegetation stretches from Eastern Angola, through southern DRC, Zambia, Malawi, and most of northern Mozambique (see Map 3.5). The northerly border of this expansive woodland savanna is the boundary separating the Congo and Zambezi River catchment areas. To the south, its spread is limited by the lower rainfall of the Namib and Kalahari desert systems.

The scholarship on the classification of the various regions of south central Africa into vegetation zones is dense, indeed.⁷ Out of this wealth of detail, two vegetation communities, the *miombo* community (including both a northerly and southerly zone) and the *mopane* community are important to our story because the transition between them runs along the crucial isohyetal line marking 700 mm annual rainfall and the limits of predictable rainfed cereal agriculture. This frontier between major vegetation communities advanced and retreated along a north/south axis. The migration of the 700 mm isohyetal line is one part of the story of how Botatwe speakers and their ideas about the relative importance of the work they did in their gardens and in the bush articulated with local ideas about instrumental sources of legitimate political power because the constriction of lands with rainfall levels that could support cereal agriculture did not pose the

⁷ The most extensive ecological survey work of South Central Africa was completed in Northern Rhodesia (now Zambia) in the 1930s and 1940s by Colin Graham Trapnell. Trapnell's survey work covered thousands of miles on foot, by boat, and by truck. Trapnell recorded observations of the local soils, natural vegetation, cultivation practices and a wide array of African names for agricultural and cultural practices as well as flora and fauna. Paul Smith, ed., *Ecological Survey of Zambia: the Traverse Records of C. G. Trapnell* vol. 1-3 (Kew: The Board of Trustees of the Royal Botanic Gardens, 2001).

same threat to all Botatwe speakers. Indeed, seasonal rainfall patterns, cyclical droughts, and longer-term shifts in the 700 mm isohyetal line all produced periods of time of varying lengths when those skilled in hunting, fishing, and gathering wild foods had great negotiating power in making and breaking relationships of indebtedness and alliance.

Generally, we may classify the northern half of south central Africa, from the savannas of southern DRC into southern Zambia, Botswana, and Zimbabwe as sparse woodlands dominated by *Brachystegia* and *Julbernardia*.⁸ *Brachystegia* is characteristic of a type of woodland called *miombo*; *miombo* woodlands generally indicate 600-1400 mm annual rainfall, an elevation below 1800 meters and, paired with their rejuvenation by occasional burning, are favored environments for creating *citimene* (slash-and-burn) gardens. We can further divide the *miombo* vegetation block into northern and southern zones to designate the slightly different floral composition resulting from lower rainfall south and west of the Kafue region of central Zambia.

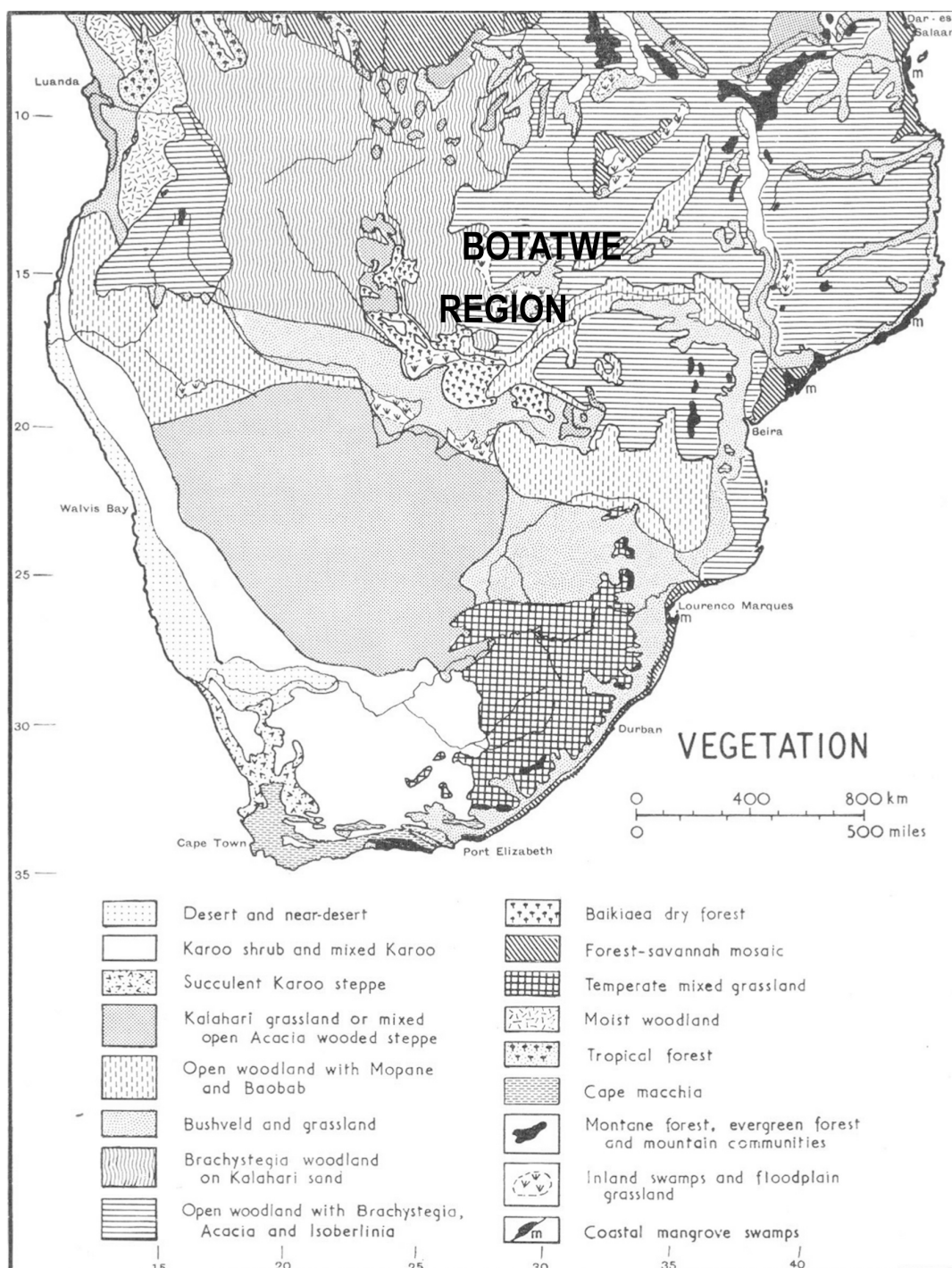
Further to the south, in the lower elevations and hotter, drier climates of the major river valleys, *Colophospermum mopane* is the characteristic tree, although it is still classified by some botanists as a kind of *Brachystegia* woodland. The general difference between the *miombo* and *mopane* zones is the compositional shift to fewer *Brachystegia*, no *Julbernardia*, and more grassland and baobab trees (*Adansonia*) interspersed with the dominant *Colophospermum mopane* tree. A *mopane* environment rarely experiences frost so it is warmer than the *miombo* woodlands; it also thrives with a lower rainfall, about 500-600 mm annually. *Mopane* is often associated with poorly drained clay soils and is favored by tsetse fly and malaria infected

⁸ See Chapter 4 for a more detailed description of regional vegetation zones.

mosquitoes in the summer months.⁹ *Mopane* is common to the major river valleys of southern Africa, including the Limpopo, Okavango, and Zambezi valleys.

⁹ *Mopane* woodlands may have harbored malaria infested mosquitoes and fly vectors of various cattle diseases during the warm, moist summer months as early as the Iron Age because Iron Age peoples generally avoided settling in *mopane* environments. R. Summers, "Environment and Culture in Southern Rhodesia" *Proceedings of the American Philosophical Society* 104 (1960): 280.

Map 3.5 Vegetation of Central and Southern Africa in the 20th Century



Adapted from H. B. S. Cooke, "The Pleistocene Environment in Southern Africa," in D. H. S. Davis, ed., *Ecological Studies in Southern Africa*, Monographiae Biologicae 14 (The Hague: W. Junk Publishers, 1964).

All three wooded savanna types—northern *miombo*, southern *miombo*, and *mopane*—are interspersed with papyrus, flooded grasslands, and even tropical rainforest-like flora in wet areas, such as floodplains or the dampest parts of the Zambezi Valley, near waterfalls and cataracts.¹⁰ Throughout the entire region, all forms of woodland savanna vegetation grow within a nearly continuous mat of grasses. These basic woodland savanna types, particularly northern and southern *miombo* and *mopane*, serve as a useful shorthand to describe how vegetation patterns changed with shifts in rainfall patterns and temperatures over the last three millennia.

3.2 Sources and Methods for Reconstructing Climate History

The sources for reconstructing climate history range from the analysis of physical changes to the earth's surface to the examination of the plants and animals who lived in historic habitats. In central and southern Africa, most of this research has focuses on the analysis of pollen cores (palynology), the examination of tree rings (dendochronology), the study of changes in the earth's surface (geomorphology), and the comparison of remains of extinct species to their modern-day descendants, often using bones of species unearthed in a region as an indicator of its past environment (palaeontology). Palaeontology's chronological reach is, however, far deeper than the range of this study, so our focus will remain on the first three sources of climate history data.¹¹

¹⁰ In some areas, there is a third woodland savanna type: *montane*. *Montane* forests prefer cool, wet climates so they are generally found in higher altitudes (1800m or higher) than are common in those areas in which Botatwe speakers settled.

¹¹ It is interesting to note, however, that archaeological and linguistic evidence from species with particular environmental and climatic needs may be used to diagnose past conditions; in fact this argument will be used in Chapter 4 with respect to linguistic data for such species.

The pollen core samples for this region of Africa are rare and of poor quality because cores need to be lifted from moist, still areas; there are few such swamps and lakes in south central Africa because most surface water is swift moving. However, cores have been taken from northern Angola, the Inyanga mountains of Zimbabwe, the swamps around Lake Bangweulu in the southern regions of the Northern Province of Zambia, and Lake Ishiba Ngandu on the Nyika plateau of the Northern Province of Zambia.¹² Cores from northern Zambia suggest a decline in the kinds of pollens produced by forest vegetation and an increase in grassland pollens around three thousand years ago; similarly, cores lifted from the Inyanga Hills of Zimbabwe demonstrate an increase in grass pollen around 1000 C.E. Palynologists claim that these vegetation shifts are the product of Early Iron Age farmers who practiced slash and burn (*citemene*) agriculture and cut forests to produce charcoal for iron smelting.¹³ This explanation glosses over the fact that shifts in vegetation patterns, such as from water-needy forests to more drought-tolerant grasslands indicate changes in climate patterns, such as local and regional cyclical drying events. Most likely, patterns of drying interacted with historical shifts in emerging iron-oriented subsistence economies but the antiquity of the practices of deforestation associated with *citemene* and charcoal production for iron working must be established with

¹² R. M. Lawton, "A Pollen Analysis of the Lake Bangweulu Peat Deposits" *Northern Rhodesia Journal* 4 (1959): 33-43; *Idem*, "Paleo-ecological studies in Northern Rhodesia," M.Sc. thesis, Oxford University, 1961; *Idem*, "Paleoecological and ecological studies in the Northern Province of Northern Rhodesia," *Kirkia* 3 (1963): 46-77; David A. Livingstone, "A 22,000 year pollen record from the plateau of Zambia," *Limnology and Oceanography* 16 (1971): 349-356; R. W. Tomlinson, *The Imayanga Area: An Essay in Regional Biogeography*, University of Rhodesia Occasional Papers, 1973; E. M. van Zinderen Bakker and J. Desmond Clark, "Pleistocene Climates and Cultures in North-eastern Angola," *Nature* 196, no. 4855 (1962): 639-42.

¹³ Livingstone, "22,000 year pollen record"; Tomlinson, *Imayanga*. For a similar process in the Lakes Region of East Africa, see David Lee Schoenbrun, "The Contours of Vegetation Change and Human Agency in Eastern Africa's Great Lakes Region: c. 2000 BC to c. AD 1000," *History in Africa* 21 (1994): 269-302.

either archaeological and linguistic evidence for these activities or palynological evidence for species associated with secondary growth in fallowed fields.

Despite these broad historical conclusions about the increase in grass pollens, pollen core analysis is complicated by the different pollen production and dispersal capacities of various plants.¹⁴ For example, the trees of south central Africa generally don't produce much pollen. Therefore, huge samples are needed to recognize statistically valid trends. Pollens from grasses could be analyzed to deduce more subtle historical changes, but grasses are difficult to identify; often they are not decipherable beyond the family or genus level of specificity. Thus, it is difficult to differentiate well enough among grass pollens to draw firm conclusions about past climate and vegetation patterns. Moreover, because pollens may be blown great distances before settling to the ground, data from pollen cores do not allow researchers to determine which pollens in the core are the result of local events and which represent broad regional patterns.

A second source of climate history is dendochronology, or the examination of tree growth. The rate of a tree's growth may be ascertained by measuring the width of tree rings, concentric bands visible when a tree is cut down. These rings are produced by the annual growth of the tree as layer after layer forms beneath the bark. During years of adequate rainfall and moderate temperatures, tree rings are wider, representing more growth; they are smaller during droughts. Researchers date periods of plentiful and sparse rainfall by counting rings inward from the bark, with each ring representing one year of growth.¹⁵ For central and southern Africa, we

¹⁴ For critiques of the types of conclusions that can be drawn from pollen core data, see L. Scott, "Palynological Evidence for Quaternary palaeoenvironments in southern Africa," in *Southern African Prehistory and Palaeoenvironments*, R. G. Klein, ed. (Rotterdam: A. A. Balkema, 1984): 65-80.

¹⁵ The method of dendochronology was developed by A. E. Douglass in the late 1890s. For an introduction to this method for recognizing and dating climate change, see M. G. L. Baillie, *A Slice through time: Dendrochronology and precision dating* (London: Batsford, 1995); A. Bayliss, *Dendrochronology: Guidelines on producing and*

can use the results of dendochronology from Natal and Malawi.¹⁶ While dendochronology is limited by the lifespan of most trees—usually a few hundred years—the long lifespan of baobab trees and their prevalence in *mopane* environments make this species a particularly good source for tracing the climate history of the southern Botatwe zone over the last half millennia or longer.

Changes in the surface of the earth provide a third source of data about the climate history of central and southern Africa. Geomorphologists identify these changes, which may include sand dune formation, erosion patterns on various surfaces, and shifts in river and lakebed margins, to postulate climate trends and a chronology of environmental change. For central and southern Africa, research in Malawi along the shores of lakes Chilwa and Malawi and in the Kalahari Sands, with particular emphasis on the greater Okavango Delta area and paleolake Makgadikgadi in northern Botswana, have yielded the best evidence of regional climate history.¹⁷ The Malawian work is particularly interesting because the interdisciplinary research

interpreting dendrochronological dates (London: English Heritage, 1998); J. Hillam, "Dendrochronology - 20 years on," *Current Archaeology* 107 (1987): 358-63; B. S. Ottaway, ed., *Archaeology, Dendrochronology and the Radiocarbon Calibration Curve* (Edinburgh: University of Edinburgh, 1983).

¹⁶ R. Crossley, S. Davison-Hirschmann, R. B. Owen and P. Shaw, "Lake Level Fluctuations during the last 2000 years in Malawi," in *Late Cainozoic Paleoclimates of the Southern Hemisphere*, J. C. Vogel, ed. (Rotterdam: A. A. Balkema, 1984): 305-316; G. L. Guy, "Andansonia Digitata and its rate of growth in relation to rainfall in South Central Africa," *Proceedings and Transactions of the Rhodesia Scientific Association* 54 (1969): 68-84; Martin Hall, "Dendrochronology, rainfall and human adaptation in the Later Iron Age of Natal and Zululand," *Annals of the Natal Museum* 22 (1976): 693-703; Margaret Kalk, A. J. McLachlan, and C. Howard-Williams, eds., *Lake Chilwa: studies of change in a tropical ecosystem* (The Hague and Boston: W. Junk, 1979); Paul A. Shaw, "Lake Chilwa and the Iron Age," *Palaeoecology of Africa* 16 (1984): 1-16; J. G. Storry, "Preliminary Dendochronology Study in Rhodesia," *South African Journal of Science* 71 (1975): 248.

¹⁷ See citations in footnote 16, above, for references to geomorphological studies in Malawi. For work in southern DRC and the Kalahari Sands of western Zambia and Northern Botswana, see H. J. Cooke, "The Paleoclimatic Significance of caves and adjacent landforms in western Ngamiland, Botswana," *Geographical Journal* 141 (1975): 430-444; Idem, "Landform Evolution in the Context of Climatic Change and Neotectonism in the Middle Kalahari of North-Central Botswana," *Transactions Institute of British Geographers*, n.s. 5 (1980): 80-90; H. J. Cooke and H. T. Verstappen, "The landforms of the western Makgadigadi basin in northern Botswana, with a consideration of the Chronology of the evolution of Lake Paleo-Makgadigadi," *Zeitschrift für Geomorphologie* 28 (1984): 1-19; J. de Ploey, "Quelques Indices sur l'évolution morphologique et paléoclimatique des environs du Stanley-Pool (Congo)," *Stud. Univ. Lovanium Fac. Sci.* 17 (1963): 1-16; Idem, "Position géomorphologique, genèse et chronologie du certaines depots superficiels au Congo Occidental," *Quaternaria* 9 (1965): 131-154; J. Deacan, N. Lancaster, and L.

team correlated a wide range of sources of evidence: changes in lakebed margins, sedimentation rates, and archaeological remains. The team then determined absolute dates for their correlations using both dendochronology and radio carbon dating.

3.3 A Chronology of Climate Change in Central and Southern Africa

Conclusions from the aforementioned studies may be synthesized to produce a 3000 year chronology of climate change in central and southern Africa (see Figure 3.1). Generally, the climate three millennia ago, as Proto-Botatwe diverged from its ancestral language, Proto-Eastern Savanna, was warmer and moister than today.¹⁸ The expansion of this warm, humid climate slowly spread from north to south and lasted well over 1500 years, reaching a peak around the sixth century. During the period of most extreme wetness in the first millennium C.E., the rainfall may have increased as much as 200% over modern-day averages, allowing current

Scott, "Evidence for late Quaternary Climate Change in Southern Africa," in *Late Cainozoic Paleoclimates of the Southern Hemisphere*, J. C. Vogel, ed. (Rotterdam: A. A. Balkema, 1984): 391-404; K. Heine, "The Main Stages of the Late Quaternary Evolution of the Kalahari Region, southern Africa," *Palaeoecology of Africa* 15 (1982): 53-76; Christopher Nugent, "The Zambezi River: Tectonism, Climate Change and Drainage Evolution," *Palaeogeography, Palaeoclimatology, Palaeoecology*, 78, no. 1-2 (May 1990): 55-69; P. W. O'Connor and D. S. G. Thomas, "The Timing and Environmental Significance of Late Quaternary Linear Dune Development in Western Zambia," *Quaternary research* 52:1 (1999): 44-55; Lawrence Robbins and M. L. Murphy, "Archaeology, Palaeoenvironment and Chronology of the Tsodilo Hills White Paintings Rock Shelter, Northwest Kalahari Desert, Botswana," *Journal of Archaeological Science* 27, no. 11 (2000): 1086-1111; Lawrence Robbins, Michael L. Murphy, Alec C. Cambell, and George A. Brook, "Intensive Mining of Specular Hematite in the Kalahari A.D. 800-1000," *Current Anthropology* 39 (1998): 144-50; M. Sarnthein, "Sand deserts during the glacial maximum and climatic optimum," *Nature* 272 (1978): 396-398; Paul A. Shaw, "Fluctuations in the level of Lake Ngami: the historical evidence," *Botswana Notes and Records* 15 (1983): 79-84; Idem, "Late Quaternary Landforms and Environmental Change in Northwest Botswana: the Evidence of Lake Ngami and the Mabebe Depression," *Transactions of the Institute of British Geographers* 10 (1985): 333-346; Idem, "The Desiccation of Lake Ngami: an historical perspective," *Geographical Journal* 151, no. 3 (1985): 318-326; P. A. Shaw and D. G. S. Thomas, "Lake Caprivi..." *Zeitschrift für Geomorphologie* xxxii (1988): 329-337; D. Thomas and P. A. Shaw, *Kalahari Environment* (Cambridge: Cambridge University Press, 1991).

¹⁸ For an argument correlating moist eras with periods of warmth and dry eras with periods of cooler temperatures, see P. D. Tyson and J. A. Lindesay, "The climate of the last 2000 years in southern Africa," *The Holocene* 2 (1992): 271-278.

mopane zones in the southern Botatwe area to support *miombo* vegetation.¹⁹ That is to say, just as the warm, moist climate spread north to south, this gradual change encouraged the similarly gradual expansion of the woodland savanna environments of the northern *miombo* zone southward. Comparison between Maps 3.5 and 3.6 demonstrate the differences in vegetation distribution that would have resulted with the increase of rainfall associated with the first half of the first millennium.

The evidence produce a more nuanced picture of the last fifteen hundred years of alternating peaks of warm, wet conditions and cool, drier periods. The early warm, moist climate may have lasted into the seventh or eight century, although it would have begun to dry out from its peak moisture levels. Then, the second half of the first millennium was characterized by the unfolding of a cool, dry period, again from north to south. This shift was probably gentler than subsequent oscillations, allowing for the slow constriction of northerly *miombo* vegetation.

In the first half of the second millennium, the Botatwe region was experiencing increasingly intense and rapid climate oscillations, many of which were tied to global climate changes. For example, by the about the tenth century, the climate of south central Africa was shifting from a two or three hundred year cool, dry period closing the first millennium toward warmer and moister conditions. This local expression of the global phenomenon of the Mediaeval Warm Epoch lasted well into the thirteenth century. From the fourteenth to the mid-sixteenth centuries, the climate of south central Africa swung back to cooler, drier conditions.

¹⁹ Cooke claims about a 200% increase over modern rainfall averages. See Cooke, "Paleoclimatic Significance of Caves," 443. Interestingly, it seems that the Kalahari Sands region to the south was experiencing drier conditions over 2000 years BP with a transition to similar wetter conditions beginning some three hundred years after the earliest evidence of increased moisture to the north. Deacon, et. al., "Evidence for Late Quaternary," 399; S. Stokes, D. S. G. Thomas, and R. Washington, "Multiple Episodes of Aridity in Southern Africa since the last interglacial period," *Nature* 338 (1997): 154-158, especially p. 155.

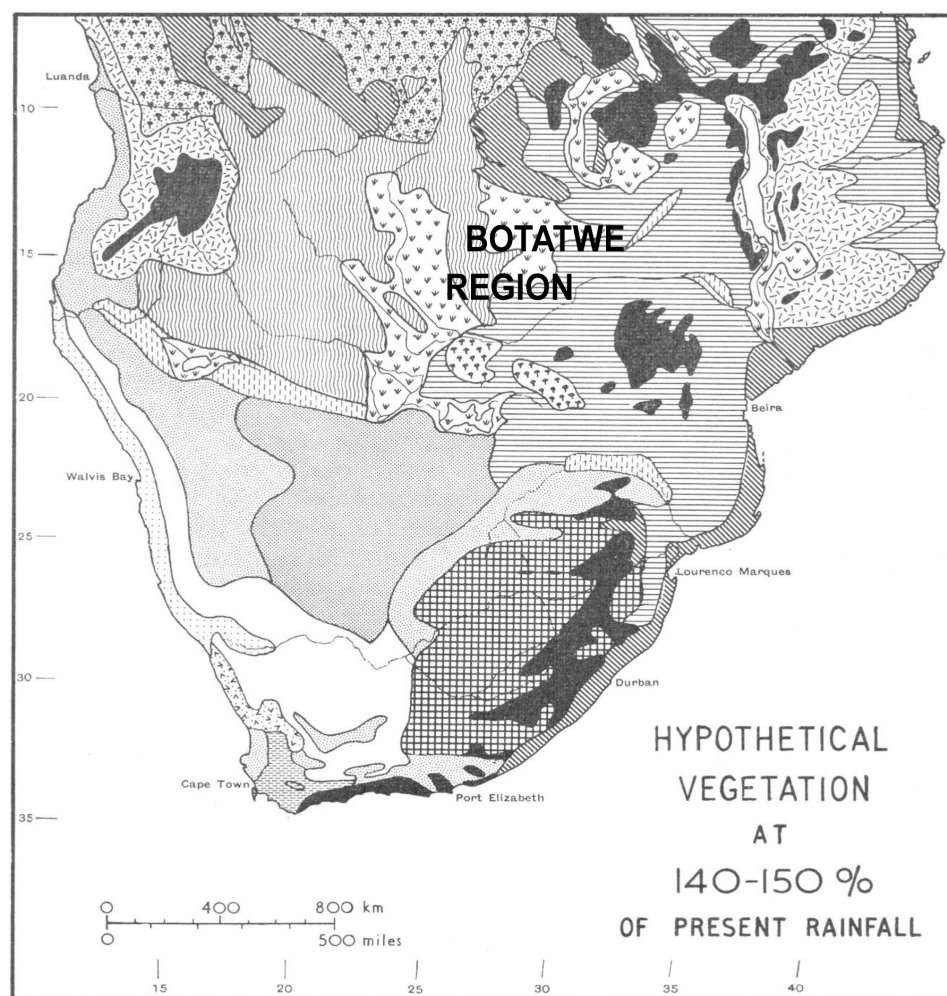
This oscillation was a regional manifestation of the Little Ice Age.²⁰ In the beginning of this period, vegetation zones would have constricted; those plant communities with greater rainfall requirements receded northward, towards moister annual weather patterns (see Map 3.7). Indeed, it seems likely that the northern half of south central Africa experienced a milder, shorter version of the Little Ice Age. The next oscillation toward warm, moist conditions occurred as early as the fifteenth century near the Malawian lakes and, according to evidence from dendochronology, at least one hundred years later in Natal, South Africa. Maps 3.6-3.7 illustrate a hypothesized north/south migration of vegetation zones, following the changing latitude of the rainfall isohyetal lines resulting from warmer, wetter conditions of cooler, drier conditions at approximately 140-150% of mid-20th century rainfall levels (Map 3.6) and 50-60% of mid-20th century rainfall levels (Map 3.7).

²⁰ The Little Ice Age, as a widespread global phenomenon, was a result of weakened tropical easterlies. These new wind patterns changed how rainfall was delivered across southern Africa so that most regions experienced a drier climate in Little Ice Age. Stronger circumpolar westerlies expand northwards, onto the continent, producing more cold snaps and some winter rain in the very south of Africa and a decline of rain in the summer rainfall area. See Tyson and Lindesay, "The Climate of the Last 2000 Years," 275-6.

Figure 3.1 A 3000 Year Climate History of Central and Southern Africa

Date	Climate Description	Source	Source Location
1000 BCE	End of long dry period in the North	Pollen Cores	Northern Province, Zambia
900 BCE	Moist but lower rainfall before and after 900 BCE	Multiple	Malawi
800 BCE			
700 BCE			
600 BCE			
500 BCE	c. 500-250 BCE humid and warm	Geomorphology	Northern Botswana
400 BCE			
300 BCE			
200 BCE			
100 BCE			
0CE	Increasingly wet and warm climate moving southward and continuing until c. 500 CE, rains occasionally tripling in some areas with Malawian Lakes displaying high water levels and possible drier conditions in Kalahari	Multiple	Northern Botswana and Malawi
100 CE			
200 CE	Warm and Humid conditions reach N. Kalahari	Geomorphology	Northern Botswana
300 CE	High water levels in Paleo Lake Makgadikgadi, c. 300-500 CE	Geomorphology	Northern Botswana
400 CE			
500 CE	Peak of warm, wet period	Multiple	Malawi
600 CE	Cooler, drier period from c. 600 or 700 CE to 900 CE	Multiple	Northern Botswana, Malawi, South Africa, Namibia
700 CE			
800 CE			
900 CE	Wet and warmer conditions c. 900-1300 CE, corresponding to Mediaeval Warm Epoch	Multiple	Northern Botswana, Malawi, South Africa, Namibia
1000 CE			
1100 CE			
1200 CE			
1300 CE	Cooler and dry, c. 1300-1550 CE, corresponds to the Little Ice Age	Multiple	Northern Botswana, Malawi, South Africa, Namibia
1400 CE	Lake Malawi's highest water levels for the period 300 CE to 2000 CE during span 1400-1600 CE; corresponds with wet, warm pulse, 1500-1700 CE	Multiple	Northern Botswana, Malawi, South Africa, Namibia
1500 CE	End of cooling phase c. 1500 CE and beginning of warming phase	Dendo-chronology	Natal, South Africa
1600 CE	Wet with rains 130-140% in Lake Chilwa, not Lake Malawi c. 1650-1750 CE	Multiple	Malawi
1700 CE	Widespread Dry Event(s), c. 1750-1890 CE, but particularly wet in Natal for earlier part of period	Multiple	Malawi and Natal, South Africa
1800 CE	Widespread dry Event through 1880s; return to weather and rainfall patterns described in section 3.1, above	Multiple	Malawi

Map 3.6 Vegetation of Central and Southern Africa at 140-150% of 20th Century Rainfall

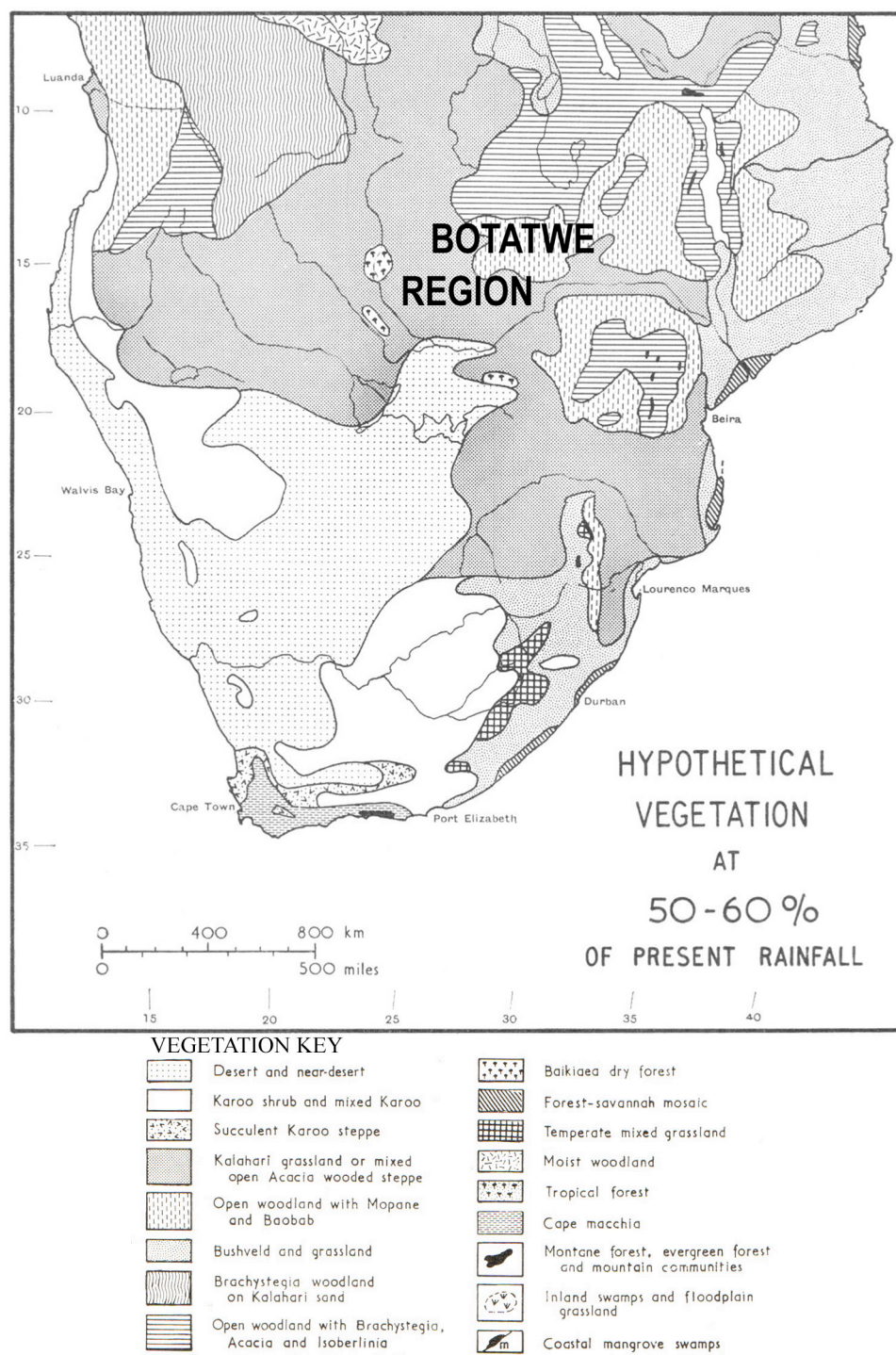


VEGETATION KEY

	Desert and near-desert		Baikiaea dry forest
	Karoo shrub and mixed Karoo		Forest-savannah mosaic
	Succulent Karoo steppe		Temperate mixed grassland
	Kalahari grassland or mixed open Acacia wooded steppe		Moist woodland
	Open woodland with Mopane and Baobab		Tropical forest
	Bushveld and grassland		Cape macchia
	Brachystegia woodland on Kalahari sand		Montane forest, evergreen forest and mountain communities
	Open woodland with Brachystegia, Acacia and Isoberlinia		Inland swamps and floodplain grassland
			Coastal mangrove swamps

Adapted from H. B. S. Cooke, "The Pleistocene Environment in Southern Africa," in D. H. S. Davis, ed., *Ecological Studies in Southern Africa*, Monographiae Biologicae 14 (The Hague: W. Junk Publishers, 1964).

Map 3.7 Vegetation of Central and Southern Africa at 50-60% of 20th Century Rainfall



Adapted from H. B. S. Cooke, "The Pleistocene Environment in Southern Africa," in D. H. S. Davis, ed., *Ecological Studies in Southern Africa*, Monographiae Biologicae 14 (The Hague: W. Junk Publishers, 1964).

From the end of the Little Ice Age, climate oscillations continued to grow more intense and more rapid. By the mid-seventeenth century, rains had improved and temperatures were on the rise from Little Ice Age levels across central and southern Africa. This climate shift to warmer, wetter conditions may have had some regional variation as some of the climate data suggests a brief cooling and drying phase around the late seventeenth to mid-eighteenth centuries. In fact, the Malawian data show differing rainfall patterns for areas as close as Lake Chilwa and Lake Malawi. The regional climate variation of the mid-seventeenth to mid-eighteenth centuries was followed by a widespread regional drought(s) from the mid-eighteenth to late nineteenth centuries.²¹ Since the 1890s, the climate has exhibited short oscillations but has generally followed the weather patterns observed today.

3.4 Correlating Climate and Language History

The chronology of changes in climate patterns correlates in interesting ways with the chronology of Botatwe language divergence based on dates derived from the application of glottochronology. Periods of language innovation and divergence correlate with eras of warm, moist climate conditions and the southerly migration of boundaries between vegetation zones. Conversely, eras of relative linguistic stability generally correspond to periods of cool, dry conditions and the northward retreat of boundaries between vegetation zones.

The sixth century peak of our early warm, moist period corresponds to the period when Proto-Botatwe began to diverge into its daughter speech communities: Soli, Proto-Eastern and Proto-Western Botatwe. As discussed in the previous chapter, according to the principle of least moves, the Botatwe languages generally spread southward from the savannas of southern DRC

²¹ Wetter conditions may have been present in the summer rainfall region of northern South Africa.

into Zambia, just as climate shifts spread north to south. As warm, moist conditions slowly spread southward, they encouraged the gradual expansion of the northerly *miombo* vegetation that characterized the Proto-Botatwe homeland. Thus, as Botatwe languages spread southward, they were moving through the familiar higher rainfall savanna woodland environments of the northern *miombo*, whose southern limits were now vastly extended due to the high rainfall of an extremely long period of warm, wet climate conditions. It was only later, as the climate grew drier and cooler in the second half of the first millennium and the spread of the northern *miombo* forests stopped and even retreated, that speakers of Botatwe languages needed to learn about the new vegetation of southern *miombo* and *mopane* savannas.²² This period of drier, cooler climate conditions during the second half of the first millennium coincides with a period of relative linguistic stability during which Proto-Soli, Proto-Eastern, and Proto-Western Botatwe were spoken.

The duration of the Mediaeval Warm Epoch, spanning the turn of the first millennium and the first three centuries of the second millennium correlates well with the glottochronologically-derived dates for the next period of language innovation: the divergences of Proto-Western Botatwe, Proto-Eastern Botatwe and Proto-Kafue during the first three centuries of the second millennium. The subsequent divergences of Proto-Zambezi Hook and Proto-Machili around the 15th centuries overlap with the beginning of the Little Ice Age from around the 14th through the 16th centuries, the later half of which overlaps with a period of general linguistic stability. As temperature and rainfall levels rebounded from Little Ice Age

²² As we will see in Chapter 4, linguistic evidence also contributes to our knowledge of how and when Botatwe-speakers began to learn about and exploiting new types of savanna environments.

levels by the end of the sixteenth century, we see another correspondence with changes in linguistic history, as Proto-Falls diverged into Toka and Leya.

The pattern we see when we compare the two sets of historical change are stunning. Each time the climate reached a peak of warm, wet conditions, it corresponds to the beginning of a period of language divergence and spread. Periods of language stability correlate with dry, cool climatic conditions. One explanation is that plentiful resources and the expansion of familiar environments and vegetation may have encouraged the spread of communities until their decreasing language contact entered the linguistic record as divergence into distinct dialects and, eventually, distinct languages. Conversely, cool, dry conditions constricted familiar vegetation zones, including environments preferred for fields and gardens, the rains needed to irrigate those crops, and environments containing fruits, vegetables, meats, medicines and other bush products. These periods may correspond with eras of linguistic conservatism as communities remained close to one another and to known natural resources. However, linguistic innovation can occur without language spread, as was the case of the rapid succession of divergences around the Kafue in the first centuries of the second millennium. Thus, despite these stunning correspondences, changes in the climate and related shifts in the flora and fauna distributions did not cause language or cultural change. Rather, they inspired population movement or consolidation, which may or may not have caused language or cultural innovation.

Correlations between periods of change and continuity in both types of historical data raise questions about how people engaged with slow changes in the climate and local environment. The next five chapters use language data to answer these questions within the context of both the physical history of environmental change and the social histories Botatwe speakers created as they experienced—and sometimes made—changes in the physical world

around them. Indeed, as scholars have long noted in other historic contexts, Botatwe *perceptions* of the opportunities and constraints of the changing natural environment were as important as the actual physical realities of changes in climate and floral and faunal distributions that may be reconstructed to particular periods and places in the past.

3.5 Sibling Disciplines: Correlating Chronologies of Language and Material Culture

Ancient material culture provides a third source for reconstructing the deep history of south central Africa. This body of data contributes to our understanding of regional settlement chronologies. With archaeological evidence we may also test our hypothesis about periods of innovation and conservatism by comparing chronologies of developments in material culture, particularly developments in pottery making, farming, herding, and trade, to chronologies of linguistic and climatic change.

Archaeologists and scholars using historical linguistics have long worked together to reconstruct ancient African history because the data they produce is complimentary in a number of ways. For example, archaeologists work with data whose geographic and temporal specificity is far more precise than the spatial and temporal approximations of scholars using the principle of least moves and glottochronology to produce historical evidence from lexical data. Yet, the geographical specificity comes at a cost; archaeologists are severely limited in the scope of their research, depending for their histories on what they are able to uncover in a select number of pits identified through various sampling strategies and in surveys along transects.

Epistemological differences about the nature of evidence complicate the complementary nature of archaeology and historical linguistics. For example, both disciplines are confounded by

problems in preservation, especially preservation of evidence for the meaning and use of the objects and words attesting to the daily lives of communities living in the deep past. Ethnography provides an important source of information about the meaning and use of objects and words recovered by archaeologists and linguistically-minded historians, either through ethnographic analogy or comparative ethnography. Yet, ideas about the nature of evidence empower scholars in each discipline to employ ethnographical data in very different ways.²³

Archaeologists may analyze the context of discovery to elaborate on the meaning and use of an object in the past with direct evidence associated by stratigraphy. Ethnographic examples of people employing similar tools, settlement patterns, or economic practices provide additional data to elaborate on the use and meaning of archaeological data, most convincingly when the ethnographic data comes from the same region or when aspects of the material culture of the ethnographically described community demonstrates typological continuity with the material culture of the archaeologically attested society. Indeed, the scholarship on the (conscious and unconscious) materialization of ideology has pushed the theoretical frontier of archaeology into the realm of social theory precisely because archaeologists argue that they can glean meaning from analyzing evidence in archaeological context and through ethnographic analogy.²⁴

²³ For an accessible overview of the methodologies and assumptions of archaeologists, see Susan Keech McIntosh, "Archaeology and the Reconstruction of the African Past," in John Edward Philips, ed., *Writing African History* (Rochester, NY: University of Rochester Press, 2006): 51-85.

²⁴ On the materialization of ideology as a source of power, see Elizabeth DeMarrais, L. J. Castillo, and Timothy Earle, "Ideology, Materialization, and Power Strategies," *Current Anthropology* 37 (1996): 15-31. For a brief review of the materialization of social identities, particularly with respect to ceramics, see the discussion and citations in Olivier Gosselain, "Materializing Identities: An African Perspective," *Journal of Archaeological Method and Theory* 7, 3 (2000): 187-217; Michelle Hegmon, "Advances in Ceramic Ethnoarchaeology," *Journal of Archaeological Method and Theory* 7, 3 (2000): 129-37.

Linguistically-minded historians reconstruct the meaning of a word from evidence tied to derivational processes, the distribution of meanings in extant languages, and redundancies in a broad survey of regional ethnography. Redundant examples in regional ethnography may attest to clusters of interconnected objects and practices; when words for these interrelated objects and practices can be reconstructed to the same period to constitute an historicized lexicon, comparative ethnography can provide data contextualizing the meaning of reconstructed words.²⁵ While historians seek out redundant examples in regional ethnography to demonstrate the relationship between clusters of objects and practices for which words can be reconstructed, archaeologists seek to match as many attributes of the archaeologically attested community to an ethnographically described community as possible, in order to understand the possible meanings of the objects and practices attested in the archaeological data. Clearly, it is with great care that we must lay out the evidence from each discipline, especially if our goal is to correlate the historical information produced by scholars employing very different methodologies to make what constitutes evidence in their field of study.

As noted in Chapter 2, researchers of Africa's ancient past have developed correlations between the linguistic and archaeological records based on the spatial and temporal overlap of speech communities and pottery traditions. Scholars locate protolanguages in space through the principle of least moves and in time by means of glottochronology. Similarly, pottery traditions, pottery remains analyzed for their similarities and classified into related groups, may be assigned to calendar dates through carbon-14 dating and to a geographic area by extensive survey work. Both the spatial and temporal assignments of pottery traditions may be confirmed or revised

²⁵ David Lee Schoenbrun, *A Green Place, A Good Place: Agrarian Change and Social Identity in the Great Lakes Region to the 15th Century* (Portsmouth, NH: Heinemann, 1998), 265-9.

based on comparison with similar pottery styles dated at other regional sites. In research on early African history, this type of correlation between the spatial and temporal overlap of speech communities and pottery traditions remains a common means of linking the archaeological and linguistic records.²⁶

Scholars find correlations based on spatial and temporal overlaps between ancient linguistic communities and collections pottery traditions classified by decorative styles useful because they can confirm, elaborate on, and contextualize conclusions from their own data. However, the utility of correlations is limited because both language and pottery classifications may be revised with subsequent scholarship, perhaps contradicting earlier proposed correlations. The problem, of course, is to understand what, exactly, is being correlated in such exercises.

The increasingly sophisticated scholarship on ceramic ethnoarchaeology can help us be more precise in correlation. The simple spatial and temporal overlap of pottery traditions and proto-language homelands has been undermined by questions about the coherence of specific pottery classifications, the process by which social identities (like linguistic identities) come to be materialized in products like pottery, and, more profound still, *which* physical manifestations of *which* of the numerous human activities that combine in the production and consumption of pottery are implicated in *which* of the varying levels of community that make up an individual's social identity.²⁷ This scholarship has brought the processes by which people affiliate—

²⁶ For one example of an argument for the validity of glottochronology based on correlations between speech communities and pottery traditions, see Christopher Ehret, "Testing the Expectations of Glottochronology against the Correlations of Language and Archaeology in Africa," in *Time Depth in Historical Linguistics*, vol. 2, C. Renfrew, A. McMahon, and L. Trask, eds. (Cambridge: McDonald Institute for Archaeological Research, 2000): 373-399. For a tempered example, see Schoenbrun, *A Green Place*, chapter 2. For a critique of the method, see Vansina, *How Societies*, 279-283 and comments below.

²⁷ Gosselain, "Materializing Identities" and cites therein.

sometimes consciously, sometimes not—as they make and consume material culture to fore in efforts to classify material culture.

Critics of correlations between speech communities and pottery traditions have drawn on this rich scholarship to reject the endeavor altogether. Yet, scholars have demonstrated that some parts of the production sequences of technical traditions like pottery-making do correlate with certain levels of social identity. For example, Olivier Gosselain argues that patterns in the distribution of the fashioning step in pottery-making across Africa do, in fact, correlate with social groups delineated by gender, language, and endogamous, ranked specialization. They do so because this part of the process is not a highly salient factor in the process of pottery consumption, yet it requires intense social interaction during a period of training and subsequently is undertaken individually, rather than as a group. Highly salient steps in the production sequence, such as decorating, are more likely to reflect shallow interactions across broad regions than shared cultural heritage unless they are consciously manipulated to demonstrate group membership.²⁸

The ceramic sequences of the Botatwe speaking area of south central Africa demonstrate a remarkable level of continuity in decorative motifs from the turn of the first millennium down to the pottery produced by modern-day Botatwe speakers. This unusual and powerful continuity in highly salient steps in the production sequence invites an approach that accepts pottery decoration as a materialization of social identity for at least the last millennium of regional

²⁸ Gosselain, “Materializing Identities.” See also B. J. Bowser, “From Pottery to Politics: An Ethnoarchaeological Case Study of Political Factionalism, Ethnicity, and Domestic Pottery Style in the Ecuadorian Amazon,” *Journal of Archaeological Method and Theory* 7 (2000): 219-48.

history. Let us first take this traditional approach to correlation tying pottery decoration to protolanguage and then assess the reliability of the correlations.

The archaeological record of the Machili region of central Zambia indicates the emergence of a new, distinct pottery ware, Namakala, around the sixth century C.E. Based on the predominance of combstamping, among other features, Thomas Huffman has argued that pottery wares from the Namakala tradition are related to the comb-stamping wares of southern DRC, specifically the Naviundu pottery that emerged in the Shaba region of southern DRC in the early centuries of the first millennium (See Map 3.8).²⁹ In fact, the research of Thomas Huffman indicates that the likely origin of the Namakala pottery lies in Naviundu pottery, just as linguistic evidence suggests that the linguistic roots of Botatwe communities lie in same region.³⁰

Namakala appears in central Zambia around the sixth century, just as Proto-Botatwe was beginning to split into its subsequent speech communities, Proto-Western Botatwe, Proto-Eastern Botatwe, and Soli. Proto-Eastern and Proto-Western Botatwe, whose respective homelands were located just north of the Kafue Hook and north of the upper reaches of the Machili River, and whose dates as extant speech communities range from c. 500 C.E. to c. 1000 C.E., overlap in compelling ways with the temporal (c. 550 C.E. to c. 1200 C.E.)³¹ and spatial (Kafue and upper Machili Valley) distribution of Namakala pottery. Namakala styles of pottery decoration, distinguished by pendant combstamped loops on the necks and shoulders of the pots, correlate

²⁹ Thomas Huffman, *Iron Age Migrations: The Ceramic Sequence in Southern Zambia* (Witwatersrand University Press, 1989).

³⁰ Huffman, *Iron Age Migrations*; see also Ahmed "Before Eve," 50-1; Robin Derricourt, *Man on the Kafue* (New York: Lilian Berber Press, 1985); Brian Fagan, "Gundu and Nonde, Basanga and Mwanamaimpa," *Azania* 13 (1978): 127-134.

³¹ Nicholas Katanekwa, "Linguistics and the Iron Age in Zambia," paper presented at the SAfA Conference, Cambridge, July 12-15, 2000:6.

well with Proto-Botatwe, spreading during the formation of Proto-Eastern and Proto-Western Botatwe speech communities and only splitting into new but developmentally continuous facies at the same time that Proto-Eastern and Proto-Western Botatwe underwent a series of quick, successive divergences from the 11th to the early 15th centuries.³²

Nicholas Katanekwa, an archaeologist who has worked in central, southern, and western Zambia, completed an extensive reassessment of regional ceramics. Based on decorative motifs and their placement on various vessel shapes, Katanekwa developed a classification of the ceramic wares uncovered in Zambia and the central African region more broadly by synthesizing the conclusions of previous research and, importantly, by assessing old classifications in light of new finds from western Zambia. Katanekwa and a number of other archaeologists agree that the series of ceramic wares that developed out of the Namakala pottery tradition show remarkable continuity over time and may be traced down to the ceramics of present day Botatwe communities, particularly the Lenje, Ila, Soli, and Tonga communities (see Figure 3.2).³³

³² On the distinguishing features of Namakala pottery, see Katanekwa “Linguistics,” 6; Huffman, *Iron Age Migrations*.

³³ Derricourt, *Man*; Huffman, *Iron Age Migrations*; *Idem*, “Ceramics, Settlements”; John Robertson, “A new Early Iron Age Pottery Tradition from South Central Africa,” *Nyame Akuma* 32 (1989); *Idem*, “Origin and Development of the Early Iron Age in south central Africa,” (PhD diss., Union Institute, 1991). The range of names in different works for these facies is summarized in Nicholas Katanekwa, “The Iron Age in Zambia: Some New Evidence and Interpretations,” paper presented at the Conference on Agricultural Origins in Eastern Africa, Cambridge University, 1995: 2-7.

Map 3.8 Location of Naviundu and Early Namakala Pottery

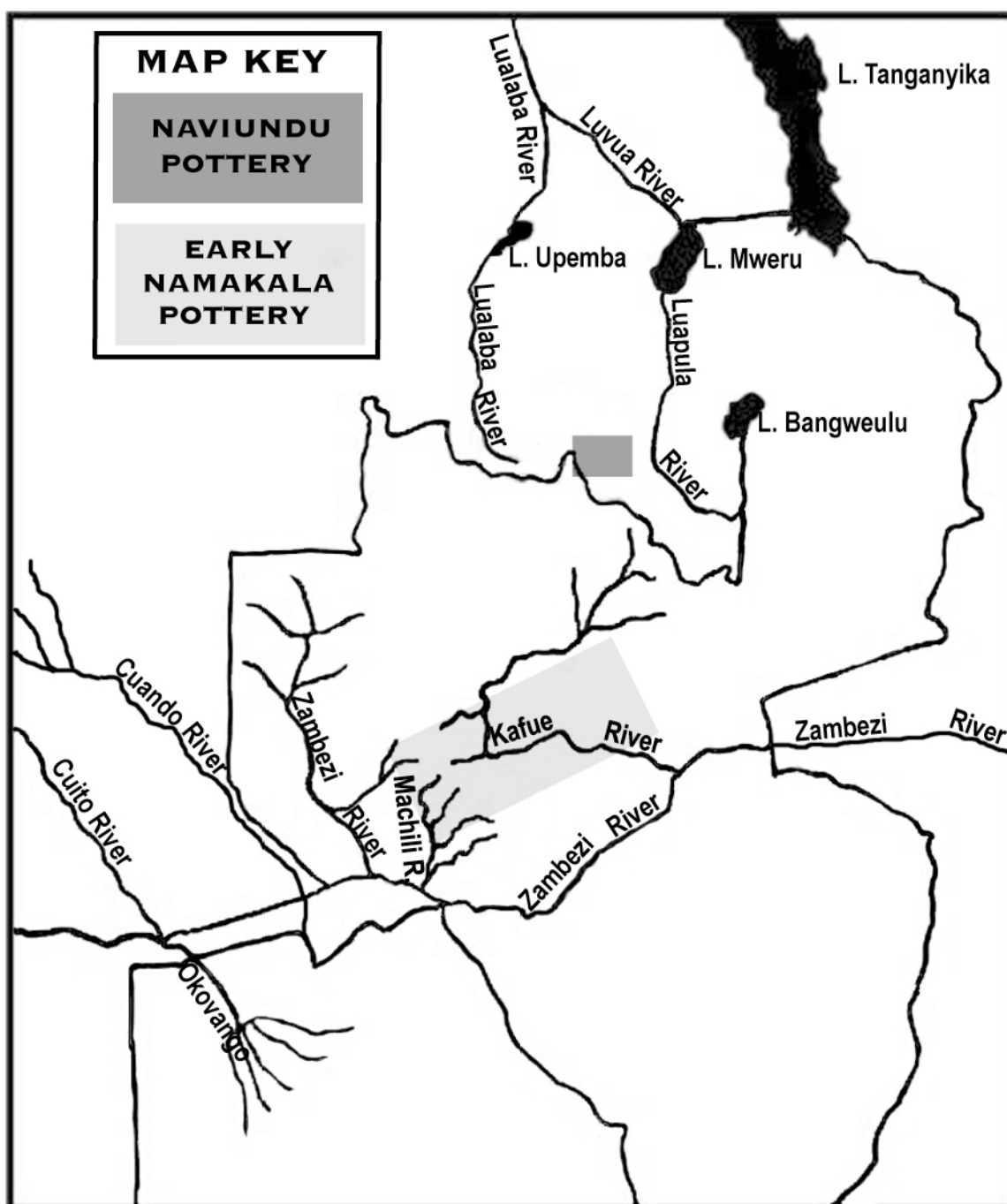
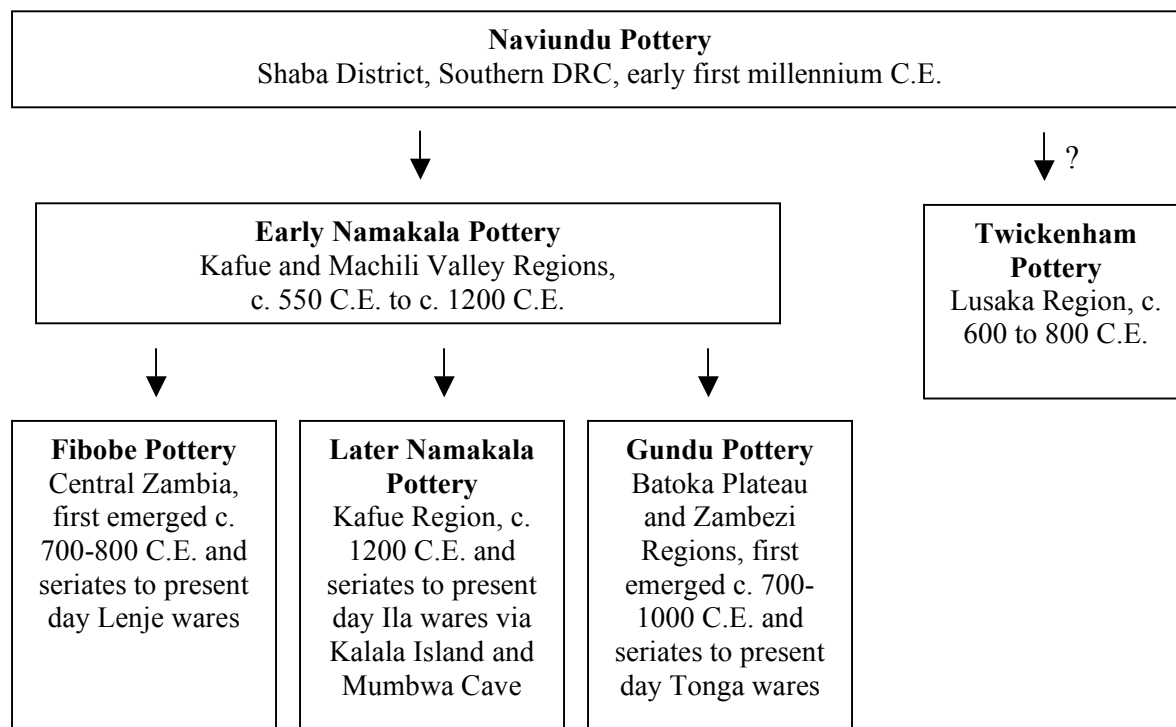


Figure 3.2 Katanekwa's Classification of Namakala Pottery

Fibobe wares, with their characteristic zigzag bands of combstamping, first appear at sites in central Zambia in the eighth or ninth centuries, to the east of the present-day towns of Kabwe and Kapri Mposhi. John Robertson, who first identified Fibobe pottery, argues that it shows strong developmental continuity with the pottery of current Lenje speakers.³⁴ Gundu wares first appear on the Batoka Plateau between c. 700 C.E. and c. 1000 C.E. and, according to Katanekwa, are the source of modern Tonga pottery.³⁵ Early manifestations of Namakala in the

³⁴ Robertson "A New Early Iron Age"; Idem, "Origin and Development."

³⁵ Katanekwa, in addition to performing his own extensive analysis of pottery sherds, draws on earlier research by Thomas Huffman, who first identified the early Namakala and Gundu wares. But Huffman is less sure about the relationship between Gundu and Tonga pottery because the latter might derive from Kangila. Katanekwa, meanwhile, is uncertain about the relationship between Kangila and Tonga pottery, while Vogel understands Kangila to be an early manifestation of the Early Tonga wares. See Huffman, *Iron Age Migrations*; Katanekwa, "The Iron Age in Zambia"; Joseph O. Vogel, "The Mosioatunya Sequence: The Iron Age Cultures in the Victoria Falls Region in Zambia," *Zambia Museums Journal* 4 (1973): 129. A broader focus on the production of regional

Kafue area show continuity with Ila-speakers' pottery styles. The pottery of Kalala Island site and Mumbwa Cave site are stages in the series leading up to ceramics produced by modern day Ila peoples.³⁶ Finally, if we accept the early dates of c. 600-800 C.E. for the Twickenham Road sites (rejected by Phillipson who did not think sites with supposedly Late Iron Age characteristics could exist so early in the archaeological record), the Twickenham wares broadly overlap with the divergence of Soli from Proto-Botatwe around the sixth century and the likely location of Soli to the south east of contemporaneous Botatwe communities, Proto-Eastern and Proto-Western Botatwe.³⁷ Modern-day speakers of the Soli language no longer produce pottery related to the Namakala wares; Ahmed argues that Soli speakers, under strong influence from neighboring Sabi peoples, adopted Luangwa pottery just as they adopted many Sabi words sometime after the spread of Luangwa pottery into south central Africa at the turn of the first millennium (see Map 3.9).³⁸

Interestingly, as the descendant facies of Namakala pottery emerged east and south of the Kafue region, they were used at sites contemporaneous with sites exhibiting different, unrelated ceramic wares: Muteteshi and Kalomo. The Muteteshi pottery style may be an extension of the

pottery, rather than just decorative motif, could come a long way toward unraveling the multiple explanations for similarity, from inheritance to diffusion, in regional pottery classification. Indeed, what was described as Kangila pottery may be a blend of Gundu and Kalundu/Kalomo decorative styles. Gosselain, "Materializing Identities"; John Robertson, "Origin and Development."

³⁶ Derricourt first noted the perfect developmental sequence from early Namakala wares up to modern day Ila wares; Katankewa incorporated these findings into his larger classification of Namakala wares. Derricourt, *Man*, 128, 161-201; Katankewa "The Iron Age in Zambia"; Idem, "Linguistics."

³⁷ Katankewa, "Linguistics," 7-8, Table 1.

³⁸ Christine Ahmed, "Before Eve was Eve: 2200 Years of Gendered History in East-Central Africa," Ph.D. diss., UCLA, 1996:51. The Luangwa tradition was first identified by D. W. Phillipson, *The Prehistory of Eastern Zambia*, (Nairobi: BIEA, 1976); Idem, *Later Prehistory of Eastern and Southern Africa*, (New York: Africana Publishing Company, 1977).

broadly distributed Chifumbaze tradition that stretched across East Africa and down the eastern half of the continent, however, there is still much debate about the upper levels of pottery classifications in south central Africa.³⁹ Muteteshi style pottery found in the sites of north central Zambia date from the first to sixth or seventh centuries C.E., making the Muteteshi site (for which the pottery is named) the earliest Early Iron Age site in south central Africa.⁴⁰ Interestingly, this pottery style disappears shortly after Fibobe wares arrive in west central Zambia.

Similarly, Kalundu pottery, associated with Gokomere pottery found in Zimbabwe, appears in the fourth century and comes to dominate Early Iron Age sites from the western province of Zambia, across the Batoka Plateau, and around the areas of the present day towns of Lusaka and Kabwe in central Zambia.⁴¹ By the end of the first millennium C.E., a second Early Iron Age population who made Shongwe pottery, also with ties to Gokomere ceramics unearthed in Zimbabwe, occupied the southwestern portion of Zambia's Southern Province around the Victoria Falls region. By the 9th century, Kalundu had been replaced by makers of a new phase of Shongwe pottery, Kalomo, who spread up to the southern fringe of the Batoka plateau from the Zambezi Valley and by makers of ceramics related to Namakala who spread down from the north, replacing Kalundu pottery throughout the rest of the plateau and up into central Zambia.

³⁹ Indeed, David Phillipson's two stream model, first introduced in 1977, continues to spark debate. David Phillipson, *The Later Prehistory of Eastern and Southern Africa* (London: Heinemann, 1977); idem, *African Archaeology* (Cambridge, Cambridge University Press, 1985). For a summary of debates about Phillipson's two stream hypothesis, see Martin Hall, *Farmers, Kings, and Traders: The People of Southern Africa, 200-1860* (Chicago: University of Chicago Press, 1990).

⁴⁰ Robertson, "A New Early Iron Age"; Idem, "Origin and Development."

⁴¹ Huffman, *Iron Age Migrations*; Katankwa, "Iron Age in Zambia"; See also James Denbow, "Congo to Kalahari: Data and Hypotheses about the Political Economy of the Western Stream of the Early Iron Age," *The African Archaeological Review* 8 (1990): 139-76.

For a few hundred years, during the 12th and 13th centuries, contemporaneous sites on the Batoka Plateau exhibit one or the other of two pottery styles: Kalomo and a pottery with origins in the Kafue, variously named Gundu, Early Tonga, or Kangila, according to the archaeologist.⁴² The coexistence of two distinct decorative traditions on ceramics on the Batoka Plateau for some two centuries has lead archaeologists to conclude that the pottery remains record the interactions of two distinct cultural populations, with the eventual outcome that makers of wares related to Gokomere were absorbed into communities making Namakala pottery with roots in the Kafue region.

The clear typological continuity of pottery decorating styles dating to the late first millennium C.E. with pottery made by the modern-day inhabitants of the region may be understood as an outcome of the social landscape of southern and central Zambia in the early second millennium C.E. It may be that ceramic decoration was a highly salient marker that materialized social identity on the cosmopolitan Batoka Plateau as makers of Kalundu, Kalomo and, a little later, Namakala potteries interacted on the respective frontiers of their communities. The adoption of Namakala styles by Kalomo makers could only function to facilitate their absorption into Namakala-making communities if pottery decoration was a means of materializing social identity.

To understand what this process might have looked like, we can consider the history of the Zambezi Valley. We know that environmental preferences of Kalomo-making inhabitants of the Zambezi Valley changed drastically as immigrants making pottery associated with Tonga

⁴² Fagan, *Iron Age Cultures in Zambia*, vol. 1; Fagan et. al., *Iron Age Cultures in Zambia*, vol. 2; Huffman, *Iron Age Migrations*; Katanekwa, "Iron Age in Zambia"; Idem, "Linguistics"; Vogel, *Kamangoza*; Idem, *Kumadzulo*; Idem, "Mosioatunya"; Idem, "Iron Age pottery from the Victoria Falls Region," *Zambia Museums Journal* 5 (1980): 41-77; Idem, *Simbusenga*. See also footnote 35, above.

speakers taught Kalomo makers how to farm in a wider range of microenvironments.⁴³ Slowly, farmers in the Zambezi region stopped making Kalomo and continued to make the pottery of immigrants from the north, an indication that earlier inhabitants of regions like the Batoka Plateau and Zambezi Valley were absorbed into the immigrants' communities. These two societies probably merged because the immigrants' virtuosity as farmers could open new lands to cultivation while the valuable knowledge of local ecological and spiritual landscapes held by earlier inhabitants could ensure the success of experimental farming enterprises distant from old centers of settlement. A common ceramic style was a visible marker of their shared endeavor of building healthy agricultural settlements in lands neither immigrants nor earlier inhabitants had previously farmed.

Shifts in the dominant ceramic style from Muteteshi and Kalundu/Kalomo to Namakala mirrors a shift in the linguistic record. We know that many Botatwe and Sabi languages now spoken in the region attest Kaskazi and Kusi vocabulary, suggesting that when the Botatwe and Sabi languages spread southwards from their respective homelands in southern DRC, their speakers met, interacted with, and eventually absorbed communities speaking outlying Kaskazi and Kusi languages, languages that became extinct as their speakers adopted Botatwe and Sabi languages. Based on the timing and location of these parallel shifts in the archaeological and linguistic record, Christopher Ehret and Christine Ahmed have argued that the makers of Muteteshi wares were probably speakers of those outlying Kaskazi languages later absorbed by

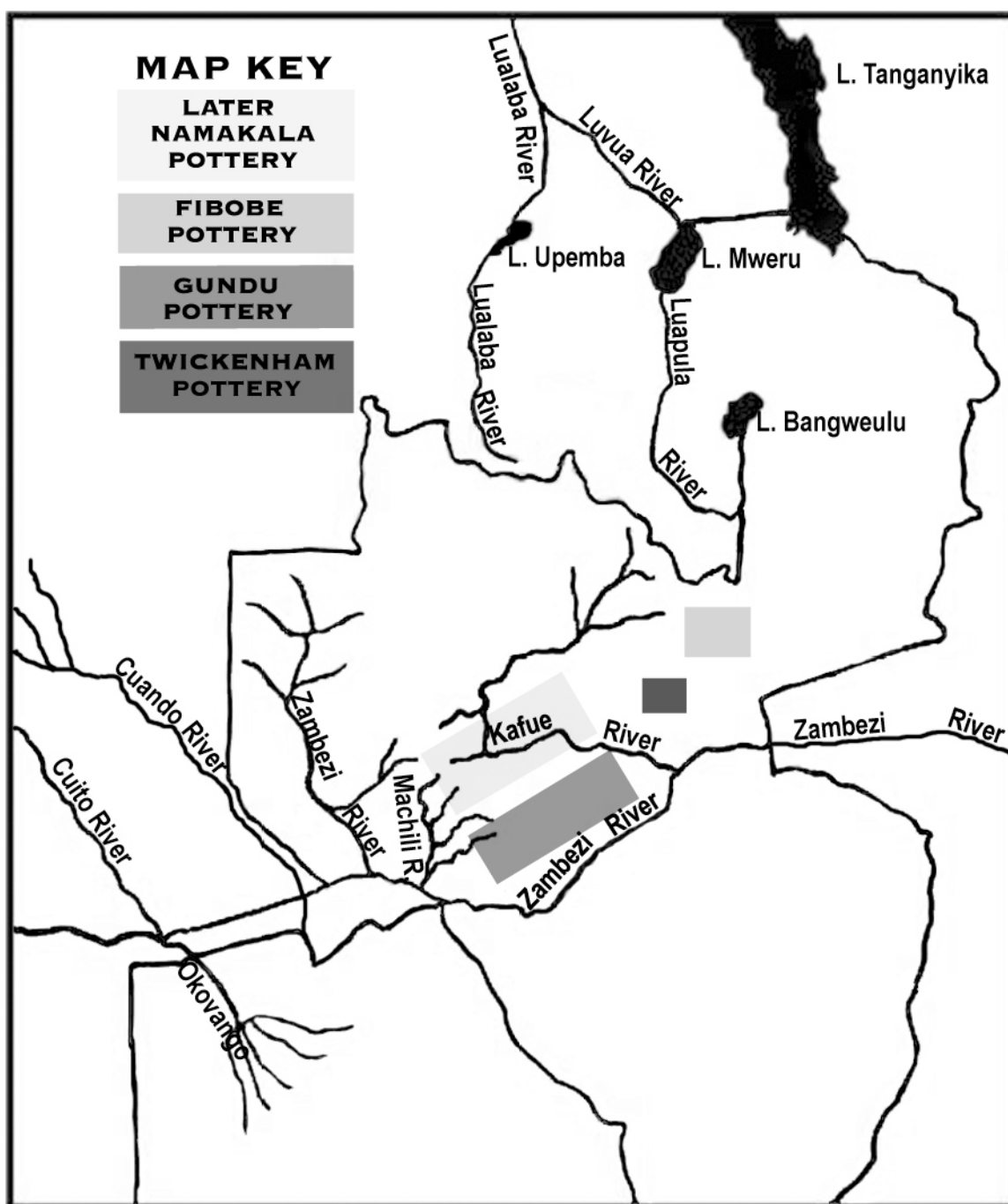
⁴³ See section 3.6.1, below.

Botatwe and Sabi communities and that Kalundu⁴⁴ is an archaeological trace of the absorbed Kusi communities.⁴⁵

⁴⁴ Ehret, relies on Katankwa's classification of regional pottery, which is less careful about the relationships between Kalundu and Kalomo because he focuses on Early Iron Age ceramics, rather than seriating facies that cross into the Late Iron Age. However, Vogel, Katankwa, and others agree that Kalundu and the ceramics that gave rise to Kalomo share connections to Gokomere and, therefore, are possibly related. This may be why Katankwa's work elides some of the distinction between Kalundu and Kalomo that, in turn, is lost in Ehret's correlation of Kalundu.

⁴⁵ Ahmed "Before Eve"; Ehret *Classical*, chapter 7.

Map 3.9 Distribution of Later Namakala, Fibobe, Gundu, and Twickenham Pottery



To date, scholars have noted correlations between pottery traditions and languages of the eastern Botatwe region, but our new classification of the Botatwe languages includes another branch of languages spoken to the west of the previously classified Botatwe languages.

Kataneke's work in the Machili Valley, largely unpublished, identified the earliest manifestations of Namakala pottery, dating to the mid to late sixth century (uncalibrated), at the Namakala site.⁴⁶ Kataneke identified several other Machili Valley sites with pottery derived from Namakala forms and styles, including sherds from the two ninth century (uncalibrated) Kazindu sites and undated material from the Mulobezi Old Bridge site.⁴⁷ Kataneke's ceramic seriation of Namakala to Kalala to Mumbwa Caves (both in the Kafue sequence) to modern-day Ila coupled with radiocarbon dates from the 6th to the 8th centuries (uncalibrated) require a correlation between the Namakala site and the southwesternmost extreme of Proto-Eastern Botatwe. Yet, its location in the southwest suggests a better geographic overlap with Proto-Western Botatwe. Until further research better describes, classifies, and dates the pottery from the Machili region, we cannot make any correlations between specific languages of Proto-Western Botatwe and particular ceramic styles. We may only conclude that around the same time and in the same Machili region in which Proto-Western Botatwe began to diverge, people made pottery that can be identified as Early Namakala pottery, to which other, later pottery styles correlated with eastern Botatwe speech communities are related.

Overlaps in the spatial and temporal distributions of archaeological and linguistic data provide compelling correlations that deserve further research. Generally, the archaeological data

⁴⁶ Kataneke, "Iron Age in Zambia," 8.

⁴⁷ Ibid.

would suggest that speech communities represented by nodes in the Botatwe classification reach further south a few centuries earlier than the approximate dates and locations generated for these speech communities by glottochronology and the averaging process of the principle of least moves. Cognation rates of the Botatwe classification may be too high by a few percentage points if, for example, some proposed cognates could not be unidentified as more recent loanwords.⁴⁸ Alternatively, producers of these pots may have initially spoken other languages, adopting Botatwe languages a few generations later. The greatest discrepancy in dates occurs with wares correlated to the Proto-Kafue divergence; these wares emerge as early as four centuries before the glottochronologically-derived date from the median of the Kafue subgroup's cognation rates. If we date the full range of cognation rates, our process of linguistic divergence also begins earlier in the past. Moreover, innovations in material culture may have developed as regional expressions of difference long before this regional differentiation manifested itself as distinct languages in the linguistic record. That is to say, people could develop new pottery forms while their language change was still at the stage of dialectical differentiation. Indeed, the distinction between dialect and language is not only a matter of debate amongst scholars but, amongst societies with a long tradition of multilingualism, it is a rather foreign concept.

The different rates of innovation in the histories of language and material culture should inspire new historical questions in the process of assessing potential correlations. In the case of the Namakala wares and Botatwe speech communities, spatial and temporal overlaps are certainly too close to be dismissed as mere coincidence; yet, the records do not correlate

⁴⁸ This may occur when, for example, we have only one example of a particular sound correspondence in a specific phonological context. Without additional examples of that sound in its specific phonological context, it is difficult to assess whether a correspondence is regular or indicates recent borrowing.

perfectly. Indeed, we must look for other ways to test and strengthen connections between the two records. Rigorous inquiry requires a density of links between the linguistic and archaeological records to further confirm correlations based on pottery and language; with such dense links, we can more confidently make connections between the histories assigned to the peoples who crafted those pots and innovated those languages under consideration.

Language evidence for hunting, plant foraging, and fishing all leave material evidence in the archaeological record: bones, tools, and charred plants. Historical linguistics allows us to reconstruct an ancient word for, for example, a particular tool to an approximate region and time period. When the matching object is uncovered in the corresponding region and carbon-14 dated to the same approximate period, this constitutes a direct association between the linguistic and archaeological records.⁴⁹ Clearly, such direct associations must be based on very specific items, like a small iron leaf-shaped, double barbed arrow point with a midrib and a square tang, rather than a generic “arrow point.” As the density of links between reconstructed words and archaeological artifacts thickens, we can test hypothesized correlations between ancient speech communities and pottery traditions. If we find no direct associations within a proposed correlation, we know to use that correlation with care. If we find a direct association across different temporal or spatial frames than those determined by hypothesized correlations, we know to explore the possibility of new correlations or to consider that pottery styles might be used to mark different sized groups, like large trade networks or small clans, rather than something approximating an ethno-linguistic community. As correlations become more reliable, we are able to propose further connections between reconstructed words for non-material aspects

⁴⁹ Vansina, *How Societies Are Born*, appendix.

of life and collections of material remains from the archaeological record, even though the two are not explicitly linked.

Not only do direct associations allow scholars to test correlations based on the spatial and temporal overlap of speech communities and pottery traditions, they can contribute in an important way to debates about glottochronology. Direct associations can confirm glottochronologically-derived dates by connecting the first appearance of a new item in the linguistic record to its first, carbon-14 dated appearance in the region's archaeological record. Jan Vansina first proposed this methodology of direct associations as a way to date divergences in his linguistic classification.⁵⁰ However, rather than considering the possibility of direct associations to test the dates derived by means of glottochronology, Vansina simply dismisses glottochronology altogether.⁵¹ Yet it is the *density* of direct associations that will make Vansina's dating process a credible test of glottochronology because redundant associations are less likely to reflect chance correlation.

As a final note on the relationship between historical linguistics and archaeology, scholars should consider the variety of ways that data generated by historical linguistics can serve as a checkpoint to archaeological data. Generally, scholars discuss archaeological data as a checkpoint to conclusions from linguistic data because its temporal and geographic data is thought to be more specific and because methods of carbon 14 dating are considered more reliable than glottochronology. However, with strong correlations between the two records, the approximations of time and space generated by historical linguistics can serve as a check on

⁵⁰ Vansina, *How Societies are Born*.

⁵¹ Kathryn de Luna, "How Societies are Born: Governance in West Central Africa before 1600 (review)," *African Studies Review* 49 (2006): 158-160.

archaeologists' tendency to extrapolate interpretations of their data from small sites to broader regions.⁵² If we work with Vansina's idea that archaeology and history are sibling disciplines, data generated by the methods of these two disciplines confirm or challenge for both historians *and* archaeologists the much more basic historical questions of *where* and *when* ideas and things were used in the past and to what ends.⁵³

As our narrative of Botatwe history unfolds, additional archaeological and linguistic data will further test the correlations that have been proposed here on the basis of ceramic and proto-language distributions. Vocabulary attesting to developments in farming, trade, or hunting, fishing, and foraging will be compared to archaeological evidence for the same developments. It is to this basic history of the region's ancient political economy that we now turn, for it is archaeologists' stories of the spread of farming, the intensification of trade, and the development of new kinds of social networks that forms the context of the history of wild resource use explored in subsequent chapters.

3.6 The Political Economy in Iron Age Central and Southern Africa

Archaeologists have produced most of the information we have about the early history of south central Africa and much of that work was undertaken in the middle of the 20th century. As a result, we know far more about those historical processes that dominated debates within the

⁵² Klieman makes a similar claim with respect to dating. She argues that linguists shouldn't use archaeologists' carbon 14 dates to recalibrate dates derived from glottochronology but suspects that this happens because archeology is seen as the authoritative voice on dating with the result that scholars trying to make linguistic dates fit work in compressed chronology of archaeologically-defined frameworks. See Kairn Klieman, "Hunters and Farmers of the Western Equatorial Rainforest," Ph.D. diss, UCLA, 1997: 54.

⁵³ For Vansina's initial musings on the relationship between the sibling disciplines, see Jan Vansina, "Historians, Are Archaeologists your Siblings?" *History in Africa* 22 (1995), 369-408. Consider also Peter Robershaw's response, "Sibling Rivalry? The Intersection of History and Archaeology" *History in Africa* 27 (2000): 261-286.

discipline of archaeology in the mid 20th century than those that have shaped regional historiography. Generally, archaeologists working in south central Africa in the mid-20th century were using pottery typologies to construct chronologies of the diffusion of technologies associated with Bantu speech communities. As part of this Bantu toolkit, archaeologists traced developments in farming, trade, settlement patterns, and the emergence of centralized polities in the savannas surrounding the Botatwe region. All of these are processes that contextualize the history of Botatwe speakers' efforts in hunting, fishing, and foraging.

3.6.1 The Spread of Farming

An emphasis on technology and economy, especially farming, metallurgy, and potting, in early scholarship on African history developed out of attempts to explain the wide distribution of related Bantu languages. One legacy of research on the Bantu Expansions is a dense archaeological and historical scholarship on the development and spread of technologies associated with this “Bantu toolkit.” Much of this research was undertaken in south central Africa, providing us with a particularly detailed understanding of the composition and spread of ancient regional economies and food systems. The spread of farming into central and southern Africa took place between the divergence of Proto-Botatwe from its ancestral proto-languages around 1000 B.C.E. and its divergence into Soli, Proto-Eastern Botatwe, and Proto-Western Botatwe around the sixth century C.E. Indeed, the long life of the Proto-Botatwe speech community may have been the result of the slow process of learning new food procurement technologies like herding small stock and cultivating cereals.

Scholars generally agree that different forms of farming, such as the nurturing of tubers, the cultivation of grains, and the tending of livestock, developed and spread from different

centers of origin and along varied trajectories at unique rates.⁵⁴ Knowledge about growing root crops, innovated in West Africa in the fourth millennium B.C.E., spread from that area of origin into the equatorial rainforest, reaching Namibia perhaps by the turn to the Common Era. A form of farming based on the cultivation of grains and the tending of livestock was developed in northeastern Africa a full two millennia earlier, in the sixth millennium B.C.E., and slowly spread southwards into the savannas of eastern Africa. By the last centuries B.C.E., one aspect of this complex, herding small stock, had reached the Zambezi region, from which it quickly spread southwards, reaching the Cape just a few centuries later. Knowledge about grain farming followed the spread of herding, reaching southeast Africa around the turn to the Common Era and later spreading westward, across the southern savannas, to the Atlantic coast before the close of the first millennium C.E. Two technologies associated with the eastern, grain-and-herding farming tradition—metallurgy and pot making—also spread along these general trajectories, albeit at different rates.

Despite the scholarly attention devoted to the spread of farming, the ways in which communities slowly perfected and elaborated upon the knowledge they borrowed and inherited is a history of equal import to the story outlining the origins and diffusion of these technologies. These *in situ* elaborations were processes by which societies developed a unique set of opportunities and constraints on the means by which community members could make a living

⁵⁴ The information presented in this section is available in a wide variety of sources. Some particularly readable accounts incorporating an analysis of linguistic and/or archaeological evidence may be found in the following sources: Christopher Ehret, *The Civilizations of Africa* (Charlottesville: University of Virginia Press, 2002), esp. chpts. 3-6; *Idem*, "Agricultural History in Central and Southern Africa, c. 1000 B.C. to A.D. 500," *Transafrican Journal of History* 4 (1974): 1-25; Martin Hall, *Farmers, Kings and Traders: The people of Southern Africa 200-1860* (Chicago: University of Chicago Press, 1990); T. Shaw, P. Sinclair, B. Andah, and A. Okpoko, eds., *The Archaeology of Africa: Food, Metals, and Towns* (London and New York: Routledge, 1993); Jan Vansina, "A Slow Revolution: Farming in Subequatorial Africa," *Azania* 29/30 (1994/1995): 15-26; *Idem*, *How Societies are Born*, chapters 1-3.

and control their relationships with each other, with the living and the dead, the human and the animal, the material and the spiritual. Rather than exhaustively list here all the specific shifts archaeologists have been able to reconstruct for the agricultural history of the Botatwe region and south central Africa more generally, these details will be described as they become relevant context to the story of developments in wild resource use. Rather, we will briefly consider one scholar's model of the region's archaeological record and the specific developments of the Zambezi Valley communities to identify broad regional trends.

Jan Vansina argues that farming spread across sub-equatorial Africa as a slow revolution with three distinct phases: the initial introduction and adoption of rudimentary farming, the intensification of farming during a long formative period resulting in this technology serving as the main source of food and, finally, latter innovations grafted onto a successful farming system.⁵⁵ Vansina's "slow revolution" model explains the spread of farming as often including but not necessarily requiring small-scale movements of people.

When farming entered a new area, people experimented with technologies, crops, breeds, tools, and combinations of farming, hunting, fishing, and foraging. Vansina calls this experimentation the "formative" phase of a farming system. Farmers who arrived in a new location were quick to learn new strategies for securing their food supply from autochthonous people, just as locals were keen to adopt from their new immigrant neighbors those technologies that seemed most useful. The result is that foraging sites often show evidence of traded pottery

⁵⁵ Vansina, "Slow Revolution." See also Susan Kent, *Farmers as Hunters: The Implications of Sedentism* (Cambridge: Cambridge University Press, 1989). Vansina uses the terms "slow revolution" to challenge the notion of farming as a sudden all-encompassing transformation of society, economy, and politics. He is writing against earlier scholarship that defines the transition to a Neolithic as a shift that overshadowed both continuities in food systems and innovations in other aspects of a community's food system, aspects that fall outside the definition of farming.

and, eventually, the development of their own pottery and possibly the adoption of other technologies. Thus, sites inhabited by autochthonous people who learned such new crafts may be indistinguishable from those of immigrant farmers.⁵⁶

The reverse could also occur when farmers moved into lands unsuitable for farming and were unable, despite extensive experimentation, to adjust their farming technologies to the new environment and had to rely almost exclusively on hunting and foraging.⁵⁷ Again, the sites produced by farmers shifting to hunting and foraging and those of autochthonous hunter foragers would not necessarily be distinguishable. However, scholars are often able to detect such historical transformations through a careful examination of the linguistic record, particularly by identifying borrowed words or specialist terminology.⁵⁸

To establish his model, Vansina draws heavily from the archaeology of the Zambezi Valley and it is worth examining this archaeological record in some detail because the Zambezi Valley regions and its adjacent hinterlands formed the southern boundary of the Botatwe speaking region.⁵⁹ Early Iron Age farming communities who settled in the Zambezi Valley in southwestern Zambia around 500 C.E. developed a specialized system to exploit the *miombo* woodland microenvironment. Joseph Vogel has used settlement patterns to reconstruct a two thousand year history of regional farming practices. Based on small, scattered sites concentrated

⁵⁶ This argument serves as the basis for conclusions in Robertson and Bradley, "A New Paradigm."

⁵⁷ This explanation is usually used to understand the historical phenomenon of the so-called Black Bushmen, dark-skinned Africans speaking San languages who probably entered northern Namibia during a period of moist climate conditions. As the climate shifted, the same region became too dry for a farming economy and the farmers were absorbed into communities of San peoples, taking on both their language and way of life: herding.

⁵⁸ Consider the development of forest specialists in Klieman, "*The Pygmies were Our Compass.*"

⁵⁹ Archaeological evidence from this region is further explored in Chapters 6 and 7.

in the *miombo* during the Early Iron Age, Vogel argues that farmers moved into similar microenvironments, instead of developing strategies to expand their farming system into other sections of the local ecology, when faced with the (inferred) challenge of soil exhaustion.⁶⁰ Thus, Vogel claims, these pioneering farmers made rapid geographical progress without population growth or large-scale migration. Later, in the last centuries of the first millennium, the region attests larger, more permanent sites. Based on ceramic continuity, Vogel argues that the same farming communities returned to those fertile *miombo* areas near waterlogged *dambos*, areas that they had previously inhabited. They transformed their farming practices from a pioneering system focused on clearing new fields to a cyclical system of shifting agriculture that used fallowing to mitigate soil exhaustion, rather clearing new fields.

Based on the influx of Gundu (Early Tonga) wares from the north into the Kalundu-dominated sites of the Zambezi Valley, Vogel concludes that immigrants entered the area in the first centuries of the second millennium. At the same time that new pottery arrived in the region, the archaeological record also attests a new style of iron hoe that Vogel attributes to the immigrant peoples and identifies as a transformative technology for local farmers who abandoned their cyclical system of fallowing. With new iron hoes, farmers could cultivate heavy clay soils, drastically reshaping ideas about which environments were considered habitable, farmable spaces. Vogel argues that these immigrants also introduced intensive cattle-keeping, which further influenced farming practices not only in terms of which lands were considered

⁶⁰ Joseph O. Vogel, "Microenvironments, Swidden and the Early Iron Age Settlement of south-western Zambia," *Azania* 21 (1986): 85-97; Idem, "Iron Age Farmers in southwestern Zambia: some aspects of spatial organization," *African Archaeological Review*, 5 (1987): 159-170.

productive but also with respect to maintaining their productivity, as cattle provided dung fertilizer.⁶¹

The history of Zambezi Valley farming communities, first as makers of Shongwe/Kalomo pottery and later as makers of pottery derived from Namakala, provides an important illustration of the formative phase in the spread of farming as well as subsequent innovations grafted onto the established system. This historical process took place on a much wider scale. Across the regions of central and southern Africa, archaeologists have noted that Early Iron Age farmers had strong environmental preferences. In addition to the Zambezi Valley, the waterlogged *dambos* of central Zambia, the coastal forest mosaic along the Indian Ocean coastline, and the *miombo* woodlands of Zimbabwe are among many examples of Early Iron Age environmental preferences.⁶²

Archaeologists interpret this environmental preference as an attempt on the part of Early Iron Age farmers to ensure the success of their farming complex as they settled new lands requiring frequent moves to fresh soils. This line of reasoning obscures the full range of economic activity pursued in the past. Knowledge about the wild fruits, vegetables, ash-salt plants, fish, and game meat of familiar environments certainly figured into farmers' decisions to seek out familiar environments as a means of achieving the broader goal of a secure food system.

⁶¹ Vogel, "Microenvironments"; Idem, "Iron Age Farmers."

⁶² Derricourt, *Man*; Hall, *Farmers, Kings and Traders*; R. Summers, "Environment and Culture in Southern Rhodesia," *Proceedings of the American Philosophical Society* 104 (1960): 271-2. For research by historians using word histories and noting the same pattern of Early Iron Age environmental preferences, see Ehret, *Classical*; Idem, "Linguistic Inferences about Early Bantu History," in *The Archaeological and Linguistic Reconstruction of African History*, C. Ehret and M. Posnansky, eds. (Berkeley and Los Angeles: University of California Press, 1982); Fourshey "Agriculture, Ecology, Kinship and Gender: A Social and Economic History of Tanzania's Corridor 500 BC to 1900 AD," Ph.D. diss., UCLA, 2002: 118-9; Schoenbrun, *A Good Place*. Idem, "We Are What We Eat: Ancient Agriculture between the Great Lakes," *Journal of African History* 34 (1993): 1-31; Jan Vansina, *Paths in the Rainforests* (Madison: University of Wisconsin Press, 1990): 49-58.

However, scholars rarely foreground hunting, gathering and fishing activities with the same care they pay to agricultural activities when reconstructing the settlement patterns of communities that are known to have been farmers. Moreover, knowledge about microenvironments was intimately tied to community health because familiar microenvironments housed familiar illnesses and the pharmacopoeia to treat them. If ideas about political leadership and community well-being were tied to protecting rain patterns, ensuring the fertility of people and the land, and tapping into familiar sources of wealth, moving within familiar microenvironments allowed leaders to successfully reproduce not only fertile gardens but systems of authority and social security for themselves and their people.

The adoption of intensive cattle-keeping in the early centuries of the second millennium is another shift from our example of Zambezian farming patterns that was far more widespread. Cattle-keeping became an important part of Late Iron Age economies because cattle were a form of wealth that could reproduce themselves with proper herd management. Cattle owners could easily transfer head of cattle between people, marking relationships between, for example, betrothed persons and their lineages, patrons and their clients, or members of the same clan looking to spread their herd to protect against localized drought and livestock disease. The productive capacity of cattle—both economic and social—inspired radical social and political transformations across the region, starting as early as c. 700 C.E. in eastern Botswana and closer to the turn of the millennium in Zimbabwe and other savanna areas as far away as the Great Lakes Region of East Africa.

Interestingly, in the Botatwe region, not a single site with ceramics that correlate with Botatwe speech communities shows any evidence of cattle-keeping until the early second millennium, despite the prevalence of small scale cattle-keeping among their neighbors. The

presence of tsetse fly (a vector of cattle disease) in *miombo* vegetation may explain Botatwe disinterest in cattle. Yet, as we will see, concentrated activity in the bush provided some of the same advantages of cattle—access to large quantities of meat for feasting, and the potential to reinforce social ties through the gifting of meat and skins—but without the labor commitments necessary for cattle herd management. And, just as the affective aspects of herding cattle inspired poetry, nicknames, and an elaborate vocabulary to describe the beauty of cattle among African pastoralists and agro-pastoralists and the invention of the concept of the Cattle Complex among scholars, the power of the emotions associated with hunting and hunters similarly inspired founding myths, celebrations, and allowed hunters to craft reputations, achieve respect, and honor their leaders.⁶³

It was only after elites in societies to the north and south successfully manipulated the self-reproducing value of healthy herds to secure their wealth and political status that Botatwe speakers also adopted cattle-keeping. Yet, Botatwe speakers did not use cattle to centralize wealth and power, as their neighbors did. This different historical trajectory in the Botatwe area poses a significant historical problem. At the very least, the adoption of cattle-keeping by communities of Botatwe speakers that remained generally decentralized suggests that major regional developments in farming were widespread indeed, while beliefs about the economic and social advantages of particular innovations, like intensive cattle-keeping, were locally and historically specific.

Clearly the fits and starts and complicated, uneven paths taken by these spreading technologies differs greatly from the earliest versions of the Bantu Expansions: the story of the

⁶³ Melville J. Herskovits, “The Cattle Complex in East Africa,” *American Anthropologist*, n.s. 28: 230-72; 361-88; 494-528; 633-64.

spread of a fully formed farming and technological complex that gave Bantu peoples an advantage over local communities whom they absorbed or replaced in their swift conquest over most of east, central and southern Africa. By considering linguistic and archaeological evidence separately, we are now able to identify the contributions of non-Bantu speakers to the spread of these technologies across the continent. The role of Kwadi and Khoekhoe speakers in the spread of herding across southern Africa and their introduction of herding to peoples speaking Bantu languages serves as one well-known example. Both technological and linguistic knowledge spread without the movement of people. Indeed, attention to such *in situ* developments are among the most important contributions offered by archaeologists who reject both the early and more recent Bantu scholarship for its relentless focus on diffusion.⁶⁴ Although migration cannot account for the range of historical changes that took place in east, central, and southern Africa over the last five thousand years, the importance of mobility, especially on a small scale and in seasonal cycles, has remained an important theme in African history and should not be rejected when it is an explanation that fits the evidence.⁶⁵

Finally, we know from the conclusions of archaeologists working in south central Africa that hunting, fishing, and foraging were important strategies during the formative phase of experimentation in farming. Specific evidence of these activities will be introduced in the

⁶⁴ For South Central Africa, see Robertson, "Origin and Development"; Robertson and Bradley, "A New Paradigm"; Karim Sadr, "The Neolithic of Southern Africa," *Journal of African History* 44, 2 (2003): 195-209.

⁶⁵ One model of movement and mobility that has been applied with great success to ancient African history is the frontier model. Igor Kopytoff, "The Internal African Frontier," in Igor Kopytoff, ed., *The African frontier: the reproduction of traditional African societies*, (Bloomington: Indiana University Press, 1987). For archaeological evidence of a dramatic long-distance population movement, consider the spread of farming from the Indian Ocean coast to Maputo, some 2200 km. away, in the short span of a century in the first centuries of the common era. The impetus for this swift migration was the need to remain in familiar natural environments. J. M. Morais, *The Early Farming Communities of Southern Mozambique*, (Stockholm: Central Board of National Antiquities, 1988) as cited in Vansina, "Slow Revolution," 21. The migrations related to the mfecane and difiquane serve as a more recent example from southern and, subsequently, south central Africa.

coming chapters. For now, it is important to note that archaeologists interpret evidence of wild resource use as supplemental to farm produce. Yet, we don't know enough about how the relationship between farming and the use of wild resources functioned or changed over time to conclude that wild resource use was supplemental to farming. Moreover, we know decidedly little about how wild products like skins and ivory articulated with changing ideas about political power, regardless of the status of wild foods in regional food systems.

According to Vansina's model, farming systems develop an optimal relationship with the local environment by the end of the formative phase; wild resources might continue to supplement farming, particularly in times of climatic stress, but farm products remain the main source of food. It is difficult to understand the idea of a "main" source of food in a region like south central Africa, where poor soils and unpredictable rainfall mean that wild resources must be combined with farm products if farming is to be pursued at all. That is to say, archaeologists have interpreted evidence of wild resource use by assuming that farming was the driving force of the economy. As we shall see in the next few chapters, African farmers used wild resources not only to feed their families and ensure adequate nutrition in the face of drought and famine but also to access different forms of wealth and the various networks of friends, followers, trade partners, and ancestors that made for a fulfilling and successful life.

Archaeologists are best able to identify bodies of evidence when they have accumulated in a concentrated place over long periods of time; that is to say, archaeologists can more easily "see" villages, for example, than single-use hunting camps in the bush. Thus, archaeologists' emphasis on farming is not only a result of a long-standing intellectual bias towards to the productive powers of farming, as noted in Chapter 1, but the very real difficulty of excavating evidence for work done in the bush. Most archaeological evidence of this work, usually tools and

bones, are found in villages or in places with intensive specialization that produced large, easily visible specialized sites.

To summarize, the broad contours of ancient food economies in central and southern Africa have been molded by a sustained scholarly interest in understanding the spread of farming. This story is characterized by several important developments. The spread of small livestock herding is attested in the archaeological record of the Zambezi region by the last centuries B.C.E., long before Botatwe languages were spoken in the area. Dated to the first centuries of the first millennium of the Common Era, the earliest direct evidence of cereal farming comes from the greater Kabwe area of north central Zambia. But, indirect traces of farming, especially iron hoes and grindstones, are found throughout Early Iron Age sites in south central Africa, indicating that the first millennium C.E. was characterized by the spread of cereal agriculture throughout the region. The final transformation in regional food economies, a shift to intensified cattle keeping, dates to the late first millennium C.E. in some areas, only reaching sites with Namakala wares in the early second millennium and never with the intensity that supported centralized polities like those of Toustwe sites in eastern Botswana. These activities, with the seasonal pursuits of hunting, fishing, and foraging supported small scale, shifting settlements. Yet, food economies were not the only thing keeping people moving in ancient south central Africa.

3.6.2 Trade

In addition to research conducted on the spread of pottery and farming technologies, archaeologists have spent a prodigious amount of energy tracing the history of trade, particularly long-distance regional and intercontinental trade. Along with the development of intensive cattle-

keeping, archaeologists have used control of trade in regional resources like gold and copper to explain the development of political complexity (and state formation in an earlier literature) among central and southern African societies like the Toutswe, Zimbabwean, and early Luban polities.⁶⁶ The history of trade provides another facet of the context surrounding developments in the use of wild resources because these resources, especially ivory and skins, were circulated along trade networks and provided their procurers with access to foreign wealth, especially copper, glass beads, and cloth. Like the development of intensive cattle-keeping, new technological achievements in metallurgy, and the proliferation of innovative pottery styles, the creation of long-distance trade networks was generally the work of peoples reformulating their economic, social, and political opportunities around the turn of the second millennium as part of the transition to the Later Iron Age. However, the regional trade networks of the Early Iron Age served an important role in setting the stage for the intensification of trade and its expansion across longer distances and even between continents during the Late Iron Age.

Early Iron Age Trade

Regional trade in fish, copper, and some small quantities of pottery and iron created relationships between Early Iron Age sites in central Africa but, for the most part, this trade seems to have been characterized as a local movement of goods from one village to neighboring

⁶⁶ Studies of “political complexity” developed not as a terminology shift to replace scholarship theorizing state formation but to enable scholars to write political histories for regions and time periods where we could not say formal states existed. The contribution of this literature was to expand the types of processes that counted as historical explanations of political change, such as the development of chiefdoms or articulations of multiple systems of authority rooted in chiefships, clans, healing cults, etc. For a survey of the development of studies on political complexity, see Susan McIntosh’s Introduction to her edited volume *Beyond Chiefdoms: Pathways to Complexity in Africa*, (Cambridge: Cambridge University Press, 1999).

villages, or “down-the-line” trade.⁶⁷ Evidence for this sort of Early Iron Age trade can be seen in a distribution pattern of local products (particularly copper); there is a concentration of the product nearer its origin and a slow tapering off in quantity further from the origin. Towards the middle of the first millennium, for example, glass beads from Indian Ocean trade networks began to appear in sites of the Botatwe region. The low frequency of these beads in the Botatwe area compared to bead frequency at sites closer to the Indian Ocean suggests that they were transported via inter-village traffic.⁶⁸

Brian Fagan argues that it was the steady but informally-structured demand for the raw materials of the Early Iron Age farmer—iron, copper, and salt—that was responsible for later, more complex regional and long-distance trade routes. Salt was either made locally by burning particular plants or was imported from Basanga in the Kafue region of central Zambia or the Ivuna region of southern Tanzania, just northeast of Zambia.⁶⁹ Iron was smelted locally at most sites to form the basic tools of farming, hunting, and fishing (smelting evidence—usually slag—exists in most Iron Age sites) but ore was traded locally.⁷⁰ Copper, however, was not used for EIA farming tools. Rather, it was used to mark social distinction within small, localized communities. Copper tools are scarce, but copper ornaments, especially simple drawn-wire

⁶⁷ Brian M. Fagan, “Early Trade and Raw Materials in South Central Africa,” *Journal of African History* 10:1 (1969): 1-13. Reece argues that the control of fishing grounds and the trade of dried fish served as the basis for consolidating authority and the eventual emergence of a centralized notion of political power among early Luban societies. Thomas Q. Reece *Rainbow and the Kings :a History of the Luba Empire to 1891* (Berkeley: University of California Press, 1981).

⁶⁸ Fagan “Early Trade,” 10.

⁶⁹ Fagan, “Early Trade” 4-6; Idem, “Gundu and Nonde, Basanga and Mwanamaimpa.”

⁷⁰ Brian M. Fagan, D. W. Phillipson, and S. Daniels, *Iron Age Cultures in Zambia, vol. II: Dambwa, Ingombe Ilede and the Tonga*, (London: Chatto and Windus, 1969): 4.

bangles, are frequent by the middle of the first millennium (see Figure 3.3).⁷¹ In Zambia, EIA trade in copper ornaments centered on the Copperbelt mines and possibly also the copper-working industry at Nqoma, northwest of the Okavango Delta in the last centuries of the Early Iron Age. It is important to stress that trade in copper was stimulated not by the outside forces of the Indian Ocean trade but by local demand.⁷² To summarize, Early Iron Age trade was generally informal in nature and concerned with local demand for raw materials related not only to the success of economic endeavors like farming and hunting but also the performance of status.

Late Iron Age Trade

By the middle of the second millennium, several areas in central and southern Africa were involved in regular transcontinental trade. The Ingombe Ilede community was the most important trade center in the Botatwe region. By the 15th century, the inhabitants of Ingombe Ilede were involved in extensive long-distance trade networks to the copperbelt, the Indian Ocean, and the Great Zimbabwe polity to the south. Botatwe-speakers living in the hinterlands to the west (Batoka Plateau), northwest (Kafue area), and north (Lusaka region and beyond) of Ingombe Ilede had opportunities to trade skins and ivory into the Indian Ocean system at Ingombe Ilede. The inhabitants of Ingombe Ilede grew cereal crops and raised livestock but

⁷¹ Derricourt, *Man*; Fagan, *Iron Age Cultures*; Fagan *et. al.*, *Iron Age Cultures*; R. R. Inskip, "Some Iron Age Sites from Northern Rhodesia," *South African Archaeological Bulletin* 14 (1962): 91-6; Joseph O. Vogel, *Kamangoza: An Introduction to the Iron Age Cultures of the Victoria Falls Region*, (Nairobi and London: Oxford University Press for the National Museums of Zambia, 1971); Idem, *Kumadzulo: An Early Iron Age Village Site in Southern Zambia*, (Lusaka and London: Oxford University Press for the National Museums of Zambia, 1971); Idem, *Simbusenga: the Archaeology of the Intermediate Period in Southern Zambia*, (London: Oxford University Press for the National Museums of Zambia, 1975).

⁷² Michael S. Bisson, "Copper Currency in Central Africa: The Archaeological Evidence," *World Archaeology* 6, 3 (1975): 276-292.

relied heavily on hunting for food as well as skins and ivory to trade for the gold, cloth, glass beads, and shells supplied by traders from the Indian Ocean coast and the Zimbabwean plateau.⁷³ The inhabitants of Ingombe Ilede seemed to have kept most of their own wealth (aside from ornamental ivory bangles and gold and glass beads) in the form of copper ingots. Such copper ingots were converted on site into small bangles that were used as a general-purpose currency in trade with the Zimbabwean polity.⁷⁴ These bracelets were probably an effective currency because as they were carried further from centers of trade, their use could transform from a currency to an ornamental prestige good. The inhabitants of Ingombe Ilede were skilled in the conversion of copper to a number of trade items, including jewelry, and may have replaced the earlier role of Nqoma as a center of copper-working in the northwestern region of the Kalahari.⁷⁵ Developments at Ingombe Ilede, including the development of copper currencies and social stratification attested in elite burials, parallel those in the Sanga region of southern DRC.⁷⁶ The development of currencies marks a transformation from regional, informal trade to a highly integrated, spatially and temporally extensive economy that shared a set of universal standards of value.

One result of this commercial transformation was a general movement towards increasing contact between communities across long distances and increasing opportunities for social

⁷³ Fagan, *Iron Age Cultures*, 12; Fagan *et. al.*, *Iron Age Cultures*.

⁷⁴ Bisson, "Copper Currency," 284-6.

⁷⁵ For more on this connection, see Chapters 6 and 7.

⁷⁶ Bisson, "Copper Currency"; Pierre de Maret, "Chronologie de l'âge du fer dans la depression de l'Upemba en République du Zaïre," Ph. D. diss. Université Libre de Bruxelles, 1978, published in *Annales du MRAC*; Idem, "Luba Roots: The First Complete Iron Age Sequence in Zaire," *Current Anthropology* 20:1 (1979): 233-235; J. Hiernaux, E. Longrée, and J. DeBuyst, *Fouilles Archéologique dans la Vallée du Haute Lualaba, I. Sanga, 1958*, (Tervuren: MRAC, 1971); J. Nenquin, *Excavations at Sanga, 1957*, (Tervuren: MRAC, 1963).

stratification. Further to the interior, this stratification remains smaller-scale, while at economic centers like Sanga and Ingombe Ilede, burials rich in copper bracelets, clusters of drawn copper wires, copper ingots, gold and glass beads, and cloth attest to highly stratified communities. A brief description of the copper and ivory artifacts uncovered in south central Africa suggests shifts in trade patterns as well as social organization, to which we will return below.

Copper is abundant in regional sites dating from the thirteenth to the nineteenth centuries because it was used as a currency along trade routes.⁷⁷ The most common copper artifact in central and southern Zambia was a bracelet made by wrapping copper wire or strips around a fiber core (see Figure 3.3).⁷⁸ The wrapping of copper around a fiber core may have been a preferred style or an attempt to stretch smaller amounts of copper into the form of a thick, seemingly solid copper bangle, particularly because solid copper bracelets seem to have been more popular in earlier periods, before copper acquired its value as a currency in the early second millennium. The difference between drawn wire and strips of foil as the material wrapped around the fiber core could represent either a technological advance, a marker of social rank, or differing scales of value.

Botatwe speakers probably engaged with the Late Iron Age commercial network not as the primary movers of trade goods but as providers of goods like ivory and skins to merchants at specialist sites like Ingombe Ilede. We know this because archaeological sites in areas where Botatwe speakers settled do not have copper crosses, the currency of Shaba copperfields. Rather, sites in central and southern Zambia have copper bangles, items that may have been produced at

⁷⁷ Bisson, "Copper Currency."

⁷⁸ Bisson, "Copper Currency," 285; Fagan, "Early Trade," 6; Idem, *Iron Age Cultures*; Inskeep, "Some Iron Age Sites"; E. A. Mills and N. T. Filmer, "Chondwe Iron Age site, Ndola, Zambia," *Azania* 7 (1972): 129-145; D. W. Phillipson, "Early Iron Age Sites on the Zambian Copperbelt," *Azania* 7 (1972): 93-128; Idem, *Later Prehistory*.

sites like Nqoma and Ingombe Ilede as a form of currency traded by merchants with producers of raw materials like ivory but then used (and even traded) locally by their trade partners as rare ornaments, not currency.

Figure 3.3 Copper Artifacts from Central and Southern Zambia

Site	Date	Quantity	Context	Description/Style	Other Copper Finds
Ingombe Ilede (East Batoka Plateau)	1300-1400 CE	Very plentiful See description for example of quantity	Burials rich in copper bangles, copper trade wire, copper ingots, glass beads, gold beads	Wire drawn to fine gauge and wrapped on raphia palm core, worn singly or in series up to 14in. long OR, twist trade wire into rough bracelet	Needles, razor
Mukuni (Zambezi)	1200 CE	1	1 bracelet in trench	Coiled copper bracelet	
Twickenham (Lusaka Area)	1150 CE	3	1 bracelet in trench 2 fragments, no context	1 copper strips wound around fibre core	Hook, belt fastener, no context
Simbusenga (Zambezi)	900-1100 CE	11	All in burials, 9 in one burial on left arm with one each for two other burials	1100+CE burial with 4 x thicker wire; c.900CE burials of 2.5mm solid copper wire	
Kamangoza (Zambezi)	800-1200 CE	11	11 Bracelets in trenches of all time periods	Thin strips wound around a grass core	Wire, sheet, ring/ferrule
Kalomo (Batoka)	1000 CE	None given	Bangles in trenches	Wire	
Kalundu (Batoka)	700-1200 CE	1	Trench	Strip of metal wound on core	
Chondwe (Copperbelt)	600-1000 CE	1	5 fragments of 1 bracelet in trench	Strips wound on fiber core	3 beads 3 fragments
Matobo (Batoka)	700-900 CE	2	Trenches	1 twisted wire with fiber core 1 solid copper bracelet	
Kumadzulo (Zambezi)	580-650 CE	2	2 bracelets in trench	1 solid, hammered oval 5 strip frags wound on core	
Isamu Pati (Batoka)	600 CE	None given	Bangles in trench	Strips wound on core	
Namakala (West Batoka)	500 CE	1	Bangle in trench	Wound on core (wire or strip?)	

Ivory is also found at sites in the interior (Batoka Plateau and Kafue area) throughout the late first millennium and second millennium so it is likely that ivory was one of the products of the informal local trade networks of the EIA.⁷⁹ The networks of skilled hunters and craftsmen developed for the Early Iron Age ivory trade expanded during the Late Iron Age, providing ivory procurers and ivory sculptors of the interior with easy access to the flow of exotic luxuries circulated along monetized long-distance trade routes.

Like copper artifacts, of all the ivory found at sites in the Botatwe region, bracelets are by far the most common ivory product (see Figure 3.4). Bracelets were turned, probably by specialist craftsmen as this skill has been described in the ethnographic record as a particularly difficult one to master.⁸⁰ The ivory bracelets of this region could certainly be interpreted as rare luxury goods because hunting ivory is dangerous, demanding the coordination of hunting groups. Furthermore, the skill needed to work the ivory into ornaments would have made them more precious. From the information collected in Figure 3.4, we can see that early bracelets were rectangular and often quite wide. Over time, perhaps as technology for turning ivory bracelets improved, styles changed from rectangular to rounded and then ridged. Some burials show the accumulation of ivory bangles; at sites where the gender of the human remains was identified, the burials with the ivory bangles belonged to women. It is possible that ivory bangles were not only markers of status and objects for gifting to build social networks, but that they were implicated in the construction of gender or the display of women's wealth or authority or even their status as lovers and wives of skilled hunters. The accumulation of ivory bangles in burials

⁷⁹ Derricourt, *Man*; Fagan, *Iron Age Cultures*; Fagan *et. al.*, *Iron Age Cultures*; Inskip, "Some Iron Age Sites"; Phillipson, *Later Prehistory*; Vogel, *Kamangoza*; Idem, *Kumadzulo*; Idem, *Simbusenga*.

⁸⁰ Edwin W. Smith and Andrew M. Dale, *The Ila-Speaking Peoples of Northern Rhodesia*. 2 vols. (London: Macmillan, 1920).

along with their increasingly complex turned forms further suggests their importance as highly visible markers of some form of social status.

Figure 3.4 Ivory Artifacts from Central and Southern Zambia

Site	Date	Quantity	Context	Description and Style	Other Ivory Finds
Kalala Island (Kafue Region)	1600-1800 CE	15	4 bangle fragments in trench; 11 bangles in burial on woman's right lower arm	Turned with ridge	1 turned segment (handle of stave) in trench 33 cut deliberately pieces
Musa Game Park (Kafue Region)	1600-1700 CE	1+	fragments of 1 or more bangles in trench	Turned with ridge	
Isamu Pati (Batoka Plateau)	900-1300 CE	8	2 bangle fragments in trench; 4.5 in. diameter. .3 in. thick 6 bangles on right forearm in burial IP/1; 4.5 in. diameter, .2 in. thick	Turned, round	1 0.2 in. thick 4.5 in. long fragment with iron tool at end
Twickenham Road (near Lusaka)	1100 CE and later	2	1 bangle in trench, internal diameter 80mm; 1 crude bangle in trench, internal diameter 42mm	1 rectangular cross section 9mm x 14mm 1 rectangular cross section, 9mm x 7mm	
Chondwe (Copperbelt Region)	1100 CE	1	1 bracelet in trench, 80 mm external diameter	1 rectangular cross section, 6mm x 30mm	
Simbusenga (Batoka)	900 CE	2	1 in burial; young woman's left arm 1 larger in trench	1 rectangular cross section, 5mm x 4mm; 1 rectangular cross section, 17mm wide	
Chundu (Batoka)	700-800 CE	1	1 in burial on right wrist	1 with 16mm diameter	

3.6.3 Political Organization

The archaeology of sites with Namakala pottery show little evidence of change; there do not appear to have been major shifts in community size or organization. Yet, this lack of change in settlement hierarchies or relative site size begs the question of how Botatwe peoples developed such a sustainable political organization. From the archaeological record, we can hypothesize that the populations living at sites associated with Botatwe speakers were probably organized under Big Men for most of the last three millennia, because the sites lack evidence of more centralized forms of political power.

The lack of evidence for any marked increase in either social stratification or political complexity from a Big Man community to a small chiefdom suggest that the political organization of the Botatwe region remained both stable and particularly decentralized.⁸¹ At sites like Ingombe Ilede during its second occupation, elite burials and other evidence of specialization in long distance trade suggest a more centralized political organization, perhaps as a chiefdom.⁸² However, it is likely that this settlement was a depot linking the larger trade and cattle polities of Shaba and the Zimbabwean plateau, rather than a Botatwe site.⁸³ In other areas, such as the Batoka Plateau, rare ornaments increased in number over time, but locally and regionally available materials, such as the ivory and copper bracelets discussed above, remained

⁸¹ Although the Big Man communities and small chiefdoms are often distinguished by single versus two-tiered settlement hierarchies and/or the creation of large monuments like the mounds at some sites like Isamu Pati on the Batoka plateau, the archaeological data for the Botatwe region remains inconclusive and mounds are more likely to represent long-term site occupations with deep accumulations.

⁸² Allen W. Johnson and Timothy K. Earle, *The evolution of human societies: From Foraging Group to Agrarian State* (Stanford, CA: Stanford University Press, 2000).

⁸³ Katanekwa argues that the second occupation of Ingombe Ilede may be attributed to Tonga speakers; even if Tonga speakers were responsible for the trade outpost, its connections with polities of both the copperbelt and the gold producing regions of Zimbabwe make it an anomaly among Botatwe settlements, rather than the norm. Katanekwa, "Iron Age in Zambia"; Idem, "Lingusitics."

far more common than glass beads, cloth, or gold. The decentralized, stable nature of political organization in the Botatwe area was an anomaly in the broader region, where societies whose success at manipulating wealth in cattle, trade goods, complicated political ideologies of descent, and, eventually, military organization and relationships with European traders, missionaries, and colonial officials led to the emergence of some of the most famous African polities: Zimbabwe, the Luba state and its affiliates including the Lunda polities and the Bemba and Phiri chiefdoms, and, later, powerful Ngoni polities and the Lozi kingdom, among others.⁸⁴

From linguistic data, we also see a history that seems to be characterized by political continuity. We know that Sabi and Botatwe societies have been predominantly decentralized with small, localized polities over the last 3000 years. Scholars believe clans organized social life until the first centuries of the second millennium, when elites in some polities gained control of sources of wealth, prestige, and power to maintain claims to some level of social stratification, although not necessarily to political power. By the 16th century, political relationships among less centralized communities throughout south central Africa were often rearranged with regional clans claiming chiefly status over commoner clans.⁸⁵

⁸⁴ For a comparison between Botatwe political culture and historical arguments developed by Vansina for sustained decentralized political power among societies to the west of the Botatwe area, see Chapter 9, below. For the history of similarly decentralized communities on the Kalahari Sands west of the Botatwe area, see Vansina, *How Societies are Born*, chapter 5.

⁸⁵ Ahmed, “Before Eve was Eve”. This trend is similar in other areas of south central Africa. Consider, for examples, the description of political organization among the Bemba over the last five hundred years in Andrew Roberts, *A History of the Bemba: Political Change in North-eastern Zambia before 1900*, (Madison: University of Wisconsin Press, 1973). See also Chapter 9.

3.7 Summing Up

The chronologies of change over time from interpretations of the climatic and archaeological records correlate surprisingly well, though not perfectly, with the chronology of linguistic divergence. These correlations allow us to tentatively make links between archaeologists' reconstruction of developments in the region's political economy and eras in which particular proto-languages were spoken. The coming chapters present linguistic data to flesh out the stories developed by archaeologists about the spread of farming, the expansion of trade, and the development of political complexity. Botatwe history can teach us something new about the spread of Bantu languages across geographic spaces, cultural interpretations of changing environmental contexts, the nature of early African food systems, changing compositions of wealth and community in the precolonial past, and the social context of political authority in ancient Bantu speaking Africa.

PART THE TECHNOLOGY AND ECONOMY
TWO OF WILD RESOURCE USE, CA. 1000 BCE TO CA. 1900 CE

**CHAPTER FOUR
TRANSLATING THE BUSH:
BOTATWE PERCEPTIONS OF THE NATURAL ENVIRONMENT**

Hunters, fishers, and foragers speaking Botatwe languages in the bush, in their grain fields, and in their villages developed words for their natural environment that described both the factual historical occurrence of particular species and intertwined ecosystems and culturally filtered perceptions of the social, economic, and political work that could be accomplished with those species and ecosystems. Reconstructions of this vocabulary provide a range of information about the past. Some of this information is common to all words used as sources for the writing of history; reconstructions identify knowledge that was valued enough to preserve, reinvent, or refine and they provide evidence of contact between communities speaking different languages, including the direction of the exchange of the particular information encoded in the words borrowed between them. The production and exchange of information about the environment was a particularly important part of the cross-cultural interaction that enabled newcomers to

settle successfully and firstcomers to benefit from the constant influx of immigrants with new ideas.

Word histories of environmental vocabulary also carry unique information about the Botatwe past. Some archaeologists claim that scholars using the principle of least moves to locate speech communities in geographical space are careless in their assessment of topography. They also argue that this historical scholarship too readily dismisses the role of autochthones in the spread of farming and language in favor of the explanatory model of small-scale migration.¹ Reconstructed words for species favoring certain topographies, such as river valleys, and species endemic to a particular area or having distinct ecological needs that limit their distribution provide details about the environment in which ancient languages were spoken. When combined with careful consideration of past climates on regional environments, they may be used to identify places where the ecosystems reflecting the characteristics described by reconstructions for topography, flora, and fauna with limited environmental distributions are likely to have existed in the past. Thus, reconstructed vocabulary can be used to locate speakers in those particular environments, confirming or refining the spatial approximations generated by the application of the principle of least moves. Moreover, evidence for contact between linguistic

¹ John Robertson and Rebecca Bradley, "A New Paradigm: The African Early Iron Age without the Bantu Migrations" *History in Africa* 27 (2000): 287-323. Consider also: Francis Musonda, "The Significance of Pottery in Zambian Later Stone Age Contexts" *African Archaeological Review* 5 (1987): 147-158; Idem, "Cultural and Social Patterning in Economic Activities and Their Implications for Archaeological Interpretation: a Case Study from the Kafue Basin, Zambia," *African Studies* 48 (1989): 55-69. Robertson and Bradley's critiques are more appropriate to an older set of scholarship than to the recent work of historians using language data. Consider the attention paid to reconstructing the environment of early Bantu communities in Christopher Ehret, *An African Classical Age: Eastern and Southern Africa in World History, 1000 B.C. to A.D. 400* (Charlottesville, VA: University Press of Virginia, 1998); Catherine Cymone Fourshey, "Agriculture, Ecology, Kinship and Gender: A Social and Economic History of Tanzania's Corridor 500 BC to 1900 AD," Ph.D. dissertation, University of California Los Angeles, 2002.

communities foregrounds the role of firstcomers in teaching speakers of immigrant languages about the local environment.

In order to recognize the influence of both the environment and human understandings of the environment on historical processes, this chapter explores Botatwe perceptions of the environment, particularly the intellectual connections and semantic leaps Botatwe speakers made between species, human activity, and specific spaces as they invented words to speak about their surroundings. Word histories of Botatwe vocabulary for the flora, fauna, and natural features around their homesteads tell us that Botatwe settlement unfolded in three stages.

Early in their history, Botatwe languages were spoken in the same kinds of environments as the linguistic ancestors of Proto-Botatwe. By the close of the Proto-Botatwe period, however, innovations for drier species suggest a combination of climate change and language spread into new environments to the south of the Botatwe homeland; knowledge about these new kinds of environments was generated both internally and learned from neighboring linguistic communities. During the second stage of settlement, from the middle of the first millennium to the early centuries of the second millennium, Botatwe communities developed words to talk about the differing agricultural potential of the microenvironments into which their languages were carried. The different approaches to agriculture and wild resource use taken by Proto-Eastern Botatwe and Proto-Western Botatwe communities carrying their cereal farming techniques into the Kafue and Kalahari Sands regions characterize the second period of settlement. Lexical innovations for wild animals and, as we will see in the following chapters, modes of wild resource use show us that the work of farming and bushcraft often overlapped in these earlier eras.

By the third stage of Botatwe settlement, from the early centuries to the end of the second millennium, intercontinental trade routes extended to trade emporiums on the fringes of Botatwe lands: Nqoma northwest of the Okavango Delta and, in two distinct occupations, Ingombe Ilede near the convergence of the Kafue and Zambezi Rivers. The greater Zambezi zone and its watersheds became the center of a great deal of cross-linguistic contact. Innovations in vocabulary about the environment continued as Botatwe communities participated in zones of contact, such as exchanges along the Zambezi floodplain with Luyana speakers and, later, with Lozi speakers who took control of the Luyana kingdom or contacts between eastern Botatwe and Sabi speaking communities in the corridor stretching from the Lukanga swamps down to the confluence of the Kafue and Zambezi.

4.1 Environmental Limitations, Perceptions, and Translations

Scholars reconstructing environmental histories of Africa accept the influence of local ecology on opportunities for economic, social, and cultural innovation while recognizing that the way humans *perceived* local ecology equally shaped their agency within its context.² In this chapter, word histories describe the kinds of environments Botatwe people knew about at different times in the past and what Botatwe speakers imagined they could do with those resources. These word histories explain how and why both specific locations and categories of spaces were assigned value; they are testaments to Botatwe speakers' changing perceptions of

² James L. Griblin, *The Politics of Environmental Control in Northeastern Tanzania, 1840-1940* (Philadelphia: The University of Pennsylvania Press, 1992); Fourshey, "Agriculture, Ecology," Introduction, Chapters 4 and 5; James McCann, *Green Land, Brown Land, Black Land: an Environmental History of Africa* (Portsmouth, NH: Heinemann, 1999); Henrietta L. Moore and Megan Vaughan, *Cutting Down Trees: Gender, Nutrition, and Agricultural Change in the Northern Province of Zambia, 1890-1990* (Portsmouth, NH: Heinemann, 1994); David Schoenbrun, *A Green Place, A Good Place: Agrarian Change, Gender, and Social Identity in the Great Lakes Region to the 15th Century* (Portsmouth, NH: Heinemann, 1998).

the natural world over three millennia. As we will see, Botatwe peoples did not seek to overcome a hostile environment, as an earlier generation of scholarship on African environmental history has argued.³ Not surprisingly, their perceptions of the places they inhabited were far more focused on their own agency: what they imagined they could do in different kinds of spaces.

The environment certainly placed constraints on human activity, as early scholarship recognized, but, as scholars now observe, it does so in the context of human recognition of such constraints. That is, some environmental limitations, such as the expansion of tsetse fly environments, stimulate a response because they have been observed to be constraints on new aspirations, like cattle keeping. Otherwise, such environmental limitations would have remained unremarkable features of the environment! Indeed, environmental limitations to one set of economic pursuits generally encourage innovations, and often specialization, in other pursuits.⁴

Other environmental limitations are cultural constructs exploiting the very real spatial boundaries produced by natural environmental conditions such as floral and faunal distributions. For example, *isokwe*, often translated as “the bush, grassy wilderness,” was a place of opportunity for skilled hunters and farmers seeking new fields, but Botatwe farmers also saw the

³ This literature understood the environment as a force to overcome, a force with the capacity to limit economic, social, and cultural possibilities. See, for example, John Iliffe, *Agricultural Change in Modern Tanganyika: An Outline History* (Nairobi: East African Publishing House, 1971); idem, *Africans: The History of a Continent* (Cambridge and New York: Cambridge University Press, 1995); Helge Kjekshus, *Ecology Control and Economic Development in East African History: The Case of Tanganyika, 1850-1950* (Berkeley: The University of California Press, 1977). Many recent histories have located the source of this idea about the hostile African environment in colonial officials’ concerns about agricultural productivity and labor control. Among many, see the citations footnote 2, above.

⁴ Consider, for example, how the impact of elevation on local environmental conditions functioned in the development of articulated specializations among agriculturalists, herders, and hunter-foragers in Stanley Ambrose, “Hunter-Gatherer Adaptations to Non-Marginal Environments: An Ecological and Archaeological Assessment of the Dorobo Model,” *Sprache und Geschichte in Afrika* 7, 2 (1986): 11-42. Consider also Roderick McIntosh’s pulse model in which he describes how interactions between communities in the circumstances of rapidly oscillating climate change and diverse micro-environments in close proximity encouraged occupational specialization in the Inland Niger Delta; “The Pulse Model: Genesis and Accommodation of Specialization in the Middle Niger,” *Journal of African History* 34 (1993): 181-220.

dangers the bush posed to the cultivated, civilized space they had cut out from the bush. Phrases like *mwana-musokwe*, “child of the bush; illegitimate child,” help us see how the frontier between contrasting vegetation densities (cleared and uncleared lands) were encoded with culturally constructed meanings.⁵ In this case, the dense vegetation of the bush was associated with antisocial behavior that threatened the safety of the spaces and societies build up by hardworking farmers.⁶ Like all people, Botatwe speakers used natural and constructed features of the landscape to limit who could go into which spaces and to what ends.

Europeans documenting Botatwe languages in the early 20th century brought their own culturally mediated perceptions of the environments in which Botatwe speakers lived and these European ideas left their mark on translations of Botatwe vocabulary. In translation, particularly in colonial-era dictionaries, the distinction between land used for cultivation and land used for bushcraft has often been formulated as a distinction between domesticated and wild spaces. While we have just seen that distinctions between cultivated fields and *isokwe* did carry cultural weight, the semantic domains of other words Botatwe speakers used to talk about areas beyond their fields focus on human activity in these spaces. All of these words are glossed as “forest” or “bush” in colonial-era dictionaries. Yet, *mutemwa*, for example, literally translates as “the place that is cut [down]” and refers to stands of trees cut for firewood or building poles, problematizing the pervasive distinction between “wilderness” and places inhabited and cultivated by humans in dictionaries penned by Europeans.

⁵ Jan Shetler, *Serengeti: a History of Landscape Memory in Tanzania from Earliest Times to the Present* (Athens, OH: Ohio University Press, 2007).

⁶ Elizabeth Colson, *Tonga Religious Life in the Twentieth Century* (Lusaka, Zambia: Bookworld Publishers, 2006), 89-108; 146-8.

When European missionaries, scholars, and colonial administrators glossed Botatwe words for vegetation communities as “bush,” “forest,” “wilderness,” or “wild space,” they reinforced a distinction between the work undertaken in two supposedly different kinds of spaces, a distinction that is not always present in the roots Botatwe speakers used as they invented such words. European glosses juxtaposed the concept of the wild with discourses linking successful civilizational conquest to productive farming practices. This emphasis on the role of farming as a means to conquer or tame the bush tells us more about missionary and colonial concerns about agricultural productivity than the history of Botatwe perceptions of the bush.⁷

4.2 The Botatwe Environment, c. 1000 BCE to c. 500 CE

Chapter 3 briefly introduced the main vegetation forms that have been present in south central Africa over the last three thousand years: northern and southern *miombo* and *mopane*, which are generally distinguished by flora with differing temperature and rainfall tolerances. Botanists have, of course, developed a far more complicated classification of the region’s ecosystems.⁸ The specificity of these classifications are helpful in understanding developments in

⁷ For a compelling history of European concerns linking agricultural productivity to successful missionary and colonial practice in northeastern Zambia, see Henrietta Moore and Megan Vaughan, *Cutting Down Trees: Gender, Nutrition, and Agricultural Change in the Northern Province of Zambia, 1890-1990* (Portsmouth, NH: Heinemann, 1994). The development of ecology as a colonial science was tied to these concerns. Much of this early colonial scientific work was done in Zambia, then Northern Rhodesia. See William Allan, *The African Husbandman* (New York: Barnes and Noble, 1965); Paul Smith, ed., *Ecological Survey of Zambia: the Traverse Records of C. G. Trapnell* vol. 1-3 (Kew: The Board of Trustees of the Royal Botanic Gardens, 2001).

⁸ Sections describing scientific classifications of vegetation zones and their constituent species draw heavily from the sources listed below. Bruce Campbell, ed., *The Miombo Woodlands in Transition: Woodlands and Welfare in Africa* (Malaysia: Centre for International Forestry Research, 1996); Vincent Carruthers, ed. *The Wildlife of Southern Africa* (Cape Town: Struik, 2000); K. Coates-Palgrave, *Trees of Southern Africa* (Cape Town: Struik Publishers, 1983); T. M. Crowe, “A quantitative analysis of patterns of distribution, species richness and endemism in southern African vertebrates,” in *Vertebrates in the Tropics*, ed. G. Peters and R. Hutterer (Bonn: Museum

Botatwe bushcraft, farming, and those activities that blurred the distinctions between the bush and the field.⁹

According to the principle of least moves, the approximate homeland of the Proto-Botatwe community was located in the west central Shaba district of DRC in the last millennium B.C.E., a region that was covered by moist *miombo* woodland savanna. Proto-Botatwe speakers living in this *miombo* environment three thousand years ago exploited the mosaic of broadleaf deciduous savannas and woodlands interspersed with denser forests, open grasslands, and swampy regions where rolling hills allowed water to pool. Soils supporting the northern *miombo* environment are highly weathered up to three meters in depth, leached of nutrients, and acidic with little organic matter. Northern *miombo* vegetation also harbors tsetse fly (*Glossina* spp.), a vector of trypanosomiasis (sleeping sickness), which is a disease that threatens both humans and cattle.

Alexander Koenig, 1990); R. East, *African Antelope Database 1998* (Gland, Switzerland and Cambridge: IUCN, 1999); R. D. Estes, *The Behavior Guide to African Mammals* (Berkeley: University of California Press, 1991); J. A. K. Farrell, "Preliminary notes on the vegetation of the lower Sabi-Lundi basin, Rhodesia," *Kirkia* 6 (1968): 223-248; R. C. V. Jeffrey, H. N. Chabwela, G. Howard, and P. J. Dugan, eds. *Managing the wetlands of Kafue Flats and Bangweulu Basin*, (Gland, Switzerland: IUCN, 1992); J. Kindgon, *The Kingdon Field Guide to African Mammals* (San Diego: Academic Press, 1997); C. A. Liengme, "Plants used by the Tonga people of Gazankulu," *Bothalia* 13 (1981): 501-518; S. P. Moyo, P. O'Keefe and M. Sill, *The Southern African Environment* (London: The ETC Foundation Earthscan Publication Limited, 1993); P. Smith, "A reconnaissance survey of the vegetation of the North Luangwa National Park, Zambia," *Bothalia* 28 (1998): 197-211; Idem, *Ecological Survey of Zambia: the Traverse Records of C. G. Trapnell, 1932-43*, 3 vols. (Kew: Royal Botanic Gardens, 2001); A. E. G. Storrs, "Know Your Trees": *Some of the Common Trees Found in Zambia* (Nairobi: Regional Soil Conservation Unit, 1995); J. Turpie, B. Smith, L. Everton and J. Barnes, *Economic Value of the Zambezi Basin Wetlands* (Cape Town: IUCN Regional Office for Southern Africa, University of Cape Town, South Africa, 1999); J. K. Turpie and T.M. Crowe, "Patterns of distribution, diversity and endemism of larger African mammals," *South African Journal of Zoology* 29 (1994): 19-32; H. Van Gils, *Environmental profile of Western Province, Zambia* (Mongu, Zambia: ITC report to Provincial Planning Unit, 1988); M. J. A. Werger, ed., *Biogeography and Ecology of Southern Africa* (The Hague: W. Junk, 1978).

⁹ John Edward Terrell, John P. Hart, Sibel Barut, Nicoletta Cellinese, Antonio Curet, Tim Denham, Chapurukha M. Kusimba, Kyle Latinis, Rahul Oka, Joel Palka, Mary E. D. Pohl, Kevin O. Pope, Patrick Ryan Williams, Helen Haines, and John E. Staller, "Domesticated Landscapes: The Subsistence Ecology of Plant and Animal Domestication," *Journal of Archaeological Method and Theory* 10:2 (2003): 323-368.

A variety of species are diagnostic of *miombo* environments (see Figure 4.1). Although wooded savannas are not able to support large concentrations of mammals, smaller groups of elephants, black rhinoceros, and African buffalo wandered the Proto-Botatwe lands, foraging for large quantities of poor-quality plant materials, while hippopotamus exploited the numerous wetlands. Other animals adjusted their eating patterns to survive in the *miombo* environment; specialized grazers, such as sable and roan antelope, hartebeest, reedbuck, eland, and kudu selectively fed on high-quality flora, especially young grass shoots, and made use of other habitats to supplement their nutrition. Along the edges of the woodland, near occasional open grassy floodplains and swamps, Proto-Botatwe speakers would have observed lechwe, puku, tsessebe, oribi, stititunga, and, further to the south, blue wildebeest, all of which prefer open grasslands, and seasonally flooded or marshy habitats to the wooded and forested regions of the *miombo*. Finally, waterbuck, bushbuck, and blue duiker, a group of antelopes that prefer wooded areas near permanent water supplies, add to our knowledge of the range of micro-environments characterizing the northerly *miombo* environment occupied by Proto-Botatwe speakers in the last millennium B.C.E. and the first half of the first millennium C.E.

Figure 4.1 Habitat Preferences of the Fauna of Central and Southern Africa

Name	Preferred Habitat
Aardvark	Woodland, grassland, scrub
Buffalo	Seasonally flooded grasslands
Bushbuck	Thick brush and forest near permanent water
Bushpig	Well-watered bush, dense woodlands, esp. in river valleys
Duiker, Blue	Well-watered bush; dense woodland
Eland	Open woodland
Elephant	Wide range of wooded savanna and forest environments
Hartebeest	Sheltered woodland near floodplain; transition between miombo and wetlands
Hippopotamus	Wetlands; rivers
Honey Badger	Wide variety of habitats
Hyena, spotted	Arid scrub, grasslands, dry woodlands
Impala	Open woodland, prefers mopane over miombo
Jackal, side striped	Open woodland and dry grasslands, dislikes mopane
Jackal, black backed	Dry, open vegetation of the Kalahari sands; dislikes miombo
Kudu	More sheltered woods on floodplain edge; prefers mopane to miombo
Lechwe	Grasslands and woodlands on edge of streams and swamps
Leopard	Forests
Oribi	Termite mounds; less water-logged areas near flooded grasslands
Pangolin	Termite mounds
Puku	Reedbeds and woodlands on floodplain margins
Reedbuck	Reedbeds and woodlands on floodplain margins; river valleys and glades in miombo
Rhinoceros, Black	prefers dense, woody vegetation
Roan Antelope	Sheltered woodlands on floodplain edge
Sable Antelope	Southern miombo vegetation with access to sheltered woodlands on floodplain edge
Sitatunga	Grasslands near water; reedbeds and woodlands on floodplain margins
Springhare	Drier scrub vegetation
Steenbok	Sheltered woodlands on floodplain edge
Tsessbe	Seasonally flooded grasslands and floodplains
Warthog	Drier areas with grassland and open woodlands
Waterbuck	Reedbeds and wooded areas near permanent water
Wildebeest (Blue)	Termite mounds; grassland, open woodland near flooded grasslands
Zebra (Burchell;s)	Flooded grasslands

Proto-Botatwe communities living in the environment of the northern *miombo* woodland savanna used many inherited words to talk about their surroundings. This conservation of older vocabulary is not surprising because the speakers of languages ancestral to Proto-Botatwe had also inhabited *miombo* woodland, a little to the north of the hypothesized Proto-Botatwe homeland. For example, Proto-Botatwe speakers applied the Proto-Savanna innovation for “river,” *-lòngà (401), to the waterways they encountered.¹⁰ Likewise, the ancient Bantu word *-djbà (402), for “lake, pool, or pond,” was a particularly useful term for Proto-Botatwe speakers describing the range of water features along which they settled over the course of three millennia.¹¹ The root retained its older meaning, pool or pond, but by shifting the root into different noun classes, Botatwe speech communities described particular forms of water. Some of these water sources were seasonal, such as annual streams or inundated floodplains (*chiziba*, *ziziba*), but each, like the permanent pools and ponds (*iziba*, *liziba*, *kaziba*) to which the Proto-Botatwe applied the term *-djbà, were reliable sources of water. Learning about reliable water supplies required the careful observation of seasonal water rhythms, observations that left their mark in morphological innovations in the use of *-djbà. These morphological innovations betray the great concern of later Botatwe communities with reliable water supplies in the drier environments they came to inhabit.

The older, probably Proto-Bantu word for “forest,” *-tjù (403), has a relict distribution and follows regular sound changes in extant Botatwe languages, supporting its place as a root

¹⁰ Christopher Ehret, “Subclassifying,” 65; A. E. Meeussen, *Bantu Lexical Reconstructions* (Tervuren, Belgium: MRAC, 1980), 23.

¹¹ C.S. 557, 603; Meeussen, 7.

inherited by Proto-Botatwe speakers.¹² The relict distribution of the root is important for, as we shall see, speakers of Botatwe languages innovated a complex taxonomy of forest types over the last three thousand years as they learned how to live in a variety of new environments with different vegetation compositions. This old term for forest, *-tj̀tù, was used in contrast to another inherited term for forest, *-sàká (404).¹³

It seems likely that *-sàká referred to secondary forest, or forest that has been allowed to regenerate after its alteration by fire, insect, or other natural disturbances, or, perhaps, by clearing for farming and subsequent abandonment for soil fallowing. A related verb, *-sàk-, referred to a form of hunting animals by chasing or driving them. Christopher Ehret argues that early Bantu speakers probably used the term *-sàká to refer to a type of forest given over to hunting, perhaps in juxtaposition to forest lands reserved for cultivation.¹⁴ Ehret glosses the term *-sàká variously as “secondary forest” and “wild area” and modern-day Botatwe meanings certainly include forest and wild area.¹⁵ However, the wide range of activities to which the verb *kusaka* refers in some Botatwe languages—to hunt animals, birds, and fish—suggests that the use of the term *-sàká to refer to this kind of forest or bush would have elicited a range of images about the activities possible in this type of environment, rather than a solitary focus on hunting.¹⁶ The constellation of activities to which verbs like *kusaka* referred were defined not necessarily by the product of the activity (meat, fish, honey), but by the distance from the village one had to

¹² Ehret, *Classical*, 37-9; 299; Guthrie, C. S. 1765; Meeussen, 9.

¹³ Ehret, *Classical*, 38, 299, 312; Meeussen reconstructs the term as *-càká, 22.

¹⁴ See semantic reconstruction in Ehret, *Classical*, 299.

¹⁵ Ehret, *Classical*, 38, 299.

¹⁶ Madan, 110.

travel to perform the activity, a mobility that is very much limited by gender in the recent ethnographic record.¹⁷

These two forest types, *-tj̀t̀ù and *-sàkà, were interspersed with other prominent features, such as baobab trees (*Adansonia digitata*) and termite hills, reconstructed as *-b̀ỳỳú (405) and *-g̀d̀d̀ù (406), respectively.¹⁸ African communities, including Botatwe peoples, have conserved ancient knowledge about the exploitation of these natural resources down to the present day. Baobab trees, for example, have long been favored for their fruits, the medicinal value of their roots and leaves, and their fibrous bark. In drier areas, people hollowed out the top of the trunk to collect and retain water from the rainy to the dry season. Similarly, termite mounds provided food (termites, or flying ants), clay for building houses, and, importantly, a unique microenvironment favored by a number of plants, including the *mululwe* plant, which is used by healers in south central Africa to treat malaria.¹⁹ It is not surprising that words for these features were conserved over millennia as Bantu speakers innovated additional ways to exploit familiar resources found in new environments. In fact, it is likely that large baobabs and anthills may help archaeologists locate ancient village sites.²⁰ Perhaps they also helped Botatwe peoples locate old, deserted village sites. These sites were a prominent feature of the physical landscape of the Botatwe region, inspiring Botatwe speakers to conserve *-tongo (407) to talk them. As Proto-Botatwe speakers learned to grow cereal crops, deserted sites were likely important

¹⁷ See Chapter 6.

¹⁸ For baobab: Ehret, “Subclassifying,” 104; Guthrie, C.S. 214; Meeussen, 28. For termite hill: Guthrie, C.S. 882.

¹⁹ For an interesting assessment of the role of termite hills in the cosmology of forest communities, see Kairn Klieman, “*The Pygmies Were Our Compass*”: *Bantu and Batwa in the History of West Central Africa, Early Times to c. 1900 C.E.* (Portsmouth, NH: Heinemann, 2003), 70, 116, 146-7, 151, 160.

²⁰ Terrell et. al., “Domesticated Landscapes,” 340.

indicators of fallowed, farmable lands, as well as markers of the spiritual landscape created by the ancestors who built *-tongo, as seen in the more recent Chitonga terms *katongo*, “the relationship between a lineage and a defined area of land where it has rights of first settlement,” and *sikatongo*, “earth priest; officiant for annual neighborhood rituals associated with the agricultural year.”²¹

Just as they did with terms to describe vegetation, Proto-Botatwe speakers conserved words for particular animals whose presence was still a feature of both their physical surroundings and their livelihood. We have already noted that elephant, hippopotamus, and buffalo were common to the northerly *miombo* vegetation, as well as a range of environments in both the moister, dense forests to the north of the Proto-Botatwe homelands and the drier savannas to the south. Not surprisingly, the words Proto-Botatwe speakers inherited for these three animals are of very old Bantu provenance. Elephant, *-jògù (408), is probably a Proto-Bantu term attesting to a history that reaches back over five millennia while hippopotamus, *-gùbù (409), and buffalo, *-jání (410), are either Proto-Bantu or of very early Bantu origin.²² Similarly, the leopard inhabits regions to the north and south of the Proto-Botatwe homeland so the ancient Bantu term, *-gùè (411), was recently borrowed into many Botatwe languages from western Savanna neighbors.²³ Other words for animals attest to knowledge about specialized environments; the old, possibly Proto-Bantu word *-kákà (412) for the pangolin, or scaly

²¹ Colson, *Tonga Religious Life*, 41; see the discussion of *sikatongo* in Chapter 9.

²² For elephant: BLR3 1607; Ehret, “Subclassifying,” 76; Guthrie, C.S. 951 and partial series (hereafter, p.s.). 261; Meeussen, 25; for hippopotamus: BLR3 1480, 1532, and 1533; Guthrie, C.S. 875, C.S. 908; Meeussen, 31; for buffalo: BLR3 1569; Guthrie, C.S. 1947; Meeussen, 21.

²³ BLR3 7154; Guthrie, C.S. 862, C.S. 834; Jan Vansina, *Paths in the Rainforests: Toward a History of Political Tradition in Equatorial Africa* (Madison: University of Wisconsin Press, 1990), 276-7; Idem, *How Societies*, 278.

anteater, is widely attested in Botatwe languages as and reinforces our argument that Proto-Botatwe speakers lived in a region with anthills and conserved knowledge of the flora and fauna dependent on this microenvironment.²⁴

Some terms for fauna were innovated more recently by the linguistic ancestors of Proto-Botatwe speakers, as they left the forests and became acquainted with the new species of the *miombo* savanna. Among these terms, many are words for antelopes whose presence in the linguistic record of Proto-Savanna and Proto-Eastern Savanna speech communities corroborate their hypothesized homeland on the edges of the *miombo* savanna and their role as the transitional communities between Bantu forest dwellers and those Bantu speakers whose languages would spread south and east into drier woodland savannas and scrub deserts, eventually the reaching the Cape. For example, impala, *-pàdà (413), and eland, *-sèCú (414), probably both of Proto-Savanna origin, indicate open woodland environments within the northerly *miombo* vegetation.²⁵ Similarly, Proto-Savanna and Proto-Eastern Savanna innovations for bushpig and duiker (probably blue duiker, *Cephalophus monticola*), *-gùlùbè (415) and *-kjá (416) respectively, are diagnostic of the well-watered bush and denser woodlands within the new *miombo* environment encountered by early Savanna peoples.²⁶

²⁴ BLR3; Guthrie, C.S. 991; Vansina, *Paths*, 277. On the importance of this animal as political symbol in some forest societies, see Vansina, *Paths*, 277. Likewise, this animal is understood to have special powers among Botatwe speakers. For the cultural significance of the nkaka, see Thayer Scudder, *The Ecology of the Gwembe Tonga* (Manchester: Manchester University Press, 1962): 195-6. See also Mary Douglas, *The Lele of Kasai* (London: Oxford University Press for the International African Institute, 1963).

²⁵ For impala: BLR3 2355; Meeussen, 19; for eland: Ehret, “Subclassifying,” 93; Guthrie, C.S. 316; Meeussen, 15.

²⁶ For bushpig: BLR3 1494; Ehret, *Classical*, 42, 299; Idem, “Subclassifying,” 66; Guthrie, C.S. 888; Meeussen, 28; for duiker: BLR 3; Guthrie, C.S. 1075; Meeussen, 9.

The conservation of these words in Botatwe vocabularies down to the present day indicate not only the continued presence of these micro-environments in the regions Botatwe speakers came to inhabit but also, as we shall see from Botatwe innovations in vegetation vocabulary, the recognition that information about microenvironments and their distinguishing species remained an important category of knowledge. In fact, the species to which *-kǵá refers in modern-day Botatwe languages, variously duiker, oribi, impala, and, in the drier western regions, dikdik, reedbuck, and klipspringer, suggest that *-kǵá was transformed into a *category* of antelope defined by the microenvironment used by a set of antelope species, rather than the distinct faunal species itself. Each of these small antelopes live in grassland and open woodland, usually near water. When Lenje speakers used *nakasha* to refer to an oribi in the early 20th century, the literal translation of the construction they used (ka + *-kǵá), “the perfect, little duiker,” betrays the historical process by which *-kǵá became a Botatwe taxonomic label for species that indicate water.

Although the conservation of words about flora, fauna, water features, and topography is an important part of the story of what Proto-Botatwe communities knew and how they exploited the resources of the environment around them, evidence of innovation is equally important. The first type of evidence teaches us something about those resources valued by both Botatwe speakers and their ancestors and the second tells us something of the kind of information Proto-Botatwe speakers needed to talk about as they encountered novel opportunities in the natural environment.

A long period of warm, moist climatic conditions prevailed from c. 1000 B.C.E. to c. 500 C.E. and encouraged the gradual expansion of the northern *miombo* vegetation zone southwards.

We have already noted that as Botatwe languages spread southwards, they were moving through the familiar northern *miombo* environment. During this period, Proto-Botatwe speech communities spread southward out of the Shaba region and up to the edges of the grassy river marshes of the Kafue, Lukanga, and Ntemwa regions. Proto-Botatwe communities that spread across the northern edges of these wet grasslands and floodplains invented a word, *-nja (417), for a particular species of antelope that lives in grasslands along the fringes of streams and swamps, the lechwe.²⁷ This species is diagnostic of permanent wetlands found in drier, more open vegetation for its soft hooves can only walk well on waterlogged lands. It seems likely that Botatwe speakers innovated this term earlier in their history, having encountered the black lechwe (*Kobus leche smithermanni*) common to the Shaba district and then reapplied the term, having come into contact with the Kafue lechwe (*Kobus leche kafuensis*) in the Kafue River region and the red lechwe (*Kobus leche leche*) further to the west, in the wet grasslands of the Ntemwa region and the Zambezi floodplains. This root was retained in many Botatwe languages, having been reapplied by speakers of those languages to other antelope species that specialize in the same wet grassland environment, particularly the sitatunga and waterbuck.

Again, the ways in which species are diagnostic of particular environments and function as part of that environment's ecosystem seems to have been a more important feature of a word's semantic domain (and its continued relevance over the millennia) than its ability to identify a particular species as unique or distinct from others. In the Botatwe speakers' classificatory system, roots whose semantic domains were extended to include a range of species usually refer

²⁷ The na/nya- prefix indicating 'mother of' or 'female' in Proto-Kafue and, perhaps reconstructable to Proto-Eastern Botatwe, is related both to how men hunt this animal by reproducing the sound of the mother to lure the animals to them and to how the skins are distributed to wives and lovers. See Chapter 6 and 9.

to species diagnostic of water availability, an increasingly important concern as Botatwe speakers used their languages in drier environments.

Another set of terms dates to either to the late Proto-Botatwe era or the period during and immediately after its divergence; phonology does not allow us to determine the exact age of these words. Yet, these terms are important because they tell us that Botatwe speakers were continuously innovated new ways to talk about species that indicated ever-drier environments. For example, the development of a word for spotted hyena, *-ntu(Cu) (418), to replace or in lieu of the adoption of terms of wider Mashariki and Savanna distribution, *-mbúj and *-pítj, indicates Botatwe speakers' increasing familiarity with drier, open vegetation during the middle centuries of the first millennium because the spotted hyena prefers arid scrub, grassland and woodland vegetations.²⁸

Similarly, *-lavu (419) for lion (*Panthera leo*), substantiates the development of knowledge about drier environments during this period. A series of innovations to talk about this savanna animal date to the Proto-Eastern Botatwe speech community, suggesting that claims to knowing about this dangerous, powerful predator, an animal form frequently taken by spirits and witches in ethnographic descriptions, were still in contest. Elizabeth Colson claims that in the 20th century, the lion was both “the most feared and most respected of the animals of the bush;” it was not to be called by its names, including *mulavu* and others innovated in the Proto-Eastern Botatwe period, but “[i]nstead one says munyama, the general term for animal, as though the lion personified the essential nature of all animals.”²⁹ It may be that the lively innovation around

²⁸ For the range of roots associated with the spotted hyena, see Ehret, *Classical*, 42, 299; Guthrie, C.S. 206, C.S. 1537, C.S. 1562, C.S. 2011.

²⁹ Colson, *Tonga Religious Life*, 96-7.

terms for the lion in the Proto-Botatwe and Proto-Eastern Botatwe periods were tied to the invention of ideas about the unique status of lions as possibly being embodied people (witches and spirits).

Mashariki peoples may have been the source of some animal terms dating to this period in the early first millennium. For example, Proto-Botatwe speakers may have borrowed the Proto-Mashariki term *-gili (420) for warthog.³⁰ Yet, this root might equally have been borrowed by Proto-Eastern and Proto-Western Botatwe speakers after their divergence from Proto-Botatwe in the middle of the first millennium C.E. Similarly, it is difficult to determine whether a Kusi word for zebra (probably Burchell's zebra, *Equus burchelli*), *-bijj (421), was borrowed very late in the period of Proto-Botatwe or into Proto-Eastern and Proto-Western Botatwe independently.³¹ Indeed, its shape follows the expected inherited form in Botatwe languages. If the root was present in the Proto-Botatwe period, it attested to increasing knowledge about grasslands and more open woodlands. Both roots tell us that Mashariki communities were living near Botatwe communities by at least the middle of the first millennium.

4.3 Language Change within New Vegetation Communities in the South

As the Proto-Botatwe speech community spread southward across the moist, northerly miombo, speakers slowly developed distinct forms of pronunciation, while maintaining contact with other Proto-Botatwe settlements. Eventually, however, through internal innovation, the absorption of other language speakers, and contact with other linguistic communities, these

³⁰ BLR3 1377; Ehret, *Classical*, 42, 300; Guthrie C.S. 814; Meeussen, 11.

³¹ Ehret, *Classical*, 42, 301; Meeussen, 24.

Proto-Botatwe dialect clusters had adopted ways of speaking that were unintelligible across the broad geographic expanse they inhabited, producing three distinct speech communities in the second half of the first millennium C.E.: Proto-Soli, Proto-Eastern Botatwe, and Proto-Western Botatwe societies located along the southern frontier of the northern *miombo* in the eastern, central, and southwestern parts of the Kafue River catchment area of north central Zambia. These three speech communities continued a process of expanding southwards, Proto-Western Botatwe along the western edge of the ecologically diverse Kafue Hook zone, Proto-Eastern Botatwe directly into this ecological diversity, and Proto-Soli along its eastern fringes.

The limits of these vegetation zones are difficult to reconstruct, but during the cool, dry climate of the fifth to the tenth centuries, they would have shifted northward. It is worth emphasizing that the small scale movement of speakers and language shift that carried Botatwe languages into southerly *miombo* and *mopane* vegetation zones meant that farmers were facing the challenge of cultivating crops on the margin of the 700 mm rainfall isohyetal line.³² The co-occurrence of settlement within the new southern *miombo* and, perhaps, *mopane* vegetation zones and the long life of the Proto-Western and Proto-Eastern Botatwe speech communities could be brought into a causal relationship: the challenges to Botatwe speakers' farming economies posed by cooler, drier conditions and the northern expansion of vegetation zones supported by lower rainfall led to a period of consolidation during which Botatwe farmers learned how to make the lands productive with limited rainfall. As the climate shifted again around the 10th century and vegetation zones supported by drier rain regimes retreated

³² Jan Vansina, *How Societies are Born: Governance in West Central Africa to 1600* (Chalottesville, VA: University of Virginia Press, 2004): 17-8. Southern *miombo* vegetation is indicative of a 600-800mm/year rainfall average and *mopane* environments average 400-700mm/year.

southward, Botatwe speakers, now comfortable cultivating drier environments, also spread southward, a catalyst for the quick succession of language divergences from the 11th to the 15th centuries.³³

Yet to understand the challenges climate change (and the manifestations of that change in vegetation distributions) posed to Botatwe farmers outside the context of the entire food system assumes that farming was the driving force of the Botatwe food economy. The history of Proto-Eastern Botatwe speakers living in the Kafue provides a clear corrective to this perspective. Consolidation around the greater Kafue area from the middle to the end of the first millennium was not solely a reaction to the limits of agricultural potential in a drier climate. As we will see in Chapter 6, the concentration of settlements around the Kafue for some five hundred years was a period of great innovation and elaboration in Proto-Eastern Botatwe hunting and fishing practices, particularly communal modes of food collection. Botatwe farming communities in the Kafue did not simply wait out the bad climate in the wetlands, where they could farm the floodplain despite low rainfall. Rather, eastern Botatwe peoples became fluent in the seasonal opportunities of mass food collection, reconfiguring settlement patterns and the division of labor to put communal hunting and fishing squarely in the center of the seasonal food procurement repertoire. These innovations were important to the spread of Botatwe speakers across the Batoka Plateau and into the Zambezi Valley in the second millennium and to changes in the way that Botatwe people understood leadership and social networks. A similar story for western Botatwe communities elucidates how they learned to diversify their food system to settle the Kalahari Sands region. To understand the inventiveness in play with these changing ideas about

³³ For other catalysts for the rapid differentiation of Proto-Kafue, Proto-Western Botatwe, Proto-Zambezi Hook, and Proto-Machili, see the discussion of the absorption of Kusi and Kaskazi speakers in Chapters 2, 6, and 7.

how individuals and communities fed themselves, we need to better understand the resources at hand in the greater Kafue region by learning about the southern *miombo* and *mopane* environments.

The diversity of environments in the Kafue Hook region deserves some attention. During the second half of the first millennium CE, as the three branches of Proto-Botatwe enveloped this area and the climate became cooler and drier, the moist northerly *miombo* was in retreat, making the wet grassland environments of the Kafue floodplain, Ntemwa wetlands, Lukanga swamps more attractive to speakers of Botatwe languages who were worried about water reliability. Surrounding the Kafue region, particularly to the south, Botatwe speakers encountered two new vegetation zones: the southern *miombo* woodland savanna, which today stretches across the Batoka Plateau and throughout the Zimbabwean highlands, and the *mopane* wooded savanna that currently thrives in the low elevation river valleys of Zambia (Machili, Zambezi, and Luangwa, among others), the fringes of the Kafue floodplains, and into most of eastern Botswana.

The *mopane* environment is starkly different from *miombo* vegetation because it thrives in a specific topography. While the two *miombo* environments dominate all escarpments and the highlands of the central African plateau in regions of moderate to high rainfall, *mopane* vegetation flourishes in the flat or gently rolling terrain of the major river valley floors in lower elevation areas with an average annual rainfall of 400-700 mm. *Mopane* woodlands are often associated with the presence of baobab trees and thorny acacias, while the composition of grasses in *mopane* ecosystems depends on the soils of each river valley. Unlike the deep, acidic, well-drained soils of *miombo* vegetations, *mopane* favors the shallow, poorly-drained (often clay), alkaline soils of river valleys. Although many animals live in both *miombo* and *mopane* environments, several groupings of species help to distinguish the two: the side-striped jackal,

sable, roan and hartebeest prefer terrains covered in *miombo* woodland savanna while the black-backed jackal, kudu, and impala demonstrate a strong preference for *mopane* woodland savanna.

The *mopane* tree itself is a particularly important feature of this environment. It is unique among trees of central and southern Africa because it is a highly-nutritious member of the legume family (*Fabaceae*).³⁴ Many wild and domestic animals feed on its characteristic glossy, green, butterfly-shaped leaves; elephants knock entire trees over to eat both the bark and the leaves. Compared to neighboring *miombo* environments, the wide availability of the *mopane* tree contributes to the higher nutritive level of *mopane* woodlands for wild animals. Moreover, termites are unable to eat this hard wood, making *mopane* a particularly good species for firewood and building.

The environmental diversity of the greater Kafue region inspired a number of innovations in Proto-Eastern and Proto-Western Botatwe vocabularies. These changes are evidence of the challenges and opportunities Botatwe speakers faced as they came to occupy this new range of environments over the second half of the first millennium C.E. Although Kusi and Kaskazi communities were already present in the region and served as an important source of information about the local surroundings, Botatwe peoples' confidence in their own powers of observation about the terrain, vegetation, and fauna grew as they increasingly relied on their own internal innovations to talk about their world.

4.4 Settling the Kafue: Environments in the East, c. 500 CE to c. 1300 CE

4.4.1 Proto-Eastern Botatwe: Linguistic Evidence of the Environment

³⁴ The *mopane* tree is also unique for being the only known member of the *Colophospermum* genus.

The new ecological contexts of the Kafue region in which communities now spoke Botatwe languages inspired a number of innovations for the grasslands of the floodplain and the animals that congregated within them. For example, Proto-Eastern Botatwe speakers used the word *-jìkà (421), “grassland” or “floodplain,” with the widespread secondary meaning of “land” or “countryside.” This root has been reconstructed by Christopher Ehret as a word Proto-Mashariki speakers applied to “partially wooded savanna environments” they encountered as they spread across the Western Rift and into the Great Lakes region and western Tanzania.³⁵ For Mashariki speakers, this term probably described a microenvironment that served as a transition between the grasslands and gallery forests bordering rivers in rift valley bottoms and the denser forests of the rift highlands.³⁶ It may be that Kusi speakers of the Mashariki family inherited this word and passed it on to their Proto-Eastern Botatwe neighbors nearly a thousand years later. The distribution of the term in western Botatwe languages is limited to Subiya, which may have been borrowed from eastern Botatwe languages more recently because its form is the same as attestations in neighboring Toka and Leya. Yet, the word follows expected sound changes in Botatwe languages and the relict western Botatwe distribution may also indicate its status as a word that existed in Proto-Botatwe vocabulary; the phonology is inconclusive. What was new in the Proto-Eastern Botatwe era was the secondary meaning as a generic word for “land” or “countryside,” suggesting that the environment to Proto-Eastern Botatwe speakers applied the term *-jìkà, grassy plains often along rivers—the exact environment of the Kafue floodplain—

³⁵ Ehret, *Classical*, 37-8, 299; Fourshey, 117; Meeussen, 12.

³⁶ Ehret, *Classical*, 37-8.

was understood as the typical environment, so representative of normal surroundings that its name could designate a more general understanding of space.

Proto-Mashariki linguistic history influenced the history of the eastern Botatwe languages in the form of the root *-bándá (422).³⁷ This word is an old Bantu term for “valley” and probably derived from *-band- “to press down,” a description of the topography of a valley.³⁸ The word was later applied to a flat grassy plain by Proto-Mashariki peoples. When Mashariki-speaking people spread into south central Africa as Kaskazi and Kusi communities, the word seems to have been borrowed twice by Proto-Eastern Botatwe speakers. The first borrowing was probably from Kaskazi speakers in the form *-bansa, which is relict in Proto-Eastern Botatwe languages and refers to a bare plain where water collects.³⁹ Later, this word was borrowed again, probably as Proto-Eastern Botatwe speakers absorbed Kusi communities to the south, who retained the nasal /nd/ so that the word appears more commonly as *-bándá in Botatwe languages, again referring to a “plain” or “vlei.” This environment was probably poor land for cultivation as some languages attest the term glossed as “desert, a place where nothing grows.”

Speakers of Proto-Eastern Botatwe languages depended heavily on their neighbors for information not only about local vegetation and topography but also common local fauna. Two roots attest to the continued role of Kaskazi and Kusi communities as sources of knowledge about wild animals. Proto-Eastern Botatwe speech communities, along with their Sabi-speaking neighbors to the east, borrowed an old Kaskazi word for hartebeest, *-nkondj (423), which

³⁷ Ehret, *Classical*, 38, 299; Guthrie, C.S. 52; Schoenbrun, *Historical Reconstruction*, 46.

³⁸ My thanks to David Schoenbrun for this possible etymology.

³⁹ The shift of *nd to *ns seems to be diagnostic of borrowings from the early Kaskazi communities east of the Botatwe peoples. Consider, in addition to this root, attestations for hartebeest, *-kondi as discussed below.

entered the Botatwe languages as *-konjj.⁴⁰ In modern day Botatwe languages, however, this root has retained its original meaning in only Lenje; Tonga and Lundwe peoples living in the drier regions of the Batoka Plateau applied the root to a range of small antelope, including lechwe and the savanna antelopes, impala and duiker.

As Proto-Eastern Botatwe speakers innovated their own terms to talk about the surrounding vegetation, they defined these environments by the range of human activity possible within their limits. For example, Proto-Eastern Botatwe speakers on the northern and eastern edges of the Kafue Hook and Kafue floodplain innovated a term for “grassland forest,” *-sansa (424). The range of meanings of the term in extant Botatwe and neighboring languages emphasize the mix of grassland and trees, the lack of water, and the virgin status of the forest, suggesting that this forest type was not always suitable for cultivation or habitation, perhaps because it was too dry. When Proto-Eastern Botatwe innovated *musanza* and *chibanda*, they needed to be able to talk about the varying agricultural and settlement potential of different environments.

Other words carried connotations in more recent periods that juxtaposed cultivated and wild places. Proto-Eastern Botatwe speakers innovated the word *-sokwe (425) to distinguish another kind of bush. This vegetation was probably a form of grassland with some scattered trees and, in many attestations, literally translates as “the place of the baboon,” which prefers grasslands and open woodlands. Often, the term glosses as “bush,” “wilderness,” or “desert.” This kind of bush is juxtaposed to cultivated fields; early dictionaries describe this kind of bush

⁴⁰ For the reconstruction of *-kondi, see Ehret, *Classical*, 235, 301.

as a “hunting ground” (Tonga) and “uncultivated lands as opposed to the village fields” (Ila).⁴¹

These definitions, incorporating ideas about which activities are (and are not) possible in certain types of space, demonstrate how Botatwe peoples defined space by human activity. Furthermore, in asserting an idea of *-sokwe as an area defined, in part, in opposition to lands for cultivating, we are alerted to the historical development of ideas dividing space by bush and farming activities, a division that probably dates to the early centuries of the second millennium CE. In earlier periods, Botatwe speakers emphasized overlaps in those activities.

Some roots about ecosystems hint at the development of overlaps between the work of farming and bushcraft. For example, as Proto-Eastern Botatwe speakers settled into the greater Kafue region, they innovated a new term for warthog (*Phacochoerus aethiopicus*), *-nkoli (426), retaining the inherited term, *-ngili, and applying it to the bushpig (*Potamochoerus porcus*). Over the coming centuries, eastern Botatwe communities would develop a rich vocabulary to talk about warthogs and bushpigs. Like other reconstructions, these words illustrate growing Botatwe familiarity with different environments; warthogs prefer drier areas with grasslands and open woodlands, which would have been increasingly common as Botatwe communities settled in the southern *miombo* woodlands and Batoka Plateau, while bushpigs inhabit the well-watered bush and dense woodland found in the river valleys draining into the Kafue and, further south, into the Zambezi.

More interesting, these roots, combined with innovations before and after the divergence of Proto-Kafue, demonstrate a new need among Botatwe speakers to talk about wild pigs as they settled permanently in the Kafue, Batoka, and Falls regions over the course of the second

⁴¹ Julius Torrend, *An English-Vernacular Dictionary of the Bantu-Botatwe Dialects of Northern Rhodesia*, Natal: Mariannhill, 1931): 152; Denis G. Fowler, *A Dictionary of Ila Usage, 1860-1960* (Hamburg: Lit Verlag, 2000): 242.

millennium. As any farmer will explain, these hogs, along with elephants, are worrisome garden pests whose meat is a prized addition to the local diet. The spate of innovations in vocabulary to talk about wild pigs suggests that over the second millennium, Botatwe speakers were increasingly committed to cultivation and worried about the protection of their crops. The near ubiquitous descriptions of the danger involved in hunting wild pigs might also connect to the development of a rich vocabulary to talk about them. The hunters who kill wild pigs are known for their skill and this might also apply to warthogs, particularly if the underlying source root of *-nkoli is one of the possibly polysemic forms of *-kód-, “to be strong, hard; to touch, pain or stupefy; to take” or *-koda, “to do, to work” with a masculine prestem element: *sinkoli* or *syankoli*.

A number of terms for species that thrive in the southern miombo appear in Proto-Eastern Botatwe vocabulary. For example, an internal innovation for the sable antelope, *-pengu (427), among Proto-Eastern Botatwe communities clearly indicates that by the second half of the first millennium, members of this speech community were becoming familiar with the southern *miombo* environment in which many of them would exclusively live in the coming centuries. Finally, Kaskazi or Kusi speakers to the east may have taught their Proto-Eastern Botatwe speaking neighbors about the blue wildebeest, *-nyumbu (428), whose habit of staying close to a water source, typically within fifteen kilometers, may have been a useful tool for farmers practicing shifting agriculture and frequently resettling villages on the edges of a new set of vegetation zones, probably the flooded grasslands of the Ntemwa, Kafue, and Lukanga areas.⁴²

⁴² Ehret, *Classical*, 42, 235, 301.

4.4.2 Proto-Kafue Linguistic Evidence of the Environment

The flooded grassland, southern *miombo*, and *mopane* environments to which peoples speaking Botatwe languages were introduced in the second half of the first millennium C.E. would remain characteristic of the spaces inhabited by eastern Botatwe peoples in the second millennium. Members of Proto-Kafue speech community both innovated and borrowed terms as they accumulated expertise in the vegetation communities of the Kafue and Batoka regions. As has been the case for most of the linguistic history of eastern Botatwe languages, the role of Kaskazi and Kusi speakers was central in the development of Proto-Kafue speakers' knowledge about the bush. As the term *-sàkà (404) was inherited by Proto-Kafue speakers living along the Kafue Hook and northern Batoka Plateau, this community shifted its meaning from forest to thicket or dense forest. This semantic shift also occurs in Soli, Sabi, and even Lakes languages of the Kaskazi branch of Mashariki Bantu, so the semantic shift may have been borrowed. Yet, such a small conceptual leap from “forest” to “thicket” is more likely to have a matter of convergence. Thickets were common in certain microenvironments, such as large termite hills, within the flooded grasslands of the Kafue Flats. Furthermore, the older type of forest to which this term was originally applied was the denser northerly *miombo* vegetation. As Proto-Kafue speakers learned to live in the drier, more open southern *miombo* of the Batoka Plateau, they may have applied their older word for “forest” to the densest areas of vegetation, thickets, within the more open southern *miombo* environment.

Many borrowings for wild animals further support the southward settlement direction presented in Chapters 2 and 3. For example, Proto-Kafue speakers borrowed a Kusi term for wild dog (*Lycaon pictus*), whose preferred habitat of dry grassland and open woodland environment suggests that this borrowing occurred as Proto-Kafue speakers spread into the Batoka region

during the second millennium. Soli speakers later borrowed this term, probably via Lenje speakers on the eastern edge of the Plateau. Although attestations take the form *-pumpi in extant Kusi languages, the word appears as *-mpe (429) in Kafue languages, losing the first syllable and exhibiting the characteristic weakening of the final vowel, an agentive deverbative suffix, common in borrowings from Kusi.⁴³

The lion (*Panthera leo*), for which Proto-Kafue borrowed the new root *shumbwa (430), is another arid savanna species indicative of a shift into the dry grasslands and open woodlands of the southern *miombo* vegetation of the Batoka Plateau. The word is an attestation of the Proto-Mashariki root *-sjumba and was borrowed into a number of Botatwe speech communities by the early centuries of the second millennium, probably into Proto-Kafue from Kusi societies living on the Plateau.⁴⁴ Attestations of the term in Lundwe have a phonological form that suggests later borrowing from Tonga speakers. The form *ihumbwa in Totela and Subiya might result from independent Proto-Machili borrowing, but are more likely recent borrowings from Lozi or Thimbukushu because they gloss, like the Lozi attestation, as leopard or cheetah and have the wrong phonological form for an inherited root.

Speakers of outlying Kaskazi languages had less direct influence on the Proto-Kafue language than speakers of Kusi languages who were absorbed directly into the Proto-Kafue speech community in the early centuries of the second millennium. Nevertheless, a few roots attest to contact between speakers of Proto-Kafue and outlying Kaskazi languages, probably in the northeastern corner of the greater Kafue region. The history of the term for sitatunga,

⁴³ Ehret, *Classical*, 42, 301; Fourshey, "Agriculture," 157-8.

⁴⁴ Ehret, *Classical*, 42, 300.

diagnostic of swamps and flooded grasslands such as those found in Lukanga, Ntemwa, and the Kafue Flats homeland of the Proto-Kafue society, serves as an example of the transfer of knowledge about new environments from early Mashariki communities to Botatwe speakers. Proto-Savanna speakers living within environments common to the forest sitatunga (*Tragelaphus spekii gratus*) inherited an old Bantu term to talk about the shy animal, *-búlǐ. Several millennia later, Kaskazi communities poised along the northern half of the western Rift Valley in the modern-day region of Rwanda and Burundi innovated a new word for sitatunga, *-jóbé (431), probably because they had encountered a new subspecies, the East African sitatunga (*Tragelaphus spekii spekii*).⁴⁵ As the Proto-Kaskazi community slowly diverged and some Kaskazi languages spread southward, reaching into Zambia in the last centuries of the first millennium B.C.E., they continued to apply their inherited term, *-jóbé, to the endemic sitatunga subspecies, the Zambezi sitatunga (*Tragelaphus spekii selousi*). In the first few centuries of the second millennium C.E., before the divergence of Proto-Kafue, *-jóbé was borrowed into Kafue languages probably during the Proto-Kafue period.

A number of internal innovations support the hypothesized Proto-Kafue homeland along the Kafue Flats and Batoka Plateau. Having observed the kudu with increasing frequency in the woodland and thickets along the edges of the floodplain grasses, Proto-Kafue speakers innovated a new root, *-mbololo (432), for this animal, which later spread via Lenje to Soli. When Lozi speakers raided the Batoka and Kafue areas in the mid to late nineteenth century, they borrowed the root, adding the ka- prefix to create kabololo with the meaning “successful hunt.” Literally, this word glossed as “great, big, mighty kudu.” The semantic connection in Lozi between the

⁴⁵ Ehret, *Classical*, 42, 234, 300; Meeussen, 23. Any misidentification of roots with sitatunga subspecies is my error.

Botatwe word for kudu and successful hunting may tell us something of why Proto-Kafue speakers invented a new word for this animal; the kudu was a prized quarry.

Other innovations for antelopes support both our hypothesized Proto-Kafue homeland and a new emphasis on hunting antelope, to which we will return in Chapter 6. Interactions with Kusi speakers led Proto-Kafue speakers to adopt the term *-bàbàlá (433) for bushbuck, a species inhabiting areas of well-watered thick brush and forest near permanent water, like the Kafue River. Although phonologically the root could be Proto-Savanna or Proto-Eastern Savanna, the block distribution in languages spoken along major swamps and rivers in south central Africa (Kafue, Zambezi, and Luangwa) suggests earlier borrowing in the early to mid-second millennium C.E. Some western Botatwe languages and some Western Savanna languages independently borrowed the word, probably at a much later date.⁴⁶ Similarly, reedbuck congregating in the grasslands and open woodlands near waterways inspired the innovation, *nalufwi (434), which spread to two Sabi languages, Lamba and Bemba, via Lenje.⁴⁷ This root probably derives from the inherited Proto-Savanna root for “arrow,” *-gújí, with a class 10 prefix. The name for the reedbuck may allude to what it was that hunters sought when they decided to hunt in the style named *kufwima*, a style that was probably originally based in archery. The feminine possessive prefix before the noun class prefix might indicate an ancient history for the practice of giving wives and lovers the skins of reedbuck, as attested in the ethnographic record.⁴⁸

⁴⁶ Ehret, *Classical*, 42, 300; Meeussen, 18.

⁴⁷ A possible Thimbukushu attestation of this root, *-ruvi, may suggest an older origin.

⁴⁸ Smith and Dale, *Ila Speaking*, vol. 1, 96 and 155.

Great innovation around the vocabulary of communal spear hunting in the Proto-Kafue era, a story taken up in chapter 6, supports a new emphasis on hunting the antelope like those that Proto-Kafue were naming: kudu, bushbuck, and reedbuck. An innovation for the cheetah of the open woodland and grassland expanse of the Batoka Plateau, *malama (435), reminds us that these innovations occurred within the context of both the wetlands of the Kafue floodplain and the savannas of the Batoka Plateau. This root was later borrowed into Soli through the intense contact between speakers of that language and Lenje speakers in the general region of the modern city of Lusaka.

The well-watered bush and dense woodlands of river valleys draining into the Kafue and Zambezi provided shelter to the wild boar and river bushpig (*Potamochoerus porcus*), for whom Proto-Kafue speakers invented *-nyembwa (436), teaching the term to Lamba speakers via the Lenje language in the second half of the second millennium. The root may be a compound of the possessive prefix *nya-* with the ancient word for dog, *mbwa*, perhaps suggesting a method of hunting the pest. This innovation did not displace the inherited semantic innovation of applying the older Bantu term for warthog, *-ngili, to the bushpig. Rather, the Proto-Eastern Botatwe innovation *nkoli remained the word for warthog in Proto-Kafue languages, while *-ngili and *nyembwa were both used to designate feral swine, with the later also serving to refer to wild boars.

A surprisingly dense vocabulary of other words for wild pigs, including a more recent borrowing to be presented below and vocabulary unique to individual languages, testifies to an intensified investment in farming beginning in the early centuries of the second millennium. The archaeological record confirms this experimentation in farming. The previous chapter described the archaeological record of the Zambezi Valley where the outcome of investment in farming by

Kafue and Batoka inhabitants was carried down to the valley. Immigrant farmers introduced strategies for farming a variety of microenvironments, not just *dambo* margins, to valley inhabitants in the early centuries of the second millennium.

Just as they are notorious field pests, wild pigs are also notoriously dangerous animals to hunt and kill. The rich vocabulary developed to talk about wild pig species illustrates a deep concern about this threat to farming, which required action on the part of skilled hunters. This vocabulary demonstrates the codependence of the development of farming and bushcraft. Intense discussion about eliminating animals that threatened sedentary farming communities produced the multiple words to talk about these animals. The ability to kill particularly dangerous animals like lions, leopards, elephants, hippo, and boars could establish a reputation in huntsmanship, as we will see in Chapters 6 and 9.

4.5 Settling the Kalahari Sands: Environments in the West, c. 500 to c. 1400 C.E.

Just as Botatwe speakers to the east were learning to settle within the southern *miombo* and perhaps even some stretches of *mopane*, Botatwe communities in the west were similarly observant of the new environments that they were learning to exploit. For Proto-Western Botatwe speakers, this was a more complicated task because the much drier environments into which they were moving posed a bigger challenge to the farming tradition they carried with them. In addition to the southern *miombo* and *mopane* environments into which Proto-Eastern and Proto-Western Botatwe spread in the second half of the first millennium, the descendants of speakers of Proto-Western Botatwe would eventually carry their languages further south and west, into the Kalahari Sands. The Kalahari Sands supported a vegetation type, *Baikiaea*

woodlands, which was new to western Botatwe communities who came to settle this area in the late first and early second millennium.

Baikiaea woodlands are characterized by dry deciduous forest interspersed with thickets and grasslands. This vegetation type thrives on the deep Kalahari Sands that form the only remainder of the ancient desert expanse, stretching along the Angola-Namibia border and into southwestern Zambia. Fossilized dunes in this topography allow water to collect and form wetlands in river valleys and dune troughs. The region on the whole is semi-arid with hot temperatures and 400-600 mm annual rainfall. The sandy soils harbor very little clay or silt so rain is almost immediately absorbed and soils remain moist enough throughout the year to support forests and woodland vegetation. *Baikiaea* woodland vegetation serves as a transitional ecotone between the deserts to the south and the *miombo* environments to the north. The dominant tree species is the famous Zambezian teak (*Baikiaea plurijuga*) but other associated species include *Ricinodendron rautanenii*, an important source of cooking oil and medicine that grows in forested patches in the alluvial soils found along tributaries of the regions major rivers, as well as in other parts of the Botatwe region. Faunal species characteristic of this environment include the honey badger and wild dog.

The distribution of these different forms of vegetation and the floral and faunal species they supported shifted as the climate changed. By the close of the first millennium, the climate was changing towards warmer and moister conditions. The northerly boundaries of southern *miombo*, *mopane*, and *Baikiaea* woodland savannas retreated south in the face of increasing rainfall. By the fourteenth century, however, the climate again shifted to the cooler and drier conditions of the Little Ice Age and the limits of southern *miombo*, *mopane*, and *Baikiaea* vegetation zones spread north, enveloping Botatwe communities. This shift had little effect on

the subsequent divergence of Proto-Zambezi Hook and Proto-Machili in the early to mid-15th century as these communities had already learned how to make a living in the range of environments between the hooks of the Zambezi and Kafue Rivers.

Proto-Western Botatwe vocabulary directly illustrates the acquisition of knowledge about these new, drier, vegetation zones. For example, *mutemwa (437) has a relict distribution in western Botatwe languages as a term for “forest,” or, literally, “that to be cut.”⁴⁹ The word’s root, *-tém-, comes from a the Proto-Bantu verb, “to cut,” or “to cut down.” Proto-Western Botatwe speakers used the root as a noun with a passive verbal extension to refer to a kind of forest environment that was to be cut. This innovation occurs just as the Proto-Western Botatwe languages were poised on the western edges of the Kafue region and in the upper reaches of the Machili river system, where they would have first encountered wooded savannas populated by *mopane* and teak, two new hardwood species that remain an important source of building timber and firewood.

The archaeological evidence demonstrate that the teak forests of the lower Machili were inhabited from the middle centuries of the first millennium to the end of the millennium by makers of the earliest forms of Namakala pottery. This period corresponds with the glottochronologically derived dates of the Proto-Western Botatwe period, though the teak forests may have greatly extended their northern frontier during the dry, cool climate of the second half of the first millennium. The archaeological record tells us that communities who settled in the

⁴⁹ For reconstructions of *-tém-, see Ehret, *Classical*, 302; Guthrie C.S. 1703, 1705, 1706. See also examples cited in Chapter 2, section 2.2.1. For a critique of Ehret’s reconstruction, see Jan Vansina, “Linguistic Evidence for the Introduction of Ironworking in Bantu-Speaking Africa,” *History in Africa* 33 (2006):321-63. Phonological evidence from Botatwe languages does not contribute to the debate surrounding this problematic reconstruction of *-tém-.

mutemwa in the second half of the first millennium were hunters and herders.⁵⁰ It may be that *mutemwa* were the forested lands nearby the frequently used hunting and herding grasslands. Or, perhaps, the *mutemwa* was a rich hunting ground.

As Proto-Western Botatwe speakers slowly extended their communities into the drier environments of southwestern Zambia, they used *-bala (438) for “grassland” or “sparsely wooded steppe.” Christopher Ehret reconstructs this term as *-lala for Kusi speakers but northern Kusi languages attest the term as *-bala and it was in this form that Botatwe speakers also used the root.⁵¹ It may be that the Kusi communities living on the Batoka Plateau in the first half of the first millennium C.E. and absorbed into Botatwe communities in the second half of that millennium were the source of the root because there are no relict attestations in the eastern Botatwe languages. If so, Kusi speakers were the source of the root, having already made the shift from *-lala to *-bala. Alternatively, the root may be *-bala in its Proto-Kusi form, later shifting to *-lala by means of reduplication in some Kusi languages. Regardless, the root probably derives from the Proto-Bantu *-bád- “to shine” with the deverbative form *-báda “open space” where, presumably, sunlight shines.⁵² The later Kusi and western Botatwe meaning “grassland” was a kind of open space where light shines, a place to herd and hunt cattle and buffalo herds, as attested in the region’s archaeological record.

Western Botatwe languages share a common word, *-kanda (439), which refers to small, seasonally inundated floodplains within valleys, a feature common to the Machili river system. Some descriptions of this kind of environment, particularly glosses as “desert,” suggest that it

⁵⁰ For a more detailed discussion of the economic history of the Machili region, see Chapter 7.

⁵¹ Ehret, *Classical*, 299.

⁵² I thank David Schoenbrun for suggesting this etymology.

cannot be farmed, that it is a wild space without trees. Indeed, the archaeological record of the Machili area tells us that early farmers planted their fields along river valleys; perhaps this word referred to valleys unsuitable for farming because of the predominance of sterile soils.⁵³ The root might be a Proto-Western Botatwe word, though the phonology is inconclusive. Therefore, the word might have been innovated any time since the 6th century. Centuries later, Lozi speakers, having conquered the Luyana-speaking kingdom whose capital was located on the Zambezi floodplain, borrowed *-kanda from the Botatwe languages of western Zambia. The Lozi relied on local communities' ecological knowledge to successfully build settlements in new lands in a process that was probably similar to the ways in which Botatwe speakers themselves learned from their Mashariki neighbors in earlier centuries. Tonga and Leya speakers living on the western fringes of the western Botatwe communities also borrowed this word: Tonga with a form and meaning identical to neighboring Totela speakers and Leya with a form that adds the ka-prefix to attestations from the neighboring Subiya.

Proto-Western Botatwe faunal vocabulary shows remarkable evidence for the increasingly dry, sandy environments into which speakers would carry these languages. An important feature of the history of the western Botatwe languages are the cultural exchanges that took place between western Botatwe peoples and their westerly neighbors, especially speakers of the continuum of Luyana / Southwest Bantu (also Njila) languages stretching from the Zambezi floodplain to the Kalahari sands of southwestern Zambia and the swampy marshes of the Caprivi Strip. Most of the words for animals in western Botatwe languages, however, are difficult to date because the phonology is inconclusive. For example, western Botatwe speakers borrowed the

⁵³ N. M. Katanekwa, "Some Early Iron Age Sites from the Machili Valley of South Western Zambia," *Azania* 12 (1978): 135-166.

root *-kanyani (440) from their western neighbors to refer to the wild dog (*Lycaon pictus*). The presence of this word in western Botatwe languages confirms the hypothesis generated by the principle of least moves that these languages spread from the moister *miombo* to the drier southern environments of western Zambia where the wild dog thrives. Similarly, western Botatwe languages share a word for giraffe, *-mbwensi (441), with Southwest Bantu speakers on the northern fringes of the Kalahari desert. It is uncertain whether the root was a loan from Proto-Western Botatwe to Southwest Bantu languages or vice versa and there may have been secondary borrowing in more recent centuries, especially in the Caprivi. Likewise, speakers of western Botatwe languages share the ideophone, *-nono (442), “wild cat,” with their Southwest Bantu neighbors. This word is probably an ancient areal based on the relict distribution in western Botatwe languages.

Other innovations attesting to dry conditions may be internal. Western Botatwe speakers share a common word for porcupine, *-kala (443), which replaced the inherited Proto-Savanna root *-nùngu (444) ⁵⁴ This root may date to the Proto-Western Botatwe era but, again, phonological evidence is inconclusive, so the root may be a more recent areal form. Likewise, western Botatwe languages share a root, *-kape (445), for honey badger, which replaced an older root, *-bule (446). This ferocious animal was a formidable competitor for honey but also served throughout the Botatwe area as an honorific nickname for those skilled in collecting honey.

Each of these roots have uncertain historical depth because western Botatwe languages are so poorly documented and, in each case, the phonology is inconclusive and the distribution common. The words may date as early as the 6th century or as recently as the past few centuries.

⁵⁴ For *-nùngu, see Ehret, “Subclassifying,” 67; Meeussen, 27.

What we can know from these terms is that the environments into which western Botatwe languages spread were far drier than the lands of eastern Botatwe communities.

4.5 Elaborations on Environmental Knowledge, c. 1400 to c. 1900

A number of words attest phonological forms and distributions that are indicative of more recent learning about the environment throughout the Botatwe speaking region. For example, the term *-galamu (447) for lion was innovated by Kusi speakers on the northern fringes of that linguistic cluster, spreading around the turn of the Common Era northward into the Proto-Rukwa society of the Kaskazi branch of Mashariki Bantu as well as eastwards some centuries later by Nyanja communities settling in southeastern Zambia beginning in the middle of the first millennium CE.⁵⁵ Nyanja speakers probably taught the term to speakers of Sabi languages, which spread through eastern Zambia in the second half of the first millennium. Later, Sabi speakers used the term when interacting with their Botatwe neighbors residing along the western border of Sabi-speaking territories, probably during the mid to late second millennium, after the divergence of Proto-Kafue. With the spread of trade networks linked to the Indian Ocean, Zimbabwe plateau and Shaba copperbelt region up the Zambezi River, speakers of Botatwe, Sabi, and Kusi languages (especially Nyanja languages) were in frequent contact.

We have already mentioned Botatwe concerns with the threat of wild pigs to their farming endeavors; perhaps it is not surprising that yet another word for bushpig, *chipongo (448), was borrowed along the well-watered bush and dense forests of the Mosi-o-tunya region

⁵⁵ Fourshey, "Agriculture," 123, 125. For more on lexical exchanges between southerly Kaskazi communities and northern Kusi communities in the region of modern-day central and southern Malawi in the last centuries of the first millennium BCE and the first centuries of the first millennium CE, see Ehret, *Classical*, 199; Idem, "Subclassifying."

(Victoria Falls, near the modern-day towns of Livingstone, Zambia and Victoria Falls, Zimbabwe). The term was used by Tonga speakers in the Valley and on the Plateau, Leya speakers in the immediate vicinity of the waterfall, Totela speakers to the northwest of the Leya and, in a different form as *liphango, by Cewa-Nyanja speakers downriver, beyond the territory of the Valley Tonga. The term was borrowed, probably from Kusi speakers after the divergence of Proto-Falls.

The history of words for ostrich are important to our story not only as an indication of the acquisition of knowledge about semi-arid environments, but also as evidence of cultural exchanges along and across the Zambezi River, connecting communities residing on the Batoka and Zimbabwean Plateaus. The root word for this history, *-pogu(e/a) (449), was a Kusi innovation probably developed after the turn of the Common Era when some Kusi languages were carried into drier lands south of their *miombo* savanna homeland along the southern shores of Lake Tanganyika.⁵⁶ By the turn of the Common Era, Proto-Kusi had diverged and two of its branches attested different forms of the original root; in Proto-Shona-Sala, the word took the form *-pou and in Proto-Southeast Bantu, it took the form *-pue.⁵⁷ Evidence for this root in modern Shona and Southeast Bantu languages suggests that Botatwe attestations of the root are the result of several distinct borrowings. It seems that the origins of the older borrowing lie in the Proto-Shona root, *-pou; speakers of Kafue languages borrowed the term as either *-mpo or *-mpowani, probably after the spread of Shona speakers from the Transvaal up onto the Zimbabwean Plateau around the tenth century, before the divergence of Proto-Kafue in the 13th

⁵⁶ Ehret, *Classical*, 42, 210-234, 301.

⁵⁷ Ehret, *Classical*, 42, 301.

or 14th century. Between the 13th and 15th centuries, Proto-Machili speakers adopted the root in the form *-mpobu as a second, independent borrowing from early Kusi peoples. These borrowed terms for ostrich probably do not indicate that Botatwe speakers lived in ecosystems containing ostrich; it is far more likely that Botatwe people came to know of the bird in the process of trading with their southern neighbors because ostrich eggshell beads were a common trade item and there is evidence for the beads in sites inhabited by makers of the various Namakala wares.

Later, as people speaking Kololo, a language of the Southeast Bantu branch of Kusi, conquered the Lozi (Luyana-speaking) kingdom of the Zambezi floodplain and spread their political and linguistic influence across western Zambia and up to the edges of Ila and Tonga communities in the early decades of the 19th century, speakers of both western Botatwe languages (Totela, Mbalangwe, and Fwe) and eastern Botatwe languages (Leya and Tonga⁵⁸) borrowed the Lozi term, *-mpye, which came from the Southeast Bantu root, *-pue. While most of these linguistic communities no longer traded ostrich shell beads with great frequency, the expansion of Lozi influence both before and after the Kololo conquest of the Zambezi floodplain kingdom resulted in the migration of many western Botatwe societies southward, across the Zambezi and into the Caprivi, on the northern edges of the Kalahari scrub. In their new lands, western Botatwe societies were in contact with communities to the south, particularly Southwest Bantu and Khoisan speakers, who frequently hunted the bird.

In these more recent centuries, western Botatwe communities learned an extensive number of words from Luyana speakers living within the Zambezi floodplain. Indeed, there have been a number of periods of areal spread between western Botatwe languages and communities

⁵⁸ Tonga speakers in the Zambezi Valley retained attestations of the Proto-Shona root while Tonga speakers on the Plateau later adopted the Lozi term.

based in the floodplain, including Luyana and, later, Lozi speakers. Not surprisingly, many of these terms are tied to fishing and other wetlands vocabulary. For example, term *-kwalata (450) was used by Luyana peoples to refer to an antelope generally or, among western Botatwe speakers, roan or sable antelope (*Hippotragus equinus/niger*), both species with a preference for access to sheltered woodlands near floodplains. Likewise, a word for sitatunga, *-tutunga (451), is attested in western Botatwe and Luyana / Southwest Bantu languages. This term was even borrowed into English with the Lozi class prefix! Just as terms for the wild dog, wild cat, and porcupine indicate that the western Botatwe communities were becoming increasingly familiar with drier environments, the adoption of terms for water-loving antelopes reminds us that grassy wetlands of the Zambezi, Chobe, and Linyani rivers were still an important feature of the environment exploited by western Botatwe speakers. It is difficult to date these transfers, but western Botatwe languages regularly follow Mwenyi-Luyana forms, suggesting that the transfers date at least to the era before the Kololo conquered the Luyana-speaking Lozi kingdom in the 19th century, though further research is needed on these terms.

4.6 Environmental Fluency and Botatwe Settlement

This chapter has situated the development of Botatwe knowledge about specific flora and fauna into the settlement chronology developed in previous chapters. The two linguistically-based narratives—one developed from measurements of relatedness between Botatwe languages and one from reconstructed environmental vocabulary—combined with information about climate history and the story of the spread of pottery traditions from archaeology tell us that Proto-Botatwe speakers lived in wetter lands to the north of present day Botatwe communities. Botatwe languages were carried south as familiar northern *miombo* environments expanded

southward; with climate shifts in the second half of the first millennium and through the initiative of Botatwe speaking hunters, fishers, and farmers, Botatwe communities learned about new, drier environments and the reliable sources of water that spotted the landscape. Eventually, Botatwe speakers settled the Kafue floodplain, Machili river system, Lukanga swamps and Lusaka area, Batoka Plateau, and Zambezi River valley. Botatwe speakers demonstrated a three millennia long commitment to acquiring and maintaining a sophisticated level of environmental fluency, the skill and knowledge necessary to best use natural resources to achieve economic and social aspirations, which will be discussed in the remaining chapters.

In addition to correlating the various pieces of evidence for the southward spread of Botatwe speakers, this chapter has produced evidence to engage archaeologists' critiques that historians must better reconstruct the natural world in which their historical actors were living in order to assess the challenges posed by those historical ecologies. Archaeologists' criticisms go too far, requiring historians to reconstruct vocabulary so as to determine whether certain environments may have been too challenging or dangerous to have been likely areas of human habitation. To make such a judgement is to dismiss those perceptions of the natural world developed by our historical actors, not to mention evidence that may, in fact, support the likely habitation of particular "challenging" habitats.

The semantic domains of reconstructed words illustrate Botatwe perceptions of the natural world and suggest three stages of settlement. Early Botatwe speakers had limited innovations that survived the linguistic record, in part because they lived in the same northern *miombo* environment as their linguistic ancestors. We know that by the end of the Proto-Botatwe period, Proto-Botatwe speakers were learning to farm cereal crops; this innovation probably dates to at least the early centuries of the first millennium, according to the archaeological

record. These crops helped the earliest Botatwe speakers feed themselves in the *miombo* and provided an impetus for slow, steady population shifts southward as speakers moved to the margins of villages to cut out new fields when their old fields were exhausted. Some early Botatwe vocabulary attests to increasing familiarity with drier lands. But older words were not forgotten; many ancient, inherited words eventually received new meanings as Botatwe languages were carried southward. For example, the inherited roots for “pool,” *-djbà, and “duiker,” *-kǐá, broadened in semantic scope so that Botatwe speakers could talk more generally about reliable water and antelope types that were indicative of nearby water supplies.

These shifts in older terms combined with the innovation of new words describe the challenge of the second phase of settlement: learning how to feed communities in the southern *miombo*, *mopane*, and teak forests. Using the bush was at the heart of farming and communication with neighbors throughout this phase. The second settlement phase unfolded from the 6th century to around the 14th century and took a different form for eastern and western Botatwe communities. In the heart of the eastern Botatwe lands, the great Kafue floodplain presented a unique wetlands that attracted seasonal as well as permanent herds of antelope and had nearby salt resources, ample fish, and good grazing and farming lands. We’ve seen that Eastern Botatwe communities developed an elaborate vocabulary for a variety of antelope, especially water-loving species, and this lexicon was matched, as we will see in Chapter 6, by vocabulary for strategies and tools to hunt local species collectively. Botatwe speakers in this region also developed words to talk about the differing agricultural potential of various microenvironments and, according to the archaeological record, how to farm a wide variety of microenvironments. Eastern Botatwe speakers also elaborated on words to talk about species, like feral swine, that threatened their agricultural endeavors and others, like lions, that

endangered sedentary communities' small livestock. We can see from this vocabulary the interdependence of farming and bushcraft.

Like the eastern region, vocabulary for microenvironments, such as *mutemwa* and *nkanda*, were developed by western Botatwe communities to talk about the differing agricultural potential of the lands around them. Yet, innovations in faunal vocabulary tell us that these western communities were living in far drier regions than those inhabited by eastern Botatwe speakers. Western Botatwe languages do not show the same evidence for intense innovation around particular kinds of species that we see in the eastern Botatwe words for antelopes, feral swine, and lions and, as we will see later, in the words used to talk about how to hunt those animals. Western Botatwe speakers seem to have very early on developed a strategy of food procurement that shunned specialization in favor of broad, diverse strategies.

The third period of settlement, from the 15th century to the late 19th century, was very different from the earlier two because, although trade routes predate these periods, trade became an increasingly important source of wealth and cross-linguistic contact for people who knew about the bush. Not only did important centers of trade appear on the edges of the Botatwe speaking region—Nqoma northwest of the Okavango Delta and Ingombe Ilede at the confluence of the Zambezi and Kafue Rivers serve as important examples—centralized polities emerged throughout the region, pulling Botatwe speakers into new relationships of exchange. We see this transition in the directions words traveled as they were borrowed across languages; communities along the Zambezi and in the hinterland north of the confluence of the Kafue and Zambezi were in regular contact. Similar interactions took place between western Botatwe speakers and communities on the Zambezi floodplain, first with Luyana speakers and later with Lozi speakers. This shift was characterized by older patterns of settlement in farming communities and newer

patterns of mobility for those who hunted and fished to supply trade networks. With this shift, people were able to imagine some forms of bushcraft as very distinct from the work of farming, a story that we will take up again in Chapters 8 and 9.

Taken together, word histories, clusters of semantic domains, and periods of concentrated vocabulary development around particular species, such as wild pigs or water-loving antelope, indicate likely periods of change in the histories of farming, hunting, and trade. Conclusions from this chapter produce expectations for histories of wild resource use. For example, we would expect a number of innovations in fishing vocabulary both during the Proto-Botatwe era when communities were living in an environment with numerous pools and rivers, during the Proto-Eastern and Proto-Kafue periods when speakers were learning to exploit the Kafue region, and during contact between western Botatwe communities and Luyana speakers on the Zambezi floodplain or, much later, in the swamps and marshes of the Caprivi Strip. Similarly, the history presented in this chapter suggests that hunting practices would have changed as Proto-Kafue learned to hunt larger, gregarious species in the Kafue floodplain or as western Botatwe communities hunted in far drier environments. Finally, we should expect that developments in bushcraft were intimately tied to changes in trade, farming, and other economic activities as well as developments in beliefs about leadership, authority, and social wellbeing.

CHAPTER FIVE
ESTABLISHING BOTATWE SYSTEMS
OF WILD RESOURCE USE, c. 1000 BCE TO c. 500 CE

Speakers of Proto-Botatwe had a complex body of knowledge about using wild resources to sustain successful communities in the northern *miombo* environment between the upper Luapula and Lualaba Rivers at the opening of the last millennium B.C.E. Some of this knowledge they had inherited from Savanna Bantu ancestors and some developed out of contact with neighbors, a number of other Bantu speaking societies whose historical ancestry reached to the northwest and northeast. The long-lived Proto-Botatwe speech community attests to the success and stability of this food system, which may, in part, explain the initial stages of a very long historical process of language shift in which established Bantu speakers adopted Botatwe languages. Only with the climate shifts of the middle of the first millennium of the Common Era did agriculture in the form of annual cereal cropping and some limited keeping of small livestock emerge as a significant component of the Proto-Botatwe food system. Importantly, wild resource use was never eclipsed as a central tool in the work of feeding communities and achieving social aspirations. Indeed, as communities experimented with farming and herding, they relied on wild resources for the successful development of agriculture. Though farming heralded a

profound transformation for the descendants of Proto-Botatwe speakers, the roots of wild resource use established in this chapter formed a pool of practice and value from which later Botatwe communities fostered important political changes.

5.1 Establishing Botatwe Fishing Technologies

Plentiful rivers and streams crossed the savanna homeland of Proto-Botatwe speakers, running with swift currents during the rainy season and forming well-stocked fishing pools as the annual rains tapered off.¹ Proto-Botatwe speakers employed a number of strategies to exploit local fish reserves. They angled with hook and line, *-dób- (501), as their ancestors had done for the previous two thousand years. This verb root also provides the name for the technology used when fishing in this manner: *-dóbò-, fishhook.² Interestingly, the root *-dóbò-, found in noun

¹ Research on early Luban settlements attests to the importance of fishing in the Shaba and Katanga regions of southern DRC during the last millennium B.C.E. and the first half of the first millennium C.E. In fact, Reece argues that control of fishing pools and their surplus was the likely catalyst for centralization of the nascent Luban polity. Thomas Reece, *The rainbow and the kings: a history of the Luba Empire to 1891* (Berkeley: University of California Press, 1981). For Luba archaeology, see P. Anciaux de Faveaux, and P. de Maret, “Vestiges des l’Age du Fer dans les environs de Lubumbashi,” *Africa-Tervuren* 26 (1980): 1-7; H. Brabant, *Contribution odontologique à l’étude des ossements trouvés dans la necropole protohistorique de Sanga, République de Congo* (Tervuren: MRAC, 1965); Terry Childs, William Dewey, M. Kamwanga and Pierre de Maret, “Iron and Stone Age Research in Shaba Province, Zaire: An Interdisciplinary and International Effort,” *Nyame Akuma* 32 (1989): 54-64; J. Hiernaux, E. Longrée and J. DeBuyst, *Fouilles Archéologique dans la Vallée du Haute Lualaba, I. Sanga, 1958* (Tervuren: MRAC, 1971); J. E. Hiernaux and J. De Buyst, “Le cimetière protohistorique de Katoto (vallée du Lualaba, Congo-Kinshasa),” In H. J. Hugot, ed., *Sixième Congrès Panafricain de Préhistoire*, (Chambéry: Imprimeries Réunies, 1972): 148-58; Pierre de Maret, “Sanga: new excavations, more data and some related problems,” *Journal of African History* 18 (1977): 321-337; Idem, “Chronologie de l’âge du fer dans la depression de l’Upemba en République du Zaïre,” Ph. D. diss. Université Libre de Bruxelles, 1978; Idem, “Luba Roots: The First Complete Iron Age Sequence in Zaire,” *Current Anthropology* 20:1 (1979): 233-235; J. Nenquin, *Excavations at Sanga, 1957* (Tervuren: MRAC, 1963).

² Angling is the earliest form of fishing we can reconstruct for Bantu languages. It seems likely that fishing with nets and traps were innovations that date to later millennia. Ehret suggests that the origins of fish trapping could lie with Central Sudanic speakers who shared their technologies with Mashariki communities on the western edge of East Africa around 300 B.C.E. to 400 C.E. See Ehret, *Classical*, 125. If so, all fish trapping vocabulary would be transfers from Mashariki peoples. Vansina also notes that angling seems to have been the only early Bantu form of fishing and that baskets, traps, and nets only came into use after the Proto-Bantu era. See Vansina, *Paths*, 288. For the root *-dób-, see BLR 3; C.S.638; Ehret, *Classical*, 312; Meeussen, *Lexical*, 23 and 40; Vansina, *Paths*, 288.

classes 5/6, 7/8, 9/10, or 14/16 throughout Bantu languages, appears in the 7/8 class in languages of the L zone to the north and west of the Botatwe languages with the meaning, “hero” or “brave man.”³ As Botatwe would do with different words later in their history, speakers of Bantu languages in west central Africa were connecting one of the oldest fishing terms in the Bantu domain with the work of crafting of a personal reputation based on skill in activities undertaken outside the village, in the bush. This example suggests that the Botatwe history of reputation building has broad parallels in the region and, perhaps, the cultural legacy of Bantu societies more generally.

In addition to angling, Proto-Botatwe speakers caught fish with baskets, dipping round, shallow, plate-like baskets into the water to retrieve fish stunned by bludgeoning or mixing bottom sediments or poison into the water. The word for fishing with a basket after administering poison, *-dùb- (502), draws on an older, possibly Proto-Bantu, meaning of the same root, “to dip,” to describe the action used to bring the fish up out of the water. This semantic shift and the new fishing method to which it refers, may be a Proto-Savanna innovation inherited by Proto-Botatwe speakers or a Proto-Mashariki innovation spread to neighboring Proto-Botatwe and other communities.⁴ Later, Proto-Kafue speakers, who were the only Botatwe communities to retain *-dùb-, would further expand the meaning of this root to refer to fishing with a basket, a net, or even a trap. That is to say, this root would be used to distinguish a range of fishing activities as distinct from angling.

Note that the Fwe attestation, *kulaba*, exhibits retrogressive assimilation, a process that is common to this language and is most frequent in the stabilizer vowels of absolute pronouns.

³ The root is *-dóbò in Kamba as reconstructed in BLR 3 6877.

⁴ BLR3 158; C.S. 731 and 732; Ehret, *Classical*, 313; Meeussen, *Lexical*, 31 and 40; Vansina, *Paths*, 288.

Trapping fish was another skill pioneered by the ancestors of Proto-Botatwe communities and preserved by subsequent Botatwe speakers. In particular, attestations of *-gònò (503) as *-ònò in Botatwe languages demonstrate that this word was used by Proto-Botatwe speakers. The crafting of this device differs very little between central African societies today. *Miono* are conical traps (with or without a funnel-like valve) constructed of sticks, reeds, or the stalks left after the harvest of grain crops that are placed in dams or weirs stretched across the river or stream. To function properly, *miono*, especially those without valves, need a swift current to keep fish from swimming out; they are most frequently used in seasonal or perennial streams, though not at the peak of the floods when barriers cannot be erected. *Miono* require an intense initial investment of labor for the construction of weirs and dams, however, the very high yield of the traps justifies the labor input.⁵

The distribution of the root *-gònò is fairly wide in Proto-Eastern Savanna Bantu languages and with the loss of /g/ in the first consonant position, it was certainly in use before the divergence of Proto-Botatwe. Christopher Ehret notes a wide Kaskazi distribution of this root with borrowing into Luba-Kasai. Attestations in Sabi and Kusi languages share the same form as Botatwe languages and easterly Botatwe languages may be the source of these attestations. If the Kaskazi provenance bears out, the borrowing of *-ònò by Proto-Botatwe speakers indicates surprisingly early contact with a Kaskazi speech community in north central Zambia, probably in

⁵ For more details on the construction and use of moono among central African communities, see P. I. R. MacLaren, *The Fishing Devices of Central and Southern Africa*, Rhodes-Livingstone Museum Occasional Paper No. 12 (Manchester: Manchester University Press for the Rhodes-Livingstone Museum, 1958); Barrie Reynolds, *The Material Culture of the Peoples of the Gwembe Valley* (Manchester: Manchester University Press for The National Museums of Zambia, 1968); T. Scudder, "Fishermen of the Zambezi," *Rhodes-Livingstone Journal* 27 (1960); Idem, *The Ecology of the Gwembe Tonga* (Manchester: Manchester University Press for The National Museums of Zambia, 1962); Edwin W. Smith and A. Murray Dale, *The Ila-speaking Peoples of Northern Rhodesia*, 2 vols. (London: Macmillan, 1920).

the middle centuries of the first millennium C.E., as Proto-Botatwe communities were poised to diverge along the upper reaches of the Kafue, stretching between the Ntemwa and Lukanga swamps.⁶

Contact with Bantu languages to the east at the very end of the Proto-Botatwe period is important for these interactions probably also included the exchange of information about cereal cropping, in evidence in the archaeological record at Muteteshi in central Zambia in the first century of the Common Era. Learning about high yield fishing methods in the early centuries of the first millennium may have provided an important supplemental food as Proto-Botatwe speakers experimented in farming because once weirs were constructed, fishing with *miono* provided food in the hungry season as labor shifted to planting and weeding. Both aspects of the food system—harvesting high yields with both *miono* and cereal crops—were important strategies for feeding communities during the shift to cooler, drier climate conditions by the middle of the first millennium, as the Proto-Botatwe speech community was in the process of diverging.

Just as they were putting into practice inherited and innovated technologies for catching fish, Proto-Botatwe speakers were also conserving the words used to refer to the products of their activities. A number of words for fish may be reconstructed to the Proto-Botatwe period. Among these, *-kunga (504) for “eel,” can be traced to Proto-Savanna or an even earlier Bantu speech

⁶ BLR3 2059; Ehret, *Classical*, 313; Meeussen, *Lexical*, 22, 40.

community.⁷ Likewise, *-pende (505) for “catfish” or “bream” may be an older root of Savanna provenance.⁸

5.2 Establishing Botatwe Hunting Technologies

A number of strategies for procuring meat were carried by Bantu speakers from the equatorial forests to the edges of the savannas of southern Africa. We know many of these practices to be of earliest Bantu provenance, including hunting with spears and archery. Yet, hunting was a particularly inventive domain amongst Proto-Botatwe communities. So, let us first consider retentions and then shift our attention to innovations.

Only one word for spear was passed into the Botatwe languages, the generic Proto-Bantu root for “spear”: *-gòngá (506).⁹ Indeed, efforts in the pursuit of animals with spears seem to have been far more concentrated in later periods, as Proto-Eastern Botatwe and Proto-Kafue speakers settled the greater Kafue area, than those periods immediately preceding the Proto-Botatwe era. One reason this word was conserved is that its meaning was shifted to refer to a specialized elephant spear, perhaps during the era of innovation in spear hunting between the 6th and the 13th centuries.¹⁰

⁷ BLR 3; C.S. 1228.

⁸ Note that Kusi and Western Savanna attestations of the root replaced *b for the initial *p. This consonant weakening from unvoiced to voiced may be a result of the influence of the voiced *nd nasal cluster. Further phonological analysis of this shift is needed to confirm the place of *-pende as a Savanna root.

⁹ BLR3 1448; C.S. 857 and 2130; Ehret, *Classical*, 83; Meeussen 23 and 51; Vansina, “Do Pygmies,” 438-9; *ibid*, *Paths*, 283 is a revision of Vansina’s reconstruction in “Do Pygmies”. This word later took on a specialized meaning in Tonga and Ila to refer specifically to elephant spears, see Chapter 8, below. As with many ancient inherited roots, the limitation of Botatwe attestations to the Tonga and Ila languages is likely a result of the better documentation of these two languages, rather than any conservative character of two.

¹⁰ See Chapters 6 and 9.

In the Proto-Botatwe era, far more interest was paid to the development of technologies of archery, as attested in the conservation of words related to archery and the innovation of new terms to discuss this important hunting strategy. The stress on archery in the Proto-Savanna, Proto-Eastern Savanna, and Proto-Botatwe speech communities is evidence that these early savanna inhabitants worked hard to make an ancient form of forest hunting successful in the open northern *miombo*. Archery is a particularly ancient Bantu skill; the term for “bow” inherited by Proto-Botatwe speakers, *-tà (507), was invented early in Bantu history, probably from the Proto-Bantu root *-tá, “to throw,” the action taken by the bow on the missile, or arrow.¹¹

Despite the antiquity of this technology, it was not unchanging. In fact, as Bantu speakers came to inhabit a range of environments and maintain their livelihoods during sometimes abrupt and severe climate shifts, technologies in food procurement were among the most innovative. For example, as Bantu languages were carried southward, out of the equatorial rainforests and into the northern fringes of the central African savannas, Proto-Savanna speakers invented a new word for arrow, probably specifically the arrowpoint, *-gújí (508), attesting to the development of a new kind of archery missile.¹² The *-gújí replaced an earlier Bantu arrow, *-bànjí. With a secondary gloss as “midrib of palm,” which was the likely material of construction for this older form of arrow, the term *-bànjí probably referred either to the arrowshaft or to an arrow fashioned with a sharpened, hardened shaft tip but without a distinct arrowhead.¹³ The new arrowpoint, *-gújí, may have been invented because it was constructed in a novel fashion,

¹¹ BLR3 2708; C.S. 1631; Ehret, *Classical*, 312; Meeussen 20 and 35; Vansina, *Paths*, 282.

¹² BLR3 1523; C.S. 903y; Ehret, *Classical*, 312-3; *ibid.*, “Subclassifying,” 66.

¹³ C.S. 545, 546, 547; Ehret, *Classical*, 313; Vansina, *Paths*, 287.

perhaps joined to the arrowshaft in a new way or developed to travel further distances in the open grasslands into which the Bantu languages had been carried.

Proto-Botatwe speakers inherited the Proto-Eastern Savanna word for another kind of arrow, *-gomba (509), similarly demonstrating that archery was a particularly innovative field of technology during early settlement of the central African savannas.¹⁴ With attestations in Botatwe languages following appropriate sound shifts, this root may now be tentatively reconstructed as a Proto-Eastern Savanna Bantu innovation. Christopher Ehret suggests that the innovative feature of this new form of arrow was the use of barbs and glosses in Botatwe languages support this conclusion. This new technology probably marks a shift in function from earlier dart-like missiles dependent on poison for killing the animal to a new potential for the missile itself to maim the animal when the barbs tore the animal's innards during its flight or as the animal attempted to remove the point.

Barbs enabled the point to remain in the animal's flesh also made any poisons smeared on the arrow all the more effective. In fact, a root for hunting poison, *-lémbé (510), was innovated around the same time as the root *-gomba, probably by Proto-Savanna or Proto-Eastern Savanna speakers who passed the technology down to descendant Proto-Botatwe communities.¹⁵ The word *-lémbé refers to a family of poisonous plants found throughout Africa (and beyond): *Apocynaceae strophanthus*. Based on observations of the plant's distribution in

¹⁴ Ehret, *Classical*, 313; Meeussen 26 and 33. As with many ancient inherited roots, the limitation of Botatwe attestations to the Tonga and Ila languages is likely a result of the better documentation of these two languages, rather than any conservative character of two.

¹⁵ BLR3 914-918; C.S. 531-534.

reports at the Kew Botanical Gardens, the root may be used by speakers of Botatwe languages today to refer to the *nicholsonii* species, which is common to *mopane* woodlands.¹⁶

Although historical arguments cannot be pinned on lack of evidence, it is worth comparing the relatively few number of terms related to the technology of spears and hunting by thrusting to those developed to talk about hunting through archery, or projectiles. These lexical innovations for hunting with projectiles support the hypothesis, based on reconstructed vocabulary for flora, fauna, and features of geography, that Proto-Savanna speakers and the members of subsequent speech communities inhabited a more open grassland environment. Missiles were efficient hunting tools in open areas because, with less vegetation cover to mask the approach of the stalking hunter, hunters needed to be able to wound the animals from afar. The deficiency of trees and bush to hide the hunter, of course, encouraged the development of archery technologies because the arrow could fly farther without interference from vegetation. In this way, Proto-Savanna peoples and those speaking Savanna languages after them (including Proto-Botatwe) adapted an earlier forest hunting technology to the vegetation of the open savanna environment by innovating longer bows and new arrow forms to throw the missile further.

The inherited Proto-Savanna root *-gúj was used to invent a new word for “hunting by archery,” *-gújím- (511), by either Proto-Eastern Savanna speakers or, perhaps, as an areal between Proto-Botatwe, Proto-Mashariki, and Proto-Sabi speakers.¹⁷ Bantuist Malcolm Guthrie

¹⁶ Royal Botanic Gardens, Kew, “eFloras Results for *Strophanthus nicholsonii*,” Royal Botanic Gardens, Kew, <http://apps.kew.org/efloras/namedetail.do?flora=fz&treeid=8Strophanthusnicholsonii&qry=browse&taxon=5669> (accessed 3/24/2008). On the distribution of *mopane* woodlands in earlier periods of central African history, see chapter 3 and 4.

¹⁷ BLR3 1525 with possible variant 4028 in zone A (!); C.S. 904. The Nkoya attestation is an borrowing from Ila, based on boths its phonological form and its narrow semantic meaning.

claimed that the addition of a final /m/ to a root is not known as a word building device.¹⁸ Yet, verbs that develop out of nouns usually undergo a process by which a nominal stem terminating in a vowel is augmented in the derived verbal stem with a final consonant + -a.¹⁹ In the case of this root, -ma was added to *-gúí. Indeed, -ma is used as a suffix that modifies aspect in Swahili by fixing the transitive effect onto an object. If this derivation holds, the addition of -ma fixes the transitive effect of an arrow's capacity to kill onto the arrow's target.²⁰

As the savanna environment came to be understood as the typical, generic environment, the word *-gúím- took on the generic definition "to hunt" in the languages that diverged from Proto-Eastern Savanna, indicating the importance of archery in the hunting repertoire of the speakers of these languages. We will see in later periods that hunting by thrusting a spear took precedence over archery with respect to the innovative efforts of Botatwe hunters; for now, we can characterize the period from beginnings of the Proto-Savanna era to the middle of the first millennium CE as a time during which Africans carrying Bantu languages into the southern savannas perfected a new kind of archery in the open grasslands.

As Proto-Botatwe speakers learned about cereal agricultural in the early centuries of the Common Era from neighboring Bantu speakers with ancestry to the northeast, Proto-Botatwe speakers' skill in trapping became a central facet of the work of farming, because the snares,

¹⁸ See comments by Guthrie in the entry for C.S. 904.

¹⁹ Consider the comments of Schadeberg, "Derivation," 84.

²⁰ I thank David Schoenbrun for this observation. Schoenbrun shared the example *kufumba* "shut, close (by bringing parts or things together); mystify, disguise" and *kufumbama* "be in a state of being mystified, be dazed, light headed." Schoenbrun suggests that the addition of -ma draws on the internal locative of place in fixing the transitive effect of the second meaning. Schoenbrun's example comes from F. Johnson, *A Standard Swahili-English Dictionary* (Oxford: Oxford University Press, 1939), 102. Johnson names this the "Static" mode.

falls, and traps located near planted fields served both productive and protective functions. The mutual and dialectic relationship between trapping and farming suggests new perspectives on old observations about the nature of farming in south central Africa. For example, shifting agriculture in the savannas has been understood as a strategy to combat soil exhaustion, yet the movement of fields and villages to new areas may have also been a strategy to mitigate against empty traps as animals living near human settlements learned to stay away from field margins studded with snares.

Like farming, spring noose and fall traps provided a regular, predictable source of food; yet, the energy needed to produce that food was far less than the effort needed to cultivate crops. As Jan Vansina observes in the equatorial rainforest, farmers probably developed a complicated knowledge about which kinds of crops, at what particular level of maturity would attract which specific animals.²¹ Farmers could cater their traps accordingly to ensure that both gardens and larders remained full. Therefore, we should expect that the historical development of farming and trapping technologies were intertwined: as farmers moved and innovated new cereals, they needed to adapt their trapping tools and practices to the demands of new environments and cultivars, adaptations that should be reflected in trapping vocabulary.

The root used to talk about setting traps, the ancient Bantu word *-tég (512), was retained in Proto-Botatwe and conserved to the present day.²² Vocabulary for the kinds of traps that need to be set are a particular class of devices; spring-set snares and fall traps are placed along game

²¹ Vansina, *Paths*, 90.

²² BLR3 2825; C.S. 1698; Ehret, *Classical*, 312; Meeussen, *Lexical*, 15 and 54; Vansina, *Paths*, 295-6.

runs and near planted fields. That is to say, traps that one would need to “set” are distinguished in trapping vocabulary from the pit traps used in *battue* hunting.

Among the devices set to protect fields, *-pètò (513) was probably inherited by Proto-Botatwe speakers, for its relict distribution within Botatwe languages and Savanna Bantu more generally attests to its age. The name for this spring noose trap developed out of its construction; an older verb, *-pèt-, “to bow, to bend, to fold,” described the action taken to the stick or branch that became the trap’s spring.²³ With a deverbative suffix *-o, *mupeto* specifically was “the thing for bending” (the stick or sapling) and more generally referred to the spring noose trap used to ensnare large grazers roaming near ripening fields. The trap was easily built with simple materials (bent stick, rope) and little labor input. The simplicity of this device, as opposed to the labor-intensive elephant-ditch earthworks of the savanna of western Uganda²⁴ or the intricate hippopotamus and pitfall traps used further from cultivated settlements, probably secured its place within the body of knowledge that enabled savanna Bantu farmers to practice shifting agriculture, frequently moving their fields and the technologies that protected them.

The protection of crops had particular season and even daily rhythms. For example, many farmers today and in the past built temporary shelters out at the fields, living in these structures just before and during harvest to protect crops from animals during the night. Similarly, trapping birds was a part of the work of farming grain crops that took place during sowing and between

²³ For reconstructions of the ancient Bantu verb *-pèt- see BLR3 2482; C.S. 1495; Meeussen, *Lexical*, 15 and 35. For other derivatives such as ‘ring’, ‘circle’, and ‘bow’ see BLR3 2482. This term was used by Great Lakes Bantu peoples to develop a new word for “bow” and, later, “military regiment.” See Kathryn de Luna, “Bantu Hunters: A Revision of the Story of Bantu Expansions and the Development of Farmer State,” (unpublished research seminar paper, Northwestern University, 2003).

²⁴ Compare the system of using snares to protect fields with the elaborate earthworks built to keep elephants out of fields at Iron Age sites in the savannas of western Uganda.

the weeding and harvesting seasons as grains ripened in the weeks before harvest. In many instances in the ethnographic record this work is described specifically as the work of children, especially boys who are not yet old enough to begin herding cattle.

Proto-Botatwe people, and possibly their children, had a number of ways to capture birds. In ancient times, perhaps as early as the era of the Proto-Bantu speech community, birds were trapped with the unctuous substance *-dìmbò (514), birdlime.²⁵ This form of trapping was passed down to Proto-Botatwe speakers; it remains a popular form of bird catching today. Proto-Botatwe speakers also used a very old falling trap, *-díbá (515), in which a heavy stone (sometimes a log) was balanced to fall when an animal, attracted to the bait under the stone, shifted the sticks supporting the weight; the animal was crushed by the falling stone.²⁶ This trap was used to protect crops from birds and livestock from cats, particularly leopards; it was a trap to catch animals that posed a threat to the farming lifestyle that increasingly occupied Botatwe speakers' time and energy.

Suggestively, of the lexical data I collected, there were no attestations of vocabulary innovations related to trapping or hunting that could be reconstructed to the Proto-Botatwe speech community. While a lack of evidence is certainly no grounds for sound historical conclusions, this period of stability in hunting and trapping vocabulary does raise questions about the history of the development of farming. The Proto-Botatwe period was, until its close in the middle of the first millennium, characterized by moist, warm conditions and the extension of the southern boundaries of the environment with which the ancestors of Proto-Botatwe speakers

²⁵ BLR3 976 [verb] and 985 [noun]; C.S. 575 and 578; Meeussen, *Bantu Lexical*, 10 and 35; Schadeberg, "Derivation," 81.

²⁶ BLR3 955; C.S. 558; Ehret, *Classical*, 313 as *-libá; Meeussen, *Bantu Lexical*, 11 and 54.

had grown familiar. This stability in hunting and trapping and even fishing up to the late centuries of the Proto-Botatwe era attests to the great success of the food system and the environmental conditions sustaining it. Moreover, this great success in the Proto-Botatwe food system probably made initial experiments in farming possible in the early centuries of the Common Era because knowledge to successfully collect food helped early farmers feed their families when agricultural experiments failed in some years or certain environments.

5.3 Establishing Botatwe Honey Collection Technologies

Like fishing, trapping, and hunting, honey collection was an ancient practice that Proto-Botatwe speakers learned about from their parents and grandparents, carrying this knowledge with them across a number of microenvironments over the course of three millennia. Most of the honey collecting vocabulary was conserved, for few tools were needed to collect honey and bees were never kept by Botatwe speakers as they were in other parts of the continent.²⁷ Among the words that Botatwe people conserved was the very ancient, probably Proto-Bantu word for honey, *-júkì (516). The root took the form *-úci in Proto-Botatwe. Similarly, Botatwe people applied an old, inherited root for a tree hollow, *-pàkò (517), to refer to a natural hive, for these locations were frequently exploited by Botatwe speakers.²⁸

²⁷ Consider Ehret's reconstructions for Mashariki man-made hives, *Classical*, 125-7.

²⁸ It is difficult to ascertain the age of the semantic innovation to use this root as the generic term for a natural beehive. The distribution stretches to Mashariki languages that are not adjacent so the innovation could be Proto-Eastern Savanna or an areal between Proto-Botatwe and Proto-Mashariki. With an attestation in Thimbukushu, it is even possible that the semantic innovation is Proto-Savanna. However, Thimbukushu frequently borrows from western Botatwe languages. Yet, the semantic extension from "hole in tree" to "natural beehive" is not surprising; the distribution could be a result of convergence. Some bees also make honey in the ground, though I found no words about these bees or their underground hives that could be reconstructed to proto-languages within the Botatwe classification.

Yet Proto-Botatwe speakers innovated a surprising number of words to change the way they spoke about honey and its collection. Many of these were very basic terms. For example, Proto-Botatwe speakers invented a new word for “bee” or “honey bee,” **(i)mpùká* (518). This root may have been borrowed later, into languages bordering the Botatwe to the northwest, west, and southwest, including Nkoya, Mwenyi, Lozi, and Thimbukushu. Yet, an attestation in Rumanyo suggests that the word could have been an ancient areal between Proto-Botatwe or Proto-Western Botatwe speakers and Proto-Luyana/Southwest Bantu. The retention of this term in Soli and Lenje far to the east of the Botatwe domain, despite its replacement in Proto-Eastern Botatwe by a transformation of the old root **-júkì* and a completely different root in neighboring Sabi languages, further supports the place of **(i)mpùká* as a Proto-Botatwe form. Proto-Botatwe speakers were also concerned with talking in new ways about beeswax, inventing a new term in class 14, **buka(to)* (519). This innovation may be related to innovations in archery, as beeswax is a common adherent for attaching the feathering of arrows. Similarly, Proto-Botatwe speakers used an older, inherited word for flower, **-dùbà* (520), stretching the meaning of that word to talk about beebread, the pollen stored in a hive and fed to the bee larva as a protein to supplement the carbohydrates in their honey food.

The development of these new words for very basic honey vocabulary is surprising because we know that the ancestors of Botatwe peoples also collected honey in the forests. Yet, this set of innovations tells us several important things about the life of Bantu speakers moving into the southern savannas. First, as Bantu languages came to be spoken in drier areas, honey collection remained a vital source of food. Although the technology for collecting honey would have changed very little, the density of calories in this food made it important enough to be the

focus of much innovative talk; early savanna farmers knew that honey was an important wild resources underpinning their shift to cereal-cropping.

Second, during the time when Proto-Botatwe was spoken, its speakers found the experience of hunting for and consuming honey to be novel enough to replace a number of the most basic terms their linguistic ancestors had used to talk about this work. While the exact reason for this difference is uncertain, we can hypothesize that the locations of bees' nests and the kinds of products Proto-Botatwe speakers found in those nests were significantly different in various savanna ecologies because the pollens bees used to make honey had changed. We will see the same innovation in the words used to talk about the products bees made—wax, honeycomb, beebread, etc.—as both Proto-Eastern and Proto-Western Botatwe speakers made their homes in new kinds of environments to the south. The term for honey, however, the main product that Botatwe people sought, did not change.

Finally, it may be that those who procured the honey, wax, and beebread of *impùká* bees from the bush worked hard to play up the distinctive qualities of the products they collected and consumers of these products obliged, developing particularly discerning tastes when it came to waxes used in crafting tools and the beebread and unique honey of the *impùká* bee consumed as food. Perhaps knowledge of where one could collect these novel types of wax, beebread, and honey brought prestige. Moreover, as the providers of the raw materials for making honey beer, a foundation of relationships between the living and the dead, honey hunters would have been very important figures.

The social importance of beer consumption best explains the surprising innovation around Botatwe talk of honey collection and the sustained use of the term *(i)mbote (521) for “honey beer.” This common Botatwe word for mead may date to the Proto-Botatwe era and, if

so, was retained across three millennia of Botatwe history. Indeed, the term may derive from a the same root as the adjective –botu, “good, beautiful.” If this derivation holds, honey beer was the “the agent or tool of goodness,” as an offering to the guests, ancestors, and neighbors who helped to make Botatwe speakers’ homes secure and, later, their fields productive. The faster production of honey beer (overnight) compared with most grain beers (often seven days, though some forms are shorter), probably secured its place as an important social gift, the consumption of which tied people together and made their settlements successful.

5.4 Proto-Botatwe Wild Resource Use

The linguistic legacy of Proto-Botawe speakers demonstrates that they fished the swift waterways, brought down game in the open savannas, hunted honey in the split bark of stands of trees. The long-lived Proto-Botatwe speech community and stability of Proto-Botatwe vocabulary for wild resource use attests to the great success of this food system, a success that could sustain communities as they experimented with farming in the early centuries of the Common Era. The ways in which Proto-Botatwe speakers made use of the resources around them both confound the distinction between collecting and producing food.

Even with the incorporation of farming into a food system based on collecting wild resources, the social importance of wild resources in building networks of people and cultivating forms of individuality was not diminished. We saw some of this in the play around the products of beehives in Proto-Botatwe communities where the use of honey beer could open paths to building relationships and bring the potential for distinction to those skilled in collecting the produce of bees: honey and larvae-filled combs. Indeed, the innovation around products of the

hive attests to the discerning tastes of those who sought access to the goods collected by the honey hunter.

These two themes—the importance of wild resources to the productivity of farming and to achieving the social aspirations of individuals and communities—took new forms in the histories of eastern and western Botatwe communities in the late first and early second millennia. Maintaining an eclectic food system was a central strategy of western Botatwe communities as they settled the sandveld because innovations in hunting and trapping were deployed to protect fields and cattle herds. The archaeological and linguistic records tell us, for example, that innovations in the use of dogs and whistles probably evolved side by side, to the benefit of both herders and hunters exploiting the cattle and buffalo herds of the open grasslands. Yet, these same activities, especially hunting game and honey, opened pathways to distinction and network building, particularly for those who engaged in regional trade networks centered on the Tsodilo Hills, which connected to the Indian and, perhaps, Atlantic Oceans. This is a story we will trace in chapter 7.

In the east, the distinction between farming and the acquisition of wild resources took a firmer shape with great innovation around communal spear hunting. Although hunting, fishing, trapping, and collecting still filled larders, certain forms of these activities, particularly those undertaken further from the safety of the homestead, opened up new ideas about the wealth and reputation one could build with skill in bushcraft. Eastern Botatwe communities identified new kinds of people who were skilled and celebrated hunters, sought out for the game meat they shared and the prestige they carried. Ideas about the distinction between the safety of the field and village and the exciting, though dangerous, opportunities of exploiting more distant game, swifter rivers, or swarming competitors for food, was only possible when planting, herding, and

the food procurement activities became well-established, productive aspects of the food system.

That is to say, the establishment of farming and herding underpinned innovation in the economic and social potential of bushcraft. It is to these developments in the east that we now turn our attention.

CHAPTER SIX
COLLECTIVE WORK IN THE KAFUE:
WILD RESOURCE USE IN THE EAST, c. 500 C.E. TO c. 1300 C.E.

By the middle of the first millennium, at the end of a period of particularly warm, moist climatic conditions, the long-lived Proto-Botatwe speech community diverged into Soli, Proto-Eastern Botatwe, and Proto-Western Botatwe along the northerly fringes of a range of wetland systems in central Zambia, including the Ntemwa and Lukanga swamps and the Kafue Flats. However, the climate shifted to drier, cooler conditions over the second half of the first millennium. As Botatwe speaking farmers sought to make a living through this era of increasingly lower rainfalls, they found it advantageous to fish local pools, tributaries, and the main river, to hunt the herds congregating around the Kafue floodplain during the dry season, and to supplement the produce of their cultivated fields by collecting honey and the fruits, insects, tubers and nuts available along footpaths between villages as well as wild greens sprouting next to garden crops. Yet, to emphasize the role of collected food merely as supplemental to cultivated food belies the complexity of the contributions of such activities not only to instrumental concerns with meeting caloric needs, but also to concerns about drawing the

knowledge of speakers of other languages into the Botatwe speaking world. The achievement of eastern Botatwe societies lay in integrating the knowledge of speakers of other Bantu languages into Botatwe food systems and, eventually, absorbing the speakers themselves into Botatwe communities.

A florescence of innovation in wild resource use characterized the second half of the first millennium and early into the second millennium, but these innovations were mustered toward different strategies. During the Proto-Eastern Botatwe era, from approximately the 6th century to the 10th century, communities fed themselves despite a long period of dry, cool climatic conditions by diversifying the microenvironments they exploited and their strategies of food procurement.

By the Proto-Kafue era, great innovation around spear technology and new specialists in using these tools supported a novel emphasis on group hunting with spears. As Botatwe societies in the east invented novel ways to organize food collection, they talked about the proper ways to integrate these technologies, techniques, and skilled persons into successful communities. Large-scale group hunts brought together neighbors from different villages and may have been an important strategy for interacting with and eventually absorbing speakers of non-Botatwe languages. We will consider each of these concerns in turn, but first let us recall the archaeological record to contextualize the lexically-based historical narrative that follows.

6.1 Material Culture in the Greater Kafue Region, c. 500 to c. 1300 C.E.

The archaeological record of the Kafue region for the mid-first millennium to mid-second millennium corresponds to the chronology of language divergence. The Iron Age of this region has been divided into three periods, Early Iron Age, Middle Iron Age, and Recent Iron Age,

rather than the two-period chronology, Early Iron Age and Late Iron Age, used throughout most of Bantu Africa. The breaks of these three periods overlap with the approximate periods of divergence assigned to linguistic data through the application of glottochronology. Generally, the three periods represented in the archaeological record are characterized by small shifts in economy and settlement pattern; however, a strong continuity is recognized throughout the Iron Age sequence.

Interpretations of archaeological evidence from the Kafue region suggest that the Early Iron Age represents the arrival of a new farming and iron working tradition, probably outlying Proto-Botatwe communities.¹ The transition to the Middle Iron Age between the 6th and 8th centuries corresponds to the divergence of the Proto-Botatwe speech community in the mid-second millennium. Middle Iron Age settlement patterns and economic practices last as a coherent tradition throughout the Proto-Eastern Botatwe and Proto-Kafue periods until a transition from the 14th to 16th centuries, corresponding roughly with the divergence of Proto-Kafue.

The archaeological record tells us that throughout this period, the people who settled in the Kafue area and South Central Africa more generally planted gardens of legumes and fields of grains, raised small livestock, smelted and shaped iron, and exchanged locally abundant raw materials (like salt and iron ore) and the products of skilled people (like skins and ivory). Such resources, both things and people, were unevenly distributed across the region.² By the middle of

¹ For a summary, see David Phillipson, *African Archaeology*, 3rd ed. (Cambridge: Cambridge University Press, 2005), chapters 6, 7, and 8.

² The most detailed archaeology of the Kafue region is described in Robin Derricourt, *Man on the Kafue: the Archaeology and History of the Itezitwezi Area of Zambia* (New York: Lilian Barber Press, 1985). See also citations and discussion in Chapter 3.

the first millennium, the informal, incremental, local exchanges between households, villages, and neighborhoods, accumulated into extensive networks reaching all the way into intercontinental trade networks based at the Indian Ocean coast, as demonstrated by glass trade beads found at sites on the Batoka. Most goods, however, were consumed within the region. Ivory and copper bangles, like glass beads, served as items of adornment, items archaeologists might call prestige goods, because it took wealth and influence to pull in copper from the north (the Zambian Copperbelt) or the south (the central Namibian copperfields via the skilled jewelry craftsmen settled in the Tsodilo Hills, west of the Okavango Delta) or to claim the ivory tusks of a successful elephant hunter. For archaeologists, their rarity made prestige goods difficult to acquire and all the more valuable as markers of personal wealth and influence and of connectedness to networks of others' personal wealth and influence.³ Interestingly, when ivory bangles were associated with burials with an identifiable sex, they were associated only with women, who were unlikely to have been the hunters of the elephants. These data suggest that some women could attract, through claims of power, wealth, or affection, ivory prestige goods as markers of status and symbols of connection to skilled and wealthy men.

While Early Iron Age settlement only occurred in the good agricultural lands of the grasslands, during the Middle Iron Age from the second half of the first millennium through the first half of the second millennium, settlement was extended into new ecological niches along the river and into the woodlands, perhaps as a strategy mitigating the cooling, drying trends at the

³ Timothy Earle, *How Chiefs Come to Power: the Political Economy in Prehistory* (Palo Alto, CA: Stanford University Press, 1997).

start of the millennium.⁴ With these new settlements, Middle Iron Age peoples developed what archaeologists call a dual economy, in which communities living in the grasslands grew sorghum, raised some livestock (including cattle, but primarily goats), and undertook some fishing while communities living in the riverine woodlands fished, hunted, and gathered. The development of settlements focused on the (seasonal?) procurement of wild resources. The marked jump in the number of fish and wild animal faunal remains associated with stratigraphic levels dated from the second half of the first millennium to the early second millennium correlates well with the lexical record, which demonstrates that the Proto-Eastern Botatwe and Proto-Kafue periods were particularly innovative fishers and hunters, first diversifying their activities and then emphasizing spear hunting.

6.2 Fishing Practices in the East, c. 500 to c. 1300 C.E.

From the mid-first millennium to the early second millennium, as Proto-Eastern Botatwe and, later, Proto-Kafue communities settled the greater Kafue region, they innovated a number of words to talk about an increasingly complex system of fishing practices. They specifically focused their energies on learning new methods of and technologies for fishing with nets, baskets, and traps, including some communal fishing. That is, this period saw a flourishing of fishing technologies that required far greater investments of time and labor and more intricate tool construction. Some of these new methods also required greater numbers of participants than angling, the oldest Bantu method of fishing. In order to capture the new, wider range of fishing

⁴ Derricourt, *Man on the Kafue*. Significantly, this shift in the MIA to settlement in a greater diversity of environments a pattern that repeats itself in the archaeology of the Zambezi Valley where the shift is associated with Early Tonga (or Namakala) pottery. Joseph O. Vogel, "Micro-environments, swidden and the early Iron Age settlements of south-western Zambia," *Azania* 21 (1986): 85-97; Idem, "Iron Age Farmers in south-western Zambia: Some Aspects of Spatial Organization," *Cambridge Review of African Archaeology* 5 (1987): 159-170.

work they were doing, eastern Botatwe communities expanded the semantic domain of the inherited root *-dùb- from “to fish with a basket” to mean “to fish with a basket, net, or trap” sometime between the 6th and 14th century. The shift in the meaning of *-dùb- (502, 601) also seems to have occurred in Kaskazi languages, where the term came to refer (perhaps exclusively) to fishing with a net. In the Sabi languages spoken to the east of Botatwe communities, the root was used to talk about fishing with a trap. To the west, the same root referred to fishing with a basket or a net.

At the same time that Botatwe speaking communities in the Kafue region were applying *-dùb- to a range of new fishing activities (and tools, as we shall see below), they innovated a new word, *-séla (602), to refer to this same cluster of fishing methods: fishing with a trap or net and, in some languages, a scoop basket. This word may have been borrowed from Sabi languages to the east, around the turn of the first millennium; among Sabi speakers, the root *-él- refers to fishing with a scoop basket. However, Mashariki attestations of the root, referring to fishing with a net or angling, suggest another possible source. Indeed, a distribution in Botatwe, Sabi, and Mashariki languages could even attest to a Proto-Eastern Savanna origin! Regardless of its origins, as was the case with *-dùb-, eastern Botatwe societies used the root *-séla to talk about a far wider range of fishing methods than were employed by neighbors attaching meaning to the same root.

When we consider *who* used these technologies, our story of semantic extension becomes more complex. Some speakers used the root *-dùb- to innovate a new noun, *-zubo, for a large trolling basket. Similarly, the root *-siko (603) was invented by Proto-Eastern Botatwe or Proto-Kafue speakers to talk about at least two fishing baskets: the flat, plate-like scooping basket used

to collect poisoned fish when doing the kind of fishing called *-dùb- and, more often, a large trawling basket.

For languages where we have an ethnographic record, it clearly indicates that only women used *izubo* and *masiko*; interestingly, among Tonga speakers today, only men may make the *izubo* baskets.⁵ Although women could simply troll the basket along the river bottom through the grasses growing adjacent to the riverbank, it was far more common to use the basket when fishing as a group. In recent times, two lines of women arrange themselves across the river, perpendicular to its flow and facing each other. They hold their baskets against the river bottom, forming a barrier from bank to bank. The women facing downstream sweep toward the stationary line, herding fish into their own and the other women's baskets. *Izubo* and *masiko* baskets are most commonly used in tributaries and the slow streams feeding the floodplains and dambos, the same types of environment as the Middle Iron Age Basanga and Mwanamaimpa settlements of the Kafue Flats region. This method of fishing yields large catches and, importantly, predictable success. Evidence of the method of fishing by trawling tells us that Botatwe speakers (women?) in the Kafue area in the late first and early second millennia were concerned with developing modes of fishing that could be used in environments near their cultivated fields to produce predictably large catches during the dry season, before the labor intensive work of sowing fields. If *izubo* and *isiko* were women's communal fishing tools in the Proto-Eastern Botatwe and Proto-Kafue periods, the reliably large catches women collected were not only important sources of food, but also sources of material wealth subject to the politics of redistribution.

⁵ Reynolds, *Material*, 41-55; Scudder, "Fishermen"; Idem, *Ecology*, 190. See also Smith and Dale, *Ila Speaking*, 160-67.

Two more roots were innovated during this period to talk about the kind of fishing done with baskets, fishing noted to be the exclusive domain of women (and sometimes children) in the ethnographic record. In the early second millennium, Proto-Kafue speakers in communication with Sabi speakers to their east innovated a new kind of fish poison, *-buuba (604). The plant source for this poison seems to have varied from one community to another, but may have included the *mundale* tree or a small, cultivated shrub, *Tephrosia vogelii*. Fish poison was used in the windy, hot season in the months before the rains to cull the last of the fish from standing pools left in dry riverbeds (or those created by damming streams early in the hot, dry season). The poison, often taken from the roots of the plant, was pounded into mush and stirred into the water; it stunned the fish within about thirty minutes. Fishers would then *-dùb using a *-siko basket.

Details from the ethnographic record invite the question: when did certain fishing practices become the domain of women or men? However, we have no direct evidence for the gendering of this work in the linguistic and archaeological records.⁶ We have already noted that basket fishing, particularly scooping up stunned fish or those caught in the process of trolling, was the domain of women in the early twentieth century. Angling, spearing, and fishing with nets, fences, weirs and traps (including plunge basket traps) were the domain of men in the eastern Botatwe region. These latter activities were generally pursued in more swiftly running waters, in water environments like those of the Middle Iron Age settlements in riverine woodlands. If we put forth the hypothesis that the gendering of fishing activities could date as

⁶ Bantu languages do not mark gender. Rarely, the feminine or masculine possessive prefix may enter a reconstruction, but such morphology is difficult to reconstruct into the deep past. Unless particular tools are consistently interred with human remains with an identifiable sex, we have no direct evidence of the gendering of particular forms of labor from archaeology.

far back as the period of Proto-Eastern Botatwe and Proto-Kafue innovation in fishing technologies, we may look at both the archaeological and linguistic records in a new way.

When we set the gendered division of fishing labor alongside ethnographic evidence of the gendering of other forms of wild resource procurement discussed in this dissertation, we see that dividing activities was tied to assessments of the degree of danger, the predictable return for effort, and the range of mobility from the agricultural settlement necessary to carry out particular modes of wild resource collection. In the ethnographic record, men undertook dangerous activities that required greater travel from the home settlement and produced far less food than women, whose work in and around the fields provided the bulk of a family's caloric intake.

When we consider the water environments at the sites of the dual economy of the Kafue Middle Iron Age and the fishing techniques appropriate to each water environment, we can interpret the Kafue MIA riverine woodland sites as men's temporary hunting and fishing camps and the agricultural sites of the grasslands as the main village sites.⁷ Thus, when Botatwe-speaking men and women were broadening the semantic domain of words like *-dùb- and *-séla, they were thinking more broadly about what it meant to fish and how one went about doing that work. We can imagine (not prove) that men sought to appropriate words used to talk about a kind of fishing that was understood to be women's work in order to include the risky work they were

⁷ Archaeologists in southern Africa have long argued for greater consideration of the role of mobility, the gendered division of labor, the seasonal rhythms of wild resource collection in the interpretation of sites classified as "Iron Age farming (Bantu)" and "Stone Age hunter-gathering (autochthonous)." These important observations have produced revisions of the Bantu Expansions narrative in which autochthones are credited with the *in situ* development of farming, ceramics, and iron-smelting, the so-called "Bantu toolkit." See Chapter 1 for a critique of this debate. For the importance of mobility and gender in interpreting archaeological sites classified as EIA and LSA in south central Africa, see Musonda, "The Significance of pottery in Zambian Later Stone Age Contexts," *African Archaeological Review* 5 (1987): 147-58; Idem, "Cultural and Social Patterning in Economic Activities and their Implications to Archaeological Interpretation: A Case from the Kafue Basin, Zambia," *African Studies* 48, 1 (1989): 55-69; J. Robertson and R. Bradley, "A New Paradigm: The African Early Iron Age Without the Bantu Migrations," *History in Africa* 27 (2000): 287-323.

doing and the elaborate technologies they were employing in definitions of words to talk about getting fish at a time when climate fluctuations made for unstable food supplies. At the very least, the unique settlement pattern of the Kafue MIA and the classification of modes of wild resource use based on danger and mobility in the linguistic record suggest that Botatwe speakers were thinking in new ways about differences between producing reliable food near the settlement and leaving this security behind for the chance of procuring food in the bush.

In addition to the expansive meanings of *-dùb- and *-séla, a number of other innovations demonstrate that Proto-Eastern Botatwe and Proto-Kafue communities sought to broaden their repertoire of fishing techniques to better exploit the resources available to them in the Kafue region, especially during the dry period at the close of the first and early in the second millennium. Redundant descriptions in the ethnographic record tell us to characterized as men's work the net fishing activities described by this set of words, though, again, we have no direct evidence proving such gendering in the deep past.⁸ For example, Proto-Eastern Botatwe speakers borrowed a Maskariki root for net, *-jábù (605), reconstructed in its Botatwe form as *-sabwe.⁹ Kusi speakers were the probable Mashariki source for this root because words borrowed from Kusi often attest a final consonant-vowel, CV, weakening to /Cwe/ or /Cwa/. The *-sabwe net was probably smaller, perhaps for throwing from a canoe in deep waters rather than trawling through shallow waters.

Although Proto-Eastern Botatwe and Proto-Kafue speakers spent a great deal of energy preserving and expanding their knowledge about net fishing, the semantic extension in the

⁸ Reynolds, *Material Culture*, 41-56, 164-7; Thayer Scudder, "Fishermen of the Zambezi," *Rhodes-Livingstone Journal* 27 (1960): 41-9; Smith and Dale, *Ila-Speaking*, vol. I, 159-67.

⁹ For evidence of *-jábù, see BLR3 3142.

meanings of *-dùb- and *-séla suggest that they also fished with baskets and traps. As part of their expanding fishing repertoire, Botatwe speakers in the east developed a new word for a fish fence, or weir, *-buyeelo (606). Centuries later, during the second half of the second millennium, some Kafue peoples living along edges of the Blue Lagoon and Lukanga swamps north and east of the Batoka Plateau, specifically the Lenje, Sala, and Plateau Tonga, innovated another term for fish fence, *-buyali (607). Both innovations drew on a set of older, related verbs, *-yeela “to fence” and *-yala, “to encircle” to talk about the work done with the *-buyeelo and *-buyali devices. Neighboring languages, including Bemba and Lozi, attest *mbélo for fish fence, which may have been an independent derivation from the same roots.

Another basket trap, *-fumbo (608), was innovated by Proto-Kafue speakers, probably as an areal form shared with their Sabi neighbors to the east and was derived from an older verb meaning “to enclose, embrace,” *-kumba. The *-fumbo basket trap was constructed as a rather large reed cylinder with two open ends, tapering toward the top like an upside-down funnel. Fishers used this device by pushing the larger open end downward, through the water, to the streambed. Fish were trapped within the reed cylinder and caught by plunging one’s hand through the smaller opening at the top and extracting the fish.

The linguistic innovations described above, particularly their concentration in the period of the late first millennium and early second millennium, indicate that fishing grew to be an increasingly complex body of technical knowledge that contributed to food security and opened up the possibility of engaging in regional trade in dried fish during a period of climatic variability along the northern edges of a new environmental zone, the southern *miombo*. However, the variety of water features dominating the greater Kafue region were not the only

microenvironments inviting exploration and innovative forms of exploitation. Proto-Eastern Botatwe and, later, Proto-Kafue speakers were equally inventive hunters.

6.3 Hunting in the Eastern Botatwe Region, c. 500 to c. 1300 C.E.

Proto-Eastern Botatwe and Proto-Kafue hunting tools, those innovated internally and those borrowed from neighbors, were tied to developments in the multiple paths of the spread of iron technology across the region of south central Africa. These innovations illustrate new ideas about what kind of work smiths and hunters thought could be done with iron-tipped tools. Stratigraphic levels associated with the Kafue MIA and Southern Province LIA sites show a marked increase in the numbers of point shapes, sizes, and barb configurations. Just as the tools of hunting changed, similar developments occurred in the organization of hunting. As with fishing, reconstructed hunting vocabularies demonstrate that eastern Botatwe peoples, particularly Proto-Kafue speakers, increasingly focused on modes of group hunting, which required a greater commitment of time, technology, manpower, and organization.

6.3.1 Developments in the Technologies of Hunting, c. 500 to c. 1000 C.E.

Generally, people speaking languages of the Botatwe language family in south central Africa have, over the last three millennia, used two simple morphological features to talk about hunters. Botatwe peoples took the root word for the kind of hunting to which they were referring and added the appropriate noun class prefix for people (mu- singular; ba- plural) and the final suffix to denote the actor of that verb (-i), in a process similar to adding ‘-er’ to a root in English: hunt, hunter. In the Botatwe languages, a person doing *-gúim was a *mufwimi*; likewise a *muwezi*

was a person who did *-weja. When a person was good at hunting, one could apply the honorific plural noun prefix, *ba-*, to the verb root: *bavwimi*, *bawezi*.¹⁰

By the late first millennium, Proto-Eastern Botatwe innovated a new word to talk about reputedly adept hunters, *-pàdú (609).¹¹ Those people who were called *-pàdú could not be properly described using the morphological processes described above to transform verbs for hunting into nouns referring to their actors. That is to say, the words *muwezi* and *mufwimi* could not capture whatever it was that made *mwaalu* unique amongst hunters. When we look at the semantic domains of this root, we see that these were celebrated hunters, people known for their skill and talked about with a word that underscored the form of work in which they excelled; their reputation for skill was what set *mwaalu* apart from *muwezi* and *mufwimi*. Indeed, the -u suffix indicates that before it was a noun, *-pàdú was an adjective, probably initially derived from the verb *-pa, “to give” with an extensive suffix, “to give at” in the sense of aiming at or projecting at something. The extensive suffix could also connote repetition in a manner that extends over space and time, “to give again and again.” When the verb was transformed into an adjective and put in noun class 1, *mwaalu* was a “good shot” and a “generous giver,” two concepts that poetically combined into one word the two tasks of the *mwaalu*: bagging and redistributing his quarry.

¹⁰ This feature is distributed widely among the Bantu languages. See attestations in Appendix 5 for demonstrations of this process still in practice in Botatwe languages. Note that the verb *kusaka* is not used to derive words for hunter.

¹¹ See *-pàduk, ‘to hunt,’ and *-pàdú, ‘hunter,’ in BLR3 8909 and 8982, respectively. It is possible that the root is Proto-Kafue, but by distribution and phonology it could be as old as the Proto-Eastern Botatwe speech community; the phonological differences between Proto-Falls and adjacent descendants of Proto-Kafue are so slight as to make this distinction impossible for this particular root. In either case, the development of the root at a time of innovation in spear hunting and, for Proto-Kafue, in communal hunting with spears, tells us something about the skills of the *mwaalu*.

The clearest attribution of skills to define *mwaalu* for eastern Botatwe communities comes from the context of technological innovation that accompanied the invention of this term. The word *-pàdú came into use alongside an incredible set of innovations in spear hunting, innovations supporting an emphasis on group hunting in the Proto-Kafue period. It may be that *mwaalu* were consulted for hunting medicines, the location of game herds, and the organization and leadership of communal hunts developed in the Proto-Kafue period. The *mwaalu* had great huntsmanship.

The distribution and phonological form of this word amongst Luban and Sabi languages spoken directly to the north and northeast of the Proto-Eastern Botatwe speech community tells us that Botatwe, Luban, and Sabi people innovated the term during a period of contact. Importantly, the underlying meaning for this word in Luban languages is simply “hunter” and it was only amongst languages spoken further south that the word took on the more specific meaning of “skilled hunter.” This narrowing of meaning is typical of loanwords; Botatwe peoples probably borrowed this word from Luban languages, perhaps alongside new techniques for hunting, such as the use of the *-kidà hunting net (see below), which inspired a new word for communal hunting among Proto-Kafue speakers. Such techniques tied those Botatwe who mastered them to Luban political economies through their hunted produce. Later, Botatwe speakers in the far eastern region would reborrow the root with a /p/ value in the first consonant position, probably from hunters like the Chikunda who followed the migratory paths of elephants through the greater Luangwa River region.

During the second half of the second millennium CE, Proto-Eastern Botatwe speaking and, later, Proto-Kafue-speaking hunters became consummate spearmen, developing an elaborate lexicon to talk about the variety of their increasingly specialized spears. The first example of this

evidence is a common word in eastern and western¹² Botatwe languages, *-weja (610), a mode of hunting with spears (with throwing spears?). This root may have been borrowed from an outlying Kaskazi language whose speakers developed a root something like *kuwinja* for the far older Bantu root, *-bing- “chase, chase away.”¹³ This word was used alongside *kufwima*, “to hunt with bows and arrows.” Thus, by the turn of the first millennium CE, Botatwe peoples living in and around the Kafue floodplains distinguished between at least two forms of hunting: archery and spearcraft.

As spearing came to be a typical mode of hunting, other words were developed along side this semantic innovation, often to refer to borrowed tools. Central to this toolkit was a new kind of spear, *-súmò (611). The word itself is an ancient, perhaps even Proto-Bantu term in the form *-túmò and some relict attestations demonstrate that the ancestral form was inherited into Proto-Botatwe. However, recent reborrowings of the root are also attested. The new version in the form *-súmò was borrowed from Kaskazi speakers (alongside *-weja?) and applied not only to spear points but also arrowheads. It is difficult to reconstruct the characteristics of the *-súmò that made it useful to apply, with a diminutive prefix, to arrowpoints; yet, the coupling of spears and arrows may have drawn on their common use as iron-tipped missiles, although point shape and barb configuration may also have been similar in *isumo* and *kasumo*. Iron-tipped projectiles were particularly useful tools for hunting the open spaces of the Kafue grasslands where vegetation

¹² See Chapter 7 for a discussion of western Botatwe attestations of this verb.

¹³ Nurse and Hinnebusch have demonstrated how *-bing- shifted to *-Wing- in Proto-Sabaki with the meaning ‘to chase away’ and *-Winj- with the meaning “to hunt.” The later root produced attestations such as –wèèja in Elwana. Given the common occurrence of related words in Botatwe and the Kuti cluster of Kaskazi, this is a possible (though uncertain) source of *-weza in Botatwe. Proto-Eastern and Proto-Western Botatwe probably borrowed the root independently. It is also possible that the root was independently innovated by Proto-Botatwe speakers. See the Appendix for citations and further discussion of this root.

cover was limited. As iron hunting implements took hold, then, *-súmò was borrowed as a generic term for “iron tipped projectile” and, especially, “spear” in the eastern and, independently, in the western Botatwe speech communities.

Hunting points were themselves transformed during this period. Some eastern Botatwe peoples eventually borrowed the Mashariki word *ingobyò (612), probably from Kusi languages, to refer to a “barb” on an arrow or spear.¹⁴ While it is impossible to date this borrowing because the phonology is inconclusive, this word was supplemented by a series of metaphorical extensions also used to talk about barbs, including “ears,” “claws,” “teeth,” and “children (of the point).” Botatwe hunters advised smiths on developing point sizes and shapes in combinations with barb size and configuration to craft specialist points for specific kinds of hunting and fishing.

Some words innovated during the second half of the first millennium and the early second millennium identify tool parts, such as *luti (613), “spear shaft,” clearly derived from *-tí, a widespread word for “tree, medicine.”¹⁵ The source of this root is probably a Kusi speaking community living to the south of the Kafue region.¹⁶ Another word for spear shaft, *-càkó or *-sàkó (614), derives from the word *-càk- (or *-sàk-), referring to hunting by adding the -o deverbative suffix for the instrument of the verb.¹⁷ The distribution of *-càkó is important,

¹⁴ See also BLR3 6885; Schadeberg, “Derivation,” 81.

¹⁵ See also BLR3 2881, C.S. 1729 for *muti*. This root had been replaced in Botatwe languages with the word *musamo/u*.

¹⁶ This may also be a relict, inherited form of *-tí whereby the root in class 3/4 was replaced but this form was retained. Interestingly, the root for arrow shaft in most Botatwe languages is the inherited root for tree, *-samo/u, which replaced *-tí.

¹⁷ On the verb root *-càk- or *-sàk-, see BLR3 418-420, 423-424; C.S. 256-258; Ehret, *Classical*, 124 and 312.

however, for it is one of a series of hunting terms with an areal distribution between Luban and neighboring languages, including the Botatwe and Sabi languages and languages west of the Zambezi that came under the influence of Luban and Lunda speakers during the second millennium CE. We will see in other vocabulary in this chapter that eastern Botatwe peoples were sharing ideas about hunting with Luban peoples living in the Sanga region in the formative centuries of the Luba polity.

In addition to spear points and shafts, the binding used to connect the two was similarly the subject of great innovation in this period. At least one word, **(i)mputi* (615), may date to the Proto-Eastern Botatwe speech community, and was used to refer to an oxtail ferrule binding.¹⁸ Not surprisingly, the innovation corresponds to the approximate date for the adoption of cattle keeping in the area, the centuries around the turn of the first millennium. The base of the ox tail was striped off the muscle and bone as a whole cylinder and pulled over the joint where the metal tang of the point was inserted into a hole bored into the shaft (often when hot, to burn fibers inserted into the hole, which, when heated, acted as a glue). As the tail skin dried, it shrunk, tightly binding the joint of the point and shaft. Another joint, **(i)ntale* (616), was a ferrule of flattened iron taping wrapped around the spearshaft at the joint. This root was a simple application of the word use to talk about “iron, iron ore, iron bloom, or iron wire” (and, at the Proto-Bantu level, “stone”), **-tádè*, to talk about something made with this material.

¹⁸ It is possible that this is a Batoka areal form, but all languages follow expected sound correspondences. Moreover, the innovation corresponds with evidence for domestic cattle remains in the archaeological record of the mound sites of the grasslands of the Kafue Flats (Basanga and Mwanamaimpa) and possibly the earliest levels of Kalala Island. As the EIA transitioned into the MIA of the Kafue region, domestic cattle are better attested at all three sites. See Brian M. Fagan, “Gundu and Ndonde, Basanga and Mwanamaimpa” *Azania* 13 (1978): 127-134. For an illustration of the *imputi* joint on a spear shaft (although it is not named as such), see Barrie Reynolds, *The Material Culture of the Peoples of the Gwembe Valley* (New York and Washington: Frederick A. Praeger, 1968) Figure 24, “Spears,” pp. 100-101.

6.3.2 Developments in the Tools and Technologies of Hunting, c. 1000 to c. 1300 C.E.

Toward the turn of the first millennium and early in the second millennium, Proto-Kafue speakers continued this innovation in hunting technologies, developing several new spear and arrow point forms, including *-bèji (617), a barbless point used on both spears and arrows. The word derives from an inherited verb, *-bèij-, “to carve” and was applied to the new point form probably due to the common function of cutting and carving the carcass.¹⁹ The agentive suffix –i was added to this verb to name a spear that was “the cutter, the carver.” Another hunting spear, *(i)mpula (618), also dates to the Proto-Kafue speech community.²⁰ The root may derive from one of a number of words, pending the reconstruction of its tone and vowel characteristics. The most likely source, however, is *-púd- “to dig.” Two other possible sources are *-pùdò, “maliciousness,” describing the unforgiving character of the spear if wielded truly and *-pùd- “to beg for food.” This spear probably had a short, barbless point and may have had a digging iron hefted onto the butt of the spear shaft.²¹ The *(i)mpula spear may have been a throwing spear that was used in hunting larger game without damaging the hide, as a barbed point is likely to do. The increasing specialization of spear and arrow points meant that a hunter needed to know what animals he expected to encounter before he went into the bush because a large spear could sever a small animal and ruin the meat and pelt while a small spear would not easily kill larger

¹⁹ On the parallels between the function of the adze and the point named after this older tool, see Smith and Dale, *Ila-Speaking*, vol. 1, 216.

²⁰ On these roots, see BLR3 3961, 3956, and 4623, respectively.

²¹ This description is contra photographs in Smith and Dale, *Ila-Speaking*, vol. 1, 215-6 for the *kapula* spear (as opposed to the *mpula*).

quarry.²² The diversity of point shapes dating to this period attests to hunters' knowledge about tools, quarry, environmental conditions, and even the seasonal or daily habits of game.

Similarly, Kafue speakers living near the large herds of antelope along the Kafue grasslands and into the Batoka Plateau invented a decoy whistle for hunting duiker and spoke about it with a common word, *-Nyele, or *-NyeNye with reduplication (619). This common root is problematic because it is onomatopoeia; speakers may have independently approximated the sounds of the whistle and/or the cry of the baby duiker to produce seeming cognates. And yet, we know onomatopoeia to be a result of culturally influenced perceptions of sound. When we consider the distribution of this root, limited as it is to Kafue languages and in the exact Lenje form in Bemba (with the Lenje meaning listed as one of three others!) and when we consider the heavy contact between Lenje and the Sabi languages, we might hypothesize that the root developed as onomatopoeia after the breakup of Proto-Kafue, undergoing common changes like reduplication in more recent centuries. All the same, this root should be treated as *highly* speculative.

Although this period was marked by developments in spear hunting, we can reconstruct at least one innovation in archery vocabulary. Proto-Kafue speakers applied the very ancient Bantu root *-támbò (620), “trap” to refer to a “bowstring.”²³ The source of this root is difficult to ascertain; it may certainly be an inherited form with an independent semantic shift to “rope” at the Proto-Botatwe, Proto-Eastern Botatwe, or Proto-Kafue level with additional semantic innovation to “bowstring” among Proto-Kafue speakers. However, Kusi speakers to the south

²² For two good sets of spear point illustrations, see Smith and Dale, *Ila-Speaking*, vol.1, 215-217; Reynolds, *Material Culture*, 100-101.

²³ The underlying meaning in Proto-Eastern (and perhaps Proto-Western?) Botatwe languages is “string.” It may be that this general meaning was borrowed from Kusi speakers.

inherited a more general meaning, “fiber string,” that Proto-Kafue speakers may have borrowed because the underlying meaning in Botatwe vocabulary seems to have been “string.” With this bundle of meanings, we see semantic innovations that play with the particular aspects of how bows and snare traps work.

During the first few centuries of the second millennium, members of the short-lived Proto-Kafue speech community used their great innovation in spearcraft to profoundly recast the work of hunting into a group activity. The importance of this innovation is attested by the relatively dense vocabulary of innovations referring to the tools and organization of group hunting that we can reconstruct to the Proto-Kafue speech community. This vocabulary is rich, like the cluster of innovations relating to spearcraft; in fact, the two vocabularies are undoubtedly connected. Moreover, the evidence we would expect from a new emphasis on group hunting is attested very clearly in the high mortality rates of gregarious species compared to other species in the faunal remains of the archaeological record of the Kafue and Batoka regions.²⁴ Fully-grown adults dominate the mortality curves, suggesting skillful hunting methods, according to archaeologist Brian Fagan.²⁵

As Proto-Kafue speakers built upon the knowledge about spearcraft that had been innovated by their Proto-Eastern Botatwe speaking ancestors, they began to employ this method of hunting on a large scale with far greater group organization. Three words help us to

²⁴ See R. G. Welbourne’s report for the Kafue region in Derricourt, *Man on the Kafue*, 208-215 and data from Brian Fagan, *Iron Age Cultures in Zambia: Kalomo and Kangila*, vol. I (London: Chatto and Windus, 1967): 70-82, especially 72, 76, and 78. Similarly, faunal remains from sites in Kruger Park demonstrate catastrophic mortality profiles, especially among gregarious species; Ina Plug has interpreted this as evidence of shift to communal hunting. This shift in Kruger is interesting because it also occurs among societies on the edges of great cattle states but not participating in intensive cattle herding themselves. Ina Plug, “Aspects of Life in the Kruger National Park during the Early Iron Age,” *South African Archaeological Society, Goodwin Series* 6 (1989): 62-84.

²⁵ Fagan, *Iron Age Cultures*, vol. 1, 78.

understand what Proto-Kafue communal hunting might have looked like. The first, *-cìlà (621), derives from a word borrowed into Proto-Kafue from Luban speakers, *-kìdà.²⁶ For Luban speakers and those living still further north, *-kìdà was a kind of hunting net; when Proto-Kafue speakers borrowed this technology from their Luba-speaking neighbors, adopting it into noun class seven without adding a noun class prefix, they knew they were talking about the kind of hunting undertaken by a large group of hunters, usually in the dry season, and probably drawing participants from a number of hamlets and villages. Some hunters would beat the bush, scaring animals toward an entrapment (a bog, a line of hunters holding a large net, a long pitfall, a fire) where other hunters waited, prepared to spear the trapped animals. *Chila* has become a general word for “large communal game drive,” sometimes drawing scores and even, hundreds of participants in the early 20th century.

One tool for the communal hunt was *lwando (622). The meaning of this word varied according to the kind of work being done, fishing or hunting. *Lwando* probably derives from the root *-pànd-, “to split (itr.),” by adding the deverbative suffix referring to the instrument of the verb.²⁷ With this derivation, the *lwando* referred to the line of hunters, the fish fence, or the fire that was used to segregate and capture part of the herd or school of fish. Lenje and Tonga speakers used this word today to talk about communal hunting by fire in the dry season.

As Proto-Kafue hunters worked together in new, larger-scale hunts, they needed to organize themselves to direct the movement of their quarry. In the recent past, one typical formation was to line up hunters in two facing lines at some distance apart. One line would

²⁶ BLR3 6130. See also Jan Vansina, “Do Pygmies Have a History?” *Sprache und Geschichte in Afrika* 7, 1 (1986): 431-445, especially 438-442; idem, *Paths in the Rainforests: Toward a History of Political Tradition in Equatorial Africa* (Madison: The University of Wisconsin Press, 1990), 287.

²⁷ On *-pànd- see BLR3 2387-2389; C.S. 1433, 1433a. 1434.

advance, beating the bush to scare the animals sweeping forward while both lines curved tighter and tighter, encircling the animals. As the circle closed in, hunters stabbed their prey. One missionary recorded that all Botatwe languages share a name for this form of hunting: *-oba banyama*. Although there is no other linguistic evidence to reconstruct this entire phrase, for Ila speakers, the verb *kuoba* means “to bend, to bring round; to guide; to surround,” while in the relational form, *kuobela*, it means “to surround, to help.”²⁸ The social aspect of the gloss “to help” is evident. It is only with the noun **ibalo* (623), “circle of hunters in a battue hunt” deriving from **-bada* “ring,” that we have a common root that explicitly refers to this kind of hunting.²⁹

6.4 On Trapping and Farming, c. 500 to c. 1300 C.E.

We have no recognizable innovations in Proto-Eastern Botatwe vocabulary for trapping. The continuity in trapping practice implied by the dearth of lexical innovations invites historical explanation of the factors sustaining such continuity. If we understand trapping to be related to successful farming, we may find an explanation for the achievement of trapping continuity in a more detailed, lexically-based history of the development of farming. The limited evidence we have for the development of farming in the region precludes drawing any such conclusions now.

In the early centuries of the second millennium, the Proto-Kafue speech community moved away from the Kafue and the forms of farming possible in the floodplains and grasslands. With this shift in environment, we see two new trapping words, both related to snare technology,

²⁸ Torrend, *Bantu-Botatwe*, 284; Fowler, *Dictionary*, 541.

²⁹ BLR3 9139.

the most common type of trap set around the game runs near grain fields. A new word was innovated to talk about a noose snare, *-kole (624), perhaps building on the root *-kód-, “to take, to touch,” for it was when the game touched the snare to set off the spring that the trapper was able to take the animal.³⁰ Another spring noose trap, *-ooje (625), may have been borrowed by Kaskazi speakers or an independent semantic innovation applying an inherited root for bark string to the noose trap made with that material.

6.5 Honey Hunting in the East, c. 500 to c. 1300 C.E.

As Africans living in the late first millennium spread Proto-Eastern Botatwe languages into the greater Kafue region through small-scale migration and language shift, we know from a number of other lexical innovations that these Proto-Eastern Botatwe speakers came into contact with people who spoke languages of the Kaskazi, Kusi, and Luban groups. When Proto-Eastern Botatwe speakers went into the bush, seeking honey, they used new words that they had learned from their easterly Bantu neighbors to talk about how honey was made. For example, Proto-Eastern Botatwe speakers used a new word for honeybee, *insuki (626), rather than the inherited Proto-Botatwe root *-pùká (518). This new word for bee used the old, probably Proto-Bantu root for honey, *-júkì, and changed the noun class. It may have been borrowed from Kaskazi, Kusi, or Luban neighbors, who also used a form of *-júkì to refer to “honey bee.” However, the distribution of this simple semantic innovation could easily be a result of convergence. Proto-Eastern Botatwe speakers developed a new word for beeswax, *busuka (627), from the innovation for bee, *insuki. Again, the origins of this word might lie with eastern Bantu

³⁰ The linguists at Tervuren trace the distribution of *-kód- in the C, G, J, M, and N zones, as noted in BLR3 6999. This is also the source root for the word *-kódè ‘captive, booty,’ as reconstructed in BLR3 1881.

languages spoken by people absorbed into Botatwe speech communities. Or, it could again be an innovation best explained by convergence.

Some honey vocabulary was certainly invented by Proto-Eastern Botatwe speakers, following a long history of local talk around the consumption of honey. In fact, honey vocabulary was one of the few domains of wild resource use in which Botatwe speakers maintained a constant, internal process of innovation; Botatwe peoples clearly considered themselves to be adept honey hunters and discerning honey consumers. Proto-Eastern Botatwe speakers innovated a new way to talk about what one was doing when one was collecting honey, *-lida (628). For the ancestors and neighbors of Proto-Eastern Botatwe speakers, one talked about hunting or searching for honey with the same words one used to talk about hunting or searching for game.³¹ However, Proto-Eastern Botatwe speakers found that they needed to develop a new word, *kulida, to describe what it meant to be collecting honey. The root stems from a Proto-Bantu root, *-dí, “to eat,” and is combined with a relational suffix to make a word that best translates as “to eat from.” Perhaps Proto-Eastern Botatwe speakers were aware not only of how to exploit bees’ hives but also of the balance that must be struck between emptying the hive, which destroyed the community of bees, and selectively eating from the hive, which preserved the hive and the bees for future use. If so, this root hints at the careful management of known bush resources, a management that blurs the distinctions between domesticated and wild foods and suggests that honey was an important, carefully tended source of calories. Indeed, the long span of time during which Proto-Eastern Botatwe existed and the drier, cooler climate in

³¹ See honey vocabulary in Chapter 7 and Botatwe attestations for *kusaka* and *kuvwima* in Appendix 5. Note that *kuweza* is not associated with hunting honey, perhaps because this verb emphasized group hunting with spears, rather than the individual searching in the bush that mirrored honey hunting.

which Proto-Eastern Botatwe farmers were cultivating their crops may have contributed to this different way of thinking about what it meant to collect wild honey while preserving the hive and bee community for the next season.³²

By the early centuries of the second millennium, after Proto-Eastern Botatwe diverged and Proto-Kafue speakers began to settle the Batoka Plateau and, eventually, the Zambezi Valley, these pioneers invented a new way of talking about “honeycomb that was filled with honey.” They innovated *(i)mpuma (629) to refer to the part of the hive that was removed and brought back to the village, probably in a bark container. It may be that *(i)mpuma was what one took when one was eating from a hive (kulida). It is most certain that the characteristics of the *(i)mpuma honeycomb were slightly different than those collected in the late first millennium, as honey hunters and consumers grew familiar with the vegetation of new areas settled as the climate grew warmer and wetter during a local iteration of the Mediaeval Warm Epoch in the early centuries of the second millennium.

6.6 Wild Resource Use in the East, c. 500 to c. 1300 C.E.

During the second half of the first millennium and early in the second millennium, Proto-Eastern Botatwe speakers developed a series of innovations to mitigate the possible food shortages that occurred in periods of uncertain rains. They settled a range of new microenvironments, an adaptation that Proto-Kafue speakers and their descendants would carry

³² Consider the argument against the dichotomy of wild and domesticated spaces and foods in John Terrell, *et. al.*, “Domesticated Landscapes: The Subsistence Ecology of Plant and Animal Domestication,” *Journal of Archaeological Method and Theory* 10 (2003): 323-368.

south, onto the Batoka Plateau and into the Zambezi Valley. They developed new tools to make use of these lands and wondered how best to ensure predictable sources of food.

Yet, the work that was carried into the bush was not merely an economic adaptation to climatic variation because much of the work that was undertaken in the bush did not yield predictable sources of food. Some forms of hunting were undertaken at great personal risk, risk that could reap the distinction of being a remarkable hunter, a *mwaalu*. Leadership and skill in wielding a spear as attested in the invention of *mwaalu* foreground the importance of reputation to ideas about working effectively on the world, for oneself and others, concepts to which we will return in Chapter 9. But the new emphasis on group hunting tells us that the collective nature of the labor rhythms became an important source of community building during the period when linguistic and archaeological data attest to great interaction and absorption between speakers of Botatwe and outlying eastern Bantu languages and between makers of pottery tied to the Kafue tradition of Namakala and makers of ceramics with antecedents to the south. Even as wild resources were used to fill cooking pots, their collection and consumption contributed to new ideas about community and about the kinds of individuals who could lead group endeavors.

CHAPTER SEVEN
ECLECTICISM AS STRATEGY:
WILD RESOURCE USE IN THE WEST, c. 500 TO c. 1400 C.E.

As Proto-Western Botatwe and, after the turn of the millennium, Proto-Machili and Proto-Zambezi Hook slowly spread into the Kalahari Sands, speakers of these languages faced a profound challenge to the farming system they had learned from their parents and made successful through the intercession of their ancestors: the very low fertility of most soils in the Kalahari Sands region.¹ We know from societies living in similar environmental zones to the west and from recent, though woefully few, excavations in the area that communities generally settled along waterways because riverbeds cut away at the layers of sand to reveal red and alluvial soils that were fertile enough to support millet and sorghum. Farmers limited to raising

¹ The origins of the Kalahari Sands have been debated but most scholars agree that there are two formations in western Zambia. The sands of the Barotse region around Mongu are the outcome of climate and water table fluctuations dating from the end of the Cretaceous to mid-Tertiary times. These Mongu sands were then overlain by the loose sands of the south, the latter of Aeolian origin. Consider N. J. Money, "An Outline of the Geology of Western Zambia," *Records of the Geological Survey (Zambia)* 12 (1972): 103-124 compared with W. C. Verboom, "The Barotse Loose Sands of Western Province, Zambia," *Zambian Geological Association Magazine* 27 (1974): 13-17. See also citations in footnote 18, Chapter 3 and Paul Smith, ed., *Ecological Survey of Zambia: the Traverse Records of C. G. Trapnell* vol. 1-3 (Kew: The Board of Trustees of the Royal Botanic Gardens, 2001); P. W. O'Connor and D. S. G. Thomas, "The Timing and Environmental Significance of Late Quaternary Linear Dune Development in Western Zambia," *Quaternary research* 52:1 (1999): 44-55.

crops along waterways due to the sterility of the Kalahari Sands soils depended on foods from flocks and the bush.² *Mopane* trees spotting the region were a new resource for Proto-Western Botatwe speakers; the trees provided fodder for small stock. Indeed, Proto-Western Botatwe speakers learned about tending sheep in this dry environment either directly from local Khwe speakers or through a Western Savanna intermediary, probably languages of the Upper Zambezi block (Luyana and related languages).³ Lands beyond the rivers were rich and important sources of honey, meat, fruit, and nuts, while the rivers themselves produced fish and some meat (crocodile and hippopotamus).

Unlike their neighbors along the Kafue, who began to emphasize group fishing and hunting, eclecticism was at the center of the food and settlement strategies of speakers of western Botatwe languages from the 6th to the 14th centuries. For Proto-Western Botatwe, Proto-Machili and Proto-Zambezi Hook communities, the diverse modes of wild resource use deployed by their Proto-Botatwe ancestors formed an important body of knowledge on which to elaborate. Like their Proto-Botatwe ancestors, western Botatwe communities developed new ways to get food outside their fields and herds as they carried their lifestyle into the dry Kalahari Sands environment because maintaining an eclectic system of wild resource use required concentrated

² Jan Vansina, *How Societies are Born: Governance in West Central Africa before 1600* (Charlottesville, VA: The University of Virginia Press, 2004), 14-22; for an interpretation of the kinds of social organization supported by the move into the Kalahari Sands, see chapter 5 generally and specifically 210-226 for a discussion of the ramifications of the shift to farming in the early period. For regional archaeology, see footnotes in section 7.1, below.

³ It is difficult to know whether Proto-Botatwe kept sheep; a cursory review of the lexical evidence suggests the independent borrowing of words to talk about this subsistence practice by both Proto-Eastern and Proto-Western Botatwe speech communities. Khwe speakers themselves may have learned sheep herding from Eastern Sahelian speakers in the second half of the last millennium BCE as the latter language seems to be the source for many Khwe herding terms. However, the source for the general word for ‘sheep’, *-gu, borrowed by Proto-Western Botatwe peoples, remains unknown. Christopher Ehret, *An African Classical Age: Eastern and Southern Africa in World History, 1000 B.C. to A.D. 400* (Charlottesville, VA: The University of Virginia Press, 1998) 217-222, especially table 40. For another independent example of the transfer of this root to Bantu speakers in the same general Kalahari Sands region, see Vansina, *How Societies*, 40 including n47.

innovation in new environmental and climate regimes, especially during the cool climate regime in the second half of the first millennium.

Although wild foods were a strategy to mitigate the risks of farming grains and tending cattle herds in these dry conditions, products from the bush also opened new opportunities to engage with the long-distance trade networks connecting the Indian Ocean to the grasslands of eastern Botswana, the Okavango, the mineral rich triangle of central Namibia, the copperfields of Zambia, and other resource rich areas of central and southern Africa. The trade opportunities exploited by settlers in the western Botatwe region would, from the middle of the second millennium, sustain economic specialization in elephant hunting and set the stage for Botatwe speakers' experience with the territorial and tributary demands of the states that emerged across the region.

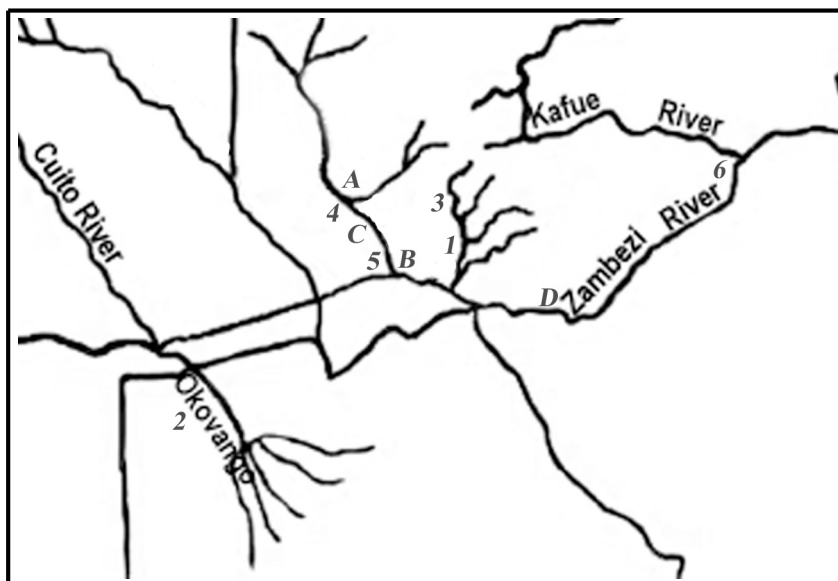
7.1 Material Culture between the Zambezi and the Kafue, c. 500 to c. 1400 C.E.

There has been significantly less archaeological research undertaken between the Zambezi and the Kafue Rivers than in other parts of south central Africa. Systematic work in the Kalahari Sands of the western region, specifically the Machili basin and the Uppler Zambezi Valley between Sesheke and Senanga, began in the mid-1970s under the direction of Nicholas Katanekwa and Joseph Vogel. This work revealed only a few sites with the Namakala pottery that correlates with Botatwe communities: Namakala itself, Kazindu I, Kazindu II, and Mulobezi Old Bridge (see Map 7.1).⁴ However, a consideration of the ceramic sequence and material

⁴ The Namakala site itself is located on the Namakala Stream, a tributary of the Machili River, located about half a kilometer from the Sichili Mission and about 20 kilometers northwest of Mulobezi, as the crow flies. Katanekwa's ceramic seriation of Namakala to Kalala to Mumbwa Caves (both in the Kafue sequence) to modern-day Ila coupled with radiocarbon dates from the 6th to the 8th centuries (uncalibrated) require a correlation between the Namakala

remains of the region's archaeology yields important information about the economic and social context within which speakers of western Botatwe languages were making a living.

Map 7.1 Archaeological Sites in the Western Botatwe Region



Key to Map 7.1

Clusters of Archaeological Sites

1. Namakala and Nanga; Mulobezi Old Bridge and Kazindu are located to the southeast
2. Tsodilo Hills sites of Divuyu and Nqoma
3. Bulila and Muchinga
4. Kalongola
5. Salumano
6. Ingombe Ilede

Modern Day Cities Mentioned for Orientation

- A. Senanga
- B. Sesheke and Katima Mulila
- C. Sioma
- D. Livingstone and the Falls

site and the southwestern most extreme of Proto-Eastern Botatwe. Yet both its location so far to the southwest and dates suggest a better geographic and temporal overlap with Proto-Western Botatwe. Indeed, this problem of correlation will not be resolved until further sites are uncovered and we have a better sense of the full range of ceramics related to Namakala and a methodology of analysis that better accounts for contact and origins. For more discussion of this and other ceramic correlations, see Chapters 3 and 6.

7.1.1 Inhabitants of the Machili Valley, mid-First Millennium to the 11th Century

Occupation in the Machili Valley has been divided into three phases and two zones. Earlier sites of phases A and B were occupied from the early first to early second millennium and are located on Transitional Sands along the edges of *mutemwa* teak forests with fertile gardens along seasonally flooded lands (Situmpa; Namakala; early Nanga; Mulobezi Old Bridge; Kazindu I and II).⁵ The second cluster of sites, Phase C, date from the mid tenth century and are located further north, in the woodlands of the upper Machili Basin along tributaries of the Machili that are characterized by loose, deep, acid sands and a slightly higher rainfall than regions to the south (Kanyanga Forest Camp; late Nanga; Muchinga I, II, and III; Bulila I, II, II, and IV; Chiundu).⁶

One of the earliest settlements in the region, the Situmpa site overlooks the Machili River. Its meager scatters of Early Iron Age pottery yield a single radiocarbon date from the last centuries before the Common Era, many centuries before glottochronology places Proto-Western Botatwe speakers in the area. However, Dr. Nicholas Katanekwa, the site's excavator, is uncertain about the association between the dated material and the pottery. The pottery remains unclassified because the collection is too small for any meaningful correlation with other

⁵ R. R. Inskip, Brian Fagan and J. Desmond Clark worked on Situmpa and Nanga before Katanekwa, though the latter's work is by far more detailed: J. D. Clark and B. M. Fagan, "Charcoal, Sands, and Channel Decorated Pottery from Northern Rhodesia," *American Anthropologist* 67 (1965): 354-71; R. R. Inskip, "Some Iron Age Sites in N. Rhodesia," *South African Archaeological Bulletin* 17 (1962): 136-80. Nanga site was named "Machili" by Inskip, who described some surface pottery that he collected from the site. See "Some Iron Age Sites." Mulobezi Old Bridge site is the same as "Mulobezi Dambo Site" in J. O. Vogel, *Kamangoza* (Nairobi: Oxford University Press, 1971). Today, farmers are able to grow maize and sorghum on the soils where these sites are located. N. M. Katanekwa, "Some Early Iron Age Sites from the Machili Valley of South Western Zambia," *Azania* 12 (1978): 135.

⁶ Today, the soils where these sites are located support cassava and bulrush millet. Katanekwa, "Some Early Iron Age Sites," 135; idem, "Namakala and Nanga Sites and the Chronology of the Early Iron Age in Southern and South-West Zambia," *South African Archaeological Bulletin* 34 (1979): 120-22.

traditions, though broad grooving, false relief chevron stamping, and comb-stamping decorative techniques (common also to Namakala wares) are present.⁷ The chronology of the southern Machili Basin grows more certain, however, with sites that date to the middle of the first millennium CE.

The earliest of these mid-first millennium communities were established only a few kilometers apart at the neighboring sites of Namakala and Nanga in the middle of the first millennium. The most interesting aspect of these two early Phase B *mutemwa* settlements is the marked difference in the subsistence economy of the two sites; Namakala occupants focused on hunting for dietary protein while Nanga inhabitants specialized in tending cattle and, later, some small livestock.⁸ Namakala site is the earlier by a century or so, with dates in the sixth century a.d., though the sites were contemporaneous for at least a century after the settlement of Nanga in the seventh century a.d.⁹ The pottery from the Namakala site is representative of the pottery tradition of the same name, Namakala, which was correlated with Botatwe settlement in Chapter 3. The site, now located in *Baikiaea plurijuga* forest dominated by teak, shows evidence of iron smelting and smithing (81 kg. slag, 3 iron fragments) as well as trade (2 copper bangles, 1 copper wire, shell beads, cowrie shells from the Indian Ocean).¹⁰ Katanekwa characterized the occupation as short and continuous, without any evidence of hut daga.

⁷ N. M. Katanekwa, "Some Early Iron Age Sites," 146.

⁸ Katanekwa, "Namakala and Nanga." Excavations were undertaken in 1976.

⁹ The following radiocarbon date for Namakala was removed from a stratigraphic level associated with its pottery and slag: N-2317 1360 ± 80 bp (5568 year bp half-life) in Katanekwa, "Some Early Iron Age Sites," 148. Another date, Birm-838 1400 ± 100 bp (Libby half-life), is reported in Katanekwa "Namakala and Nanga," 120.

¹⁰ For more on this forest type, see Chapter 3. For the archaeological findings, see Katanekwa, "Some Early Iron Age Sites," 147-8; idem, "Namakala and Nanga"; idem, "The Iron Age in Zambia: Some New Evidence and Interpretations," paper presented at the Conference on the Growth of Farming Communities in Africa from the Equator Southwards, Cambridge, July 4-8, 1994: 7-8.

With respect to the subsistence economy, the Namakala site yielded unidentified insect and vegetable remains and 2.8 kg of animal bones. From the faunal remains, only eight individuals were identified, three of which were juvenile; species included giraffe, eland, steenbok, and duiker as well as several bovid samples, whose status as domesticates is uncertain. We can conclude that the occupants of Namakala certainly hunted to acquire protein but left no definitive evidence of domesticates.¹¹

Nanga, on the other hand, lies in an environmental zone between the *mutemwa* teak forest occupied by Namakala peoples and the woodland environment characteristic of the upper Machili Basin, the very environment into which most Machili inhabitants moved during Phase C.¹² Nanga was occupied for longer than the Namakala site, with a double component deposit divided into two periods. The first begins in the early seventh, continues into the ninth or tenth century a.d., and is contemporaneous with Namakala in its earliest centuries. The later phase dates to around the eleventh century a.d., by which point the Namakala site had long been abandoned. The finds at Nanga include evidence of more permanent residences (25 kg hut daga with impressions of a range of pole sizes), smelting and smithing (107 kg slag, 2.2 kg of fragments of tuyeres, iron objects, including 7 arrowheads and 3 bodins), trade (14 copper

¹¹ 25.3% of bones from Namakala showed some evidence of burning. Ina Plug, "Namakala and Nanga: Faunal Report on Two Early Iron Age Sites, Zambia," *South African Archaeological Bulletin* 34 (1979): 123-26.

¹² Indeed, there are some similarities between Nanga diagonal comb-stamping designs on pottery and ceramics from Phase C Bulila sites; however, Katanekwa seriates the Bulila pottery with early Chondwe based on decoration placement and other decoration types because the diagonal comb-stamping is not predominant. Katanekwa does, however, place ceramics from both Nanga and Bulila in his East-South West Tradition. N. M. Katanekwa, "The Iron Age in Zambia."

bangles, 2 thin copper sheets, bracelets, wire rings) and ceramics, including figurines (undescribed, of cattle?).¹³

The Nanga faunal assemblage, however, is markedly different from that of Namakala. Ina Plug identified 22 individuals representing three different species from the two phases of occupation at Nanga.¹⁴ Of the five levels representing the earlier phase of occupation, the first three are contemporaneous with occupation at Namakala and they yield certain evidence of domesticated cattle down to level seven (see Figure 7.1). Indeed, aside from one Bovid I, which Plug notes could have been hunted, and evidence from one human, the other identified species attest to a herding economy from the earliest occupation of the site. Moreover, the earliest herding evidence comes from cattle; sheep and goats do not appear in the faunal record until level 4, after the occupation of Namakala and just before the transition to the later phase of the Nanga occupation.¹⁵ For the first phase of occupation—contemporaneous in its earliest stages with the Namakala site—cattle provided over 98%, sheep/goats less than 2% and hunted game 0.2% of the meat diet.¹⁶ Overall, the diet and subsistence economy of Nanga remained fairly

¹³ Katanekwa “Namakala and Nanga”; idem. “The Iron Age in Zambia,” 8-9.

¹⁴ Compared with Namakala and other sites in southern Africa a very low percentage of bones were burnt (1.4%). Plug, “Namakala and Nanga.”

¹⁵ This early focus on cattle herding at Nanga is at odds with most Early Iron Age sites in southern Africa, where a mixed economy is the norm. However, it does foreshadow the stunning development of the intensive cattle herding economies of the Toutswe culture, itself a forerunner of the large-scale polities of the Zimbabwean plateau. Among many others, see James Denbow, “A New Look at the Later Prehistory of the Kalahari,” *Journal of African History* 27 (1986): 3-29; James R. Denbow and Edwin N. Wilmsen, “Advent and Course of Pastoralism in the Kalahari,” *Science*, n.s. 234, no. 4783 (Dec. 19, 1986): 1509-1515; Thomas N. Huffman, “Mapungubwe and the Origins of the Zimbabwe Culture,” *South African Archaeological Society Goodwin Series*, 8 (Dec., 2000): 14-29; Andrew Reid and Alinah Segobye, “Politics, Society and Trade on the Eastern Margins of the Kalahari,” *South African Archaeological Society Goodwin Series*, 8 (Dec., 2000): 58-68.

¹⁶ There may have been representative remains from a duiker-sized animal but this information was removed from the report published in the *South African Archaeological Bulletin*. Statistics from: Ina Plug, “Nanga: an Early Iron Age Cattle Herding Community in the Machili Valley, Zambia,” *Archaeologia Zambiana* 20 (1981): 17-19, esp. p. 17.

consistent between the earlier and later phases, with only a slight shift when a limited number of small livestock (sheep and/or goats) were incorporated into the herding work of Nanga inhabitants around the turn of the first millennium, perhaps at the end of the long period of cool, dry conditions from the 6th or 7th through the 9th century in the north, a climate shift that reached the south by the later part of this range of dates.

Figure 7.1 Faunal Remains of the Lower Machili Valley, 6th to 11th Centuries a.d.¹⁷

Site	Level	Date	Domesticates		Unidentified ¹⁸	Wild, Hunted	Human	Total
			Cattle	Sheep/Goats				
Namakala	n/a ¹⁹	c. 600 a.d.			1x Bov. I & II; 2x Bov. III	4		8
Nanga -levels 6-8 contemporaneous to Namakala -earlier phase: c. 700-900 a.d. -later phase: c. 1000 a.d.	1	later phase	1					1
	2	later phase	2	1				3
	3	later phase			1x Bov. III		1	2
	4	earlier phase	5	1	1x Bov. I & III			8
	5	earlier phase	1		1x Bov. II & III			3
	6	earlier phase			2x Bov. III			2
	7	earlier phase	3					3
	8	earlier phase						0

With the Namakala and Nanga evidence, we have a pair of contemporary sites with complementary subsistence economies. There are a number of ways we can imagine the interactions between the two communities. With their subsistence specializations, it is likely that the two communities were in contact, probably exchanging the products of their hunting and herding. It is possible that they also exchanged services, with Nanga occupants tending the livestock of Namakala inhabitants and the latter protecting the herds from wild predators and

¹⁷ This table combines data from Katanekwa, “Some Iron Age Sites”; idem, “Namakala and Nanga”; idem, “The Iron Age in Zambia”; and Plug, “Namakala and Nanga.”

¹⁸ Plug notes that Bovid I from Nanga could have been hunted or trapped and that Bovid II and III size classes may, indeed, be domestic. Plug, “Namakala and Nanga,” 125.

¹⁹ Because this was a single component site, Katanekwa advised Plug to merge the finds into one category.

providing bush products like game meat, skins, ivory, honey, foraged foods, and perhaps wood for fuel and building. Plug notes that the focus on cattle was a cultural choice because the region is rich in game (as the Namakala faunal remains attest). Yet, with the evidence of huts at Nanga and none from Namakala, we could even speculate that Namakala site was a seasonal hunting camp and that Nanga was the center of settlement, herding, and, possibly, agriculture. Though there is no firm archaeological evidence, Nanga may also have been the center of farming activity.

Ceramics, the standard marker of social boundaries used by archaeologists of this region, are far more difficult to assess. The ceramics of the two sites are different but share a number of characteristics, including vessel shape and size as well as some decorative techniques and motifs. These parallels may account for the confusing remarks on their relationship in Katanekwa's research. For example, he notes that characteristic decorative style, basic technique, and vessel form "link the two sites very closely with each other."²⁰ In later work he disassociates the pottery collections of Namakala and Nanga and also conflates the two Nanga eras he demarcated based on stratigraphy and pottery characteristics in the earlier report. In this later work, Katanekwa notes that "Nanga lacks the pendent combstamping and grooved designs of the Namakala site."²¹ Yet, in his earlier report, Katanekwa claims that those Nanga ceramics that are contemporaneous to Namakala show 12% pendant loops, combstamped, and grooved or incised motifs compared to the 30% at Namakala.²² Katanekwa notes that the combstamping decorative type is common

²⁰ Katanekwa, "Namakala and Nanga," 121.

²¹ Consider remarks in idem, "The Iron Age in Zambia," 9 and Tables 1-4.

²² Idem, "Namakala and Nanga," 121.

in the Kafue and is interpreted in the Victoria Falls region as an intrusion from the Kafue and Batoka Plateau, specifically the Kangila (Early Tonga) wares.²³

These inconsistencies make it difficult to determine how Katanekwa understands the relationship between the ceramics of the two sites. Indeed, both sites may even have imported pottery from the Kafue or other communities with ties to the Kafue, perhaps as a result of the trade in salt from Busanga. We are left with the impression that the inhabitants of the two sites interacted during the earlier eras of Nanga occupation when the two sites were contemporary. Only with further assessment of the pottery will we have evidence from the ceramic record on the nature of those interactions.

The material evidence for trade places the two communities in a shared network of exchange. They both attest copper jewelry, while Indian Ocean cowrie shells were also found at Namakala. The copper jewelry may come from the north or, more likely, from the contemporaneous site at Divuyu, located some 300 kilometers away in the Tsodilo Hills to the northwest of the Okavango delta. We know Divuyu inhabitants consumed large amounts of wild game and were in competition with local foragers or pastro-foragers for meat.²⁴ It may be that the specialist site of Namakala, which made use of the rich local game resources, provisioned Divuyu with meat and skins. This relationship deserves more attention than can be explored here,

²³ Ibid; on the Victoria Falls pottery, Katanekwa cites “Kabondo Kumbo and the Early Iron Age in the Victoria Falls Region,” *Azania* 10 (1975): 49-75. For more on the sequence of this area, see the discussion and footnotes below.

²⁴ Divuyu was occupied between the sixth and eighth centuries AD. James Denbow, “Material Culture and Identity in the Kalahari: AD 700-1700” in Susan McIntosh, ed., *Beyond Chiefdoms: Pathways to Complexity in Africa* (Cambridge: Cambridge University Press, 1999): 110-123, esp. 117-8. See also idem, “Congo to Kalahari: Data and Hypotheses about the Political Economy of the Western Stream of the Early Iron Age,” *African Archaeological Review* 8 (1990): 139-75. On the possibly aggressive relationship between Divuyu inhabitants and local foragers, see Denbow “Material Culture,” 118 and James Denbow and Edwin Wilmsen, “Advent.”

but it is worth digressing to consider the subsequent history of the Tsodilo Hills and its relation to the fortunes of people living in the Machili Valley area.

Nqoma replaced Divuyu and was most intensively occupied from the ninth to the twelfth centuries AD, at which time it served as a hub of regional trade “wherein items from different ecological environments were directly exchanged for each other by the parties who needed them in a manner that may well have been similar to the *hxaro* practice still attested to in the nineteenth century.”²⁵ The inhabitants of Nqoma, then, are probably best characterized as specialists in long-distance trade in prestige goods and regional trade in food supplies. Their long-distance trade, particularly copper and iron jewelry, reached to the Indian Ocean and possibly also the Atlantic coast.²⁶

The relationship between the metal working Tsodilo inhabitants of Divuyu and Nqoma and their foraging or patro-foraging neighbors shifted in the years between the two occupations. One great distinction between the two sites is the substantial shift from game meat to beef, a shift that would have affected Namakala and Nanga in different ways. It seems likely that this shift first affected hunters at Namakala, contributing to the abandonment of the site, as local foragers at Nqoma took the market in game meat and skins away from Namakala. In contrast, the herders of Nanga could have maintained trading ties to the southwest, continuing their exchanges with the inhabitants of Nqoma.

By the time metal traders established Nqoma, foragers closer to the Tsodilo area probably provided most or all traded furs and game meat, while the consumption of beef jumped from 3%

²⁵ Vansina, *How Societies*, 113.

²⁶ Denbow, “Material Culture.”

at Divuyu to around 30% at Nqoma.²⁷ Jan Vansina argues that, rather than metal-working and trade, “it was cattle herding that made the long life of the Nqoma emporium possible.”²⁸ Yet, there is no archaeological evidence for kraals at Nqoma and no cattle outposts have been located in the hinterland of Nqoma as in eastern Botswana. Moreover, tsetse fly is permanent in the grasslands around the Delta and in the Tsodilo Hills area. It may be that sites like Nanga were early suppliers of beef to elites at Nqoma; though, as Vansina argues, the inhabitants of Nqoma eventually recognized the potential for social ties and material wealth created by owning self-reproducing cattle herds, rather than marking status in jewelry. Nqomans, like Njila speakers in the region, probably turned to managing cattle herds in the early centuries of the second millennium, leading to the eventual abandonment of the site²⁹ and the contemporaneous decline of sites like Nanga that may have supplied beef to the sedentary Nqoma smiths.

The abandonment of the Namakala site did not mark the end of Machili occupation by makers of ceramics related to those uncovered at Namakala. On the contrary, makers of related ceramics later built settlements along the larger Machili and Mulobezi Rivers, still within the Transitional Sands soils and along the edges of *mutemwa* teak forests. Katanekwa identified three sites with ceramics that were related to Namakala: Mulobezi Old Bridge and Kazindu I and II, but finds from these sites are very limited. In fact, Mulobezi Old Bridge site was disturbed during the construction of the bridge across the Mulobezi River and only yielded ceramics.

²⁷ Denbow bases this argument on the marked increase of lithics at Nqoma (compared to Divuyu), many of which were now developed for what seems like a hide scraping industry. Moreover, Nqoma attests a rise in wild and domestic faunal remains (where usually at Kalahari sites an increase in cattle consumption is tied to a decrease in wild game consumption). Denbow, “Material Culture,” 119-120. Meat consumption statistics from Denbow, “Congo to Kalahari,” 165.

²⁸ Vansina, *How Societies*, 116.

²⁹ *Ibid*, 110-116.

Portsherds and lumps of slag were recovered at Kazindu I with radiocarbon dated charcoal from the same stratigraphic level providing a ninth century a.d. date.³⁰ At a similar depth and within the same stratigraphy as finds from Kazindu I, Katanekwa uncovered a hut floor, granite slabs, pottery, and slag; charcoal from this level also dates to the ninth century a.d. The Kazindu sites reveal single, short occupations, in keeping with the requirements of shifting agriculture. With the demise of the settlement at the Tsodilo Hills, perhaps inhabitants of sites associated with Namakala pottery and dated to the centuries immediately after the shift to warmer, wetter climatic conditions renewed their emphasis on the farming facet of their eclectic food system.

7.1.2 Inhabitants of the Machili Valley in the Second Millennium

The third phase of the Machili Valley occupation dates to the mid tenth century and is characterized by a marked change in environmental preference. The representative sites of this phase (Kanyanga Forest Camp; Muchinga I, II, and III; Bulila I, II, II, and IV; Chiundu) are located further north, in the woodlands of the upper Machili Basin, on the loose, deep, acid sands of tributaries of the Machili, except for the later phases of the occupation of Nanga. Today, this region has a slightly higher annual rainfall than the lower Machili Basin, a condition that may have been amplified at the turn of the first millennium as the region began to shift into the warmer and wetter climatic conditions corresponding to the Mediaeval Warm Epoch, a great boon to farmers of the Kalahari Sands region.

³⁰ Katanekwa, "Some Early Iron Age Sites," 149.

We have evidence of farming for these sites; an iron hoe and three axes—probably for cutting out gardens—were uncovered at Bulila, an 11th or 12th century site.³¹ Faunal remains suggest a mixed economy, but game was still an important part of the subsistence economy. Plug notes that although hunting was practiced, producing 44.4% of bones, it contributed only 6.3% of the meat in the diet because most hunted animals were small. This pattern is in keeping with the kinds of species caught in traps along field edges and, as we will see, innovations in western Botatwe trapping vocabulary shows a corresponding investment in protecting crops as speakers of western Botatwe languages worked to make farming productive in the rainy era of the early centuries of the second millennium.³² Interest in hunting may be seen in the iron artifacts uncovered at Bulila: six arrowheads from Bulila I and a spearhead from Bulila IV.³³ Most of the protein in the diet of Bulila occupants came from their cattle (89.8% of the meat), while small stock contributed only 3.7% of the meat.³⁴ In addition to this mixed farming subsistence

³¹ Dates for Bulila I are listed as 1065 ± 65 A.D. and 1190 ± 70 AD in Ina Plug, “Bulila I: An Early Iron Age Site in the Machili Valley, South Western Zambia,” *Archaeologia Zambiana* 21 (1983): 17-19 based on personal communication with the excavator, N. M. Katanekwa. Katanekwa’s own work notes dates as 1165 AD and 1190 AD in “The Iron Age in Zambia” (p. 11) and 885 ± 65 years b.p. (1090 ± 65 a.d.) in “Some Early Iron Age Sites,” (p. 151). We can date this site to the 11th or 12th century a.d.

³² Plug, “Bulila I,” 19.

³³ N. M. Katanekwa, “Some Early Iron Age Sites,” 150-53; idem, “Upper Zambezi Iron Age Research Project Phase II: A Preliminary Report” *Archaeologia Zambiana* 20 (April, 1981): 12; idem, “The Iron Age in Zambia,” 11-12. At least one of the six iron arrowheads was barbless and similar in form to the arrowheads recovered at Kalundu by Brian Fagan, according to Katanekwa. Katanekwa cites Figure 27 (d) as the relevant sample but it appears that he incorrectly attributes this arrowhead to Kalundu when the point was actually uncovered at Isamu Pati. See Katanekwa, “Some Early Iron Age Sites,” 151; Brian M. Fagan, *Iron Age Cultures in Zambia*, vol. I (London: Chatto and Windus, 1967): 80; Katanekwa, “The Iron Age in Zambia,” 11-12.

³⁴ Plug, “Bulila I,” 18-19.

economy, Katanekwa argues that the large concentration of slag in the area suggests that smelting was a specialty of the occupants of the site.³⁵

Bulila entrepreneurs carried the trading ties between the Machili Basin and wider regional networks into the second millennium. For example, Katanekwa recovered five thin sheets of copper, two copper wires, six copper bangles, and two iron rings from Bulila; all of these metal ornaments could have come from Nqoma, the impressive trade emporium site in the Tsodilo Hills.³⁶ A surprisingly large cache of glass trade beads (174!) with an equally impressive range of colors (yellow, green, and red) was recovered at Bulila and attests to links with the intercontinental trade networks of the Indian Ocean.³⁷ These items may have flowed through Nqoma as well because inhabitants of that site did not seem to collect glass beads. In fact, Bulila had more than six times as many glass beads as Nqoma. The trade goods may be related to the large concentration of slag; perhaps Bulila inhabitants traded their smelted iron for copper and glass trade beads.

To summarize, the inhabitants living near the Machili River in the early centuries of the second millennium—the people amongst whom Proto-Machili speakers lived—shifted their settlement to the different soils of the upper Machili Basin, away from the *mutemwa* forest fringes and seasonally flooded depressions. Along with cereals, they raised cattle and hunted

³⁵ Katanekwa, “The Iron Age in Zambia,” 12; idem, “Upper Zambezi,” 12. Totela speakers, who occupy this region today, are known as particularly skilled metal workers.

³⁶ The site also contained utilitarian iron objects: on iron hoe (evidence of farming), three axes, six arrowheads, and 14 bodkins. Katanekwa, “Upper Zambezi” *Archaeologia Zambiana* 20 (April, 1981): 12. These details are omitted from the earlier published account of the site because they are based on subsequent research during the 1979 season. For earlier descriptions of the site, see Katanekwa, “Some Early Iron Age Sites.”

³⁷ Katanekwa, “The Iron Age in Zambia,” 12; on the 26 glass trade beads at Nqoma, see Denbow, “Material Culture,” 119.

(probably trapped) mostly small game. They made little use of riverine foods, though that might also be a matter of the delicate composition of fish bones and the problem of their preservation in the faunal record.³⁸ They also seem to have invested significant time and energy in iron working. Peoples of the upper Machili, like earlier inhabitants of the lower Machili Transitional Sands, were connected to regional and Indian Ocean trade networks, demanding copper and glass beads in surprising numbers.

The most significant shift in the regional archaeology in the early second millennium, however, was the abandonment of teak *mutemwa* forests for the more open woodlands of the upper Machili. Upper Machili people developed a mixed subsistence economy on new kinds of soils, as was the case with other south central African communities of the second millennium, including the Middle Iron Age societies near the Kafue and the Late Iron Age settlements of the stretch of land from the Machili Basin to the Batoka Plateau and Zambezi Valley near the Falls.³⁹ The shift to wetter, warmer conditions than those experienced in the region today probably facilitated such experimentation in new environments, though it was the creativity of farmers, hunters, fishers, and foragers that sustained communities cultivating such experimental plots.

7.1.3 Inhabitants of the Upper Zambezi in the Late First and Early Second Millennia

³⁸ Plug makes the observation of the lack of riverine foods in comparison to sites in Malawi with plentiful fish remains.

³⁹ See Chapter 6 and section 7.1.4, respectively. See also Joseph Vogel, "An Early Iron Age Settlement System in Southern Zambia," *Azania* 20 (1984): 29-39; idem, "Subsistence Settlement Systems in the Prehistory of South-Western Zambia," *Human Ecology* 14 (1986): 397-414; idem, "Microenvironments, Swidden, and the Early Iron Age Settlement of Southwestern Zambia," *Azania* 21 (1986): 85-97; idem, "Iron Age Farmers in South-western Zambia: Some Aspects of Spatial Organization," *African Archaeological Review* 5 (1987): 159-70. For a more speculative consideration of the forms of social organization that supported the various settlement and subsistence systems Vogel studies, see idem, "Savanna Farmers on the Sandveldt: Patterns of Land-Use and Organisational Behaviour of Some Shifting Cultivators in South-Central Africa," *Azania* 24 (1989): 38-50.

To the west, along the Upper Zambezi between Sesheke and Senanga, material remains attest to a different story of interaction and agricultural experimentation. With respect to ceramic affinities, the earliest Iron Age sites from this area fall into two spheres with a frontier located near the modern-day town of Sioma.⁴⁰ To the north lay a cluster of sites (Sioma Mission, Kalongola, Sefula, and Lubusi) with pottery displaying false relief chevron motifs and, on this evidence, tentatively linked with the Iron Age ceramics of the uppermost Zambezi.⁴¹ Sioma Mission and Kalongola are probably later representatives of a ceramic sequence dating back to older sites further to the north, of which Lubusi is representative. Any tradition, if one can even be defined for this northerly region, remains unclear, despite a plethora of opinions.⁴² As makers of this little known Sioma facies reached further and further south either in small-scale population shifts or through the diffusion of the technique for crafting this pottery, they met with makers of a different ceramic style who were similarly moving northwards.

To the south of the ceramic frontier, inhabitants of sites like Salumano, Lusu Station, Ilwendo, Musei-sei Hill, and Naluyoyela made pottery in a style distinct from their northerly neighbors. Potters began making this southerly ware in the region between Sesheke and Senganga earlier than makers of ceramics related to the pottery of the uppermost Zambezi. In

⁴⁰ This section draws from Joseph Vogel and N. M. Katanekwa, "Early Iron Age Pottery from Western Zambia," *Azania* 11 (1976): 160-67; Katanekwa, "The Iron Age in Zambia" and other work by Joseph Vogel that is cited as it becomes relevant.

⁴¹ Vogel and Katanekwa, "Early Iron Age Pottery," 166.

⁴² S. G. H. Daniels, "A Note on Iron Age Material from Kamusongolwa Kopje, Zambia," *South African Archaeological Bulletin* 22 (1967): 142-50; D. W. Phillipson, "An Early Iron Age Site on the Lubusi River, Kaoma District, Zambia," *Zambia Museums Journal* 2 (1971): 51-7; Joseph O. Vogel, "Some Iron Age Sites in Southern and Western Zambia," *Azania* 8 (1973): 25-54; idem, "The Early Iron Age Site at Sioma Mission, Western Zambia," *Zambia Museums Journal* 4 (1973): 153-69; idem, "The Early Iron Age in Western Zambia," *Current Anthropology* 17, 1 (1976): 153-4; idem, "Recent Archaeological Survey in Western Zambia," *Current Anthropology* 19, 1 (1978): 148-9; Vogel and Katanekwa, "Early Iron Age Pottery."

fact, archaeologists conclude that the ceramics of the two areas shared no “immediate typological correspondence.”⁴³ Rather, ceramics from the southern sphere show strong affinities with a tradition, Gokomere, broadly attested *south* of the Zambezi, into southern Malawi, across the Kalahari to Nqoma, and, it was discovered, in the Victoria Falls region and the earliest phase of occupation in the Machili Valley.⁴⁴

The Gokomere tradition has been correlated with Kusi languages. This correlation is supported by lexical evidence in the form of Kusi borrowings into western Botatwe languages (see below) and other Bantu languages of the boundary region of Zambia, Botswana, Namibia, Zimbabwe, and Angola, where Gokomere pottery is known to have spread.⁴⁵ As noted in Chapter 3, by the early and mid second millennium, a ceramic style found throughout the Southern Province and in the Machili Valley came to coexist and, later, replace the Gokomere-related pottery found at the sites between Lusu Station and Katima Mulilo in the southern sphere of the Upper Zambezi Valley. This style was labeled Kangila, later redefined as Early Tonga, and later still called Namakala, though the definition of the tradition has been a matter of some

⁴³ Vogel, “Recent Archaeological.”

⁴⁴ Vogel, “Recent Archaeological.” On southern Malawi, see Joseph Vogel, “Some Iron Age Pottery from Salima, Malawi,” *Azania* 8 (1973), 154. On the Victoria Falls ceramic sequence, see idem, “The Mosiotunya Sequence,” *Zambia Museums Journal* 4 (1973): 105-52; idem, “The Iron Age Pottery of the Victoria Falls Region,” *Zambia Museums Journal* 5 (1980): 41-77; N. M. Katankwa, “The Iron Age in Zambia.” On the origins of Gokomere in the Bambata and Ziwa facies, consider the new argument in T.N. Huffman, *Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa* (Scottsville, South Africa: University of KwaZulu-Natal Press, 2007): 346-59, esp. 355. For a more general description of Gokomere and its spatial and temporal expanse, see work on the Gokomere, Kinsale, Mabveni, and Cighwa sites. K. R. Robinson excavated the type-site, Gokomere Tunnel. Start with K. R. Robinson, “Further excavations in the Iron Age Deposits at the Tunnel Site, Gokomere Hill, Southern Rhodesia,” *South African Archaeological Bulletin* 18 (1963): 155-71. Consider also Joseph Vogel, “The Gokomere Tradition,” *South African Archaeological Bulletin* 33 (1978): 12-17. On the relationship to pottery at Nqoma, see Denbow, “Congo to Kalahari,” 166; Vansina notes personal communication from Denbow emphasizing similarities with the pottery from Matlapaneng in *How Societies*, 109.

⁴⁵ Christopher Ehret correlates this pottery to Kusi speakers who were probably later absorbed by other Bantu speech communities, including the Botatwe. He postulates that this branch of Kusi was closely related to the Nyasa subgroup of Kusi. See *Classical*, 222, 239-40, 246.

debate over the years.⁴⁶ If Gokomere is correlated with Kusi languages and Namakala with Botatwe languages and a period of overlap occurs between Gokomere and Namakala potteries in the early second millennium, it is no surprise that Kusi words were borrowed into Botatwe languages at the corresponding glottochronologically-derived dates in the early second millennium.

We know decidedly less about the economy of this region as few excavations have been conducted and most data remains unpublished. Kangola, along the west bank of the Zambezi River some 20 km from Senanga and Salumano, located 30 km northwest of Sesheke, may each serve as representative sites of the northern and southern ceramic spheres, respectively. Earlier data from the sites contribute to our knowledge of the broader regional economy in which Proto-Western Botatwe speakers engaged. Later data from these sites gives us some idea of the economy of people living just before we hypothesize Proto-Zambezi Hook speakers to have lived in the same approximate region.

In the north, people lived at Kangola from the 5th to the 10th century. Faunal remains provide evidence of a hunting and herding economy, with cattle as the only attested domesticate. This hunting and herding economy is in keeping with the subsistence pattern attested in the Namakala and Nanga sites dating to the 6th and 7th centuries a.d. in the lower Machili Valley. Three iron arrowheads and an iron spear further corroborate the practice of hunting and the recovery of 7 clay whistles may be interpreted as indirect evidence of either herding or hunting (with dogs? as a group?). Fish bones uncovered at the site tell us that Kangola's inhabitants were

⁴⁶ Vogel, "Recent Archaeological Survey in Western Zambia." Vogel calls this the "Tonga Diaspora Tradition" in idem, *Kamangoza: an Introduction to the Iron Age Cultures of the Victoria Falls Region* (London and Nairobi: Oxford University Press on behalf of the National Museums of Zambia, 1971) 19-20.

also fishermen. Finally, a copper bangle, a copper wire and another copper fragment attest to limited trade, probably indirectly with the inhabitants of the Tsodilo hills to the south.⁴⁷

Salumano to the south is a far more complex site with three distinct phases of occupation: Phase A with a date in the third or fourth century BCE, Phase B from the 5th to the 9th century CE, and Phase C in the 13th century.⁴⁸ Curiously, stone tools were found at the site, though the phases to which they correspond were not reported.⁴⁹ Figure 7.1 outlines other finds by phase. Hunting, snaring, fishing and herding were all part of the economy, according to faunal evidence. Interestingly, with respect to herding, only cattle were herded during Phases A and C, while a limited number of sheep/goats were tended during Phase B. This limited, temporary incorporation of small livestock at Salumano, also found at Nanga, may have been a strategy to weather the limited rain and constricted pasturelands during the cool, dry period which spread from the north to the south in the mid to late first millennium. Cattle herding remained the most important activity throughout the occupation, accounting for 81.7% protein while hunting accounting for 18.2% of protein and snaring and fishing for minimal amounts.⁵⁰ Yet, hunting large species (probably buffalo) provided a fairly significant source of meat, particularly in the dry season and in environmental zones that, at least with buffalo, could also have been exploited by cattle herds. With so little evidence of snaring and such an emphasis on herding, one wonders

⁴⁷ Katanekwa, "The Iron Age in Zambia," 12-14.

⁴⁸ Ibid, 9. All dates are uncalibrated. For a complete listing of dates, see Nicholas Katanekwa, et. al., "Radio Carbon Dates for Zambia," *Archaeologia Zambiana* 20 (1981): 23-25. See also dates from David Phillipson, *African Archaeology*, 2nd ed. (Cambridge: Cambridge University Press, 1993), 194.

⁴⁹ Ibid, 11.

⁵⁰ Ina Plug, "The Fauna from Salumano, an Early Iron Age Site in Zambia," *Archaeologia Zambiana* 20 (1981): 20-22.

to what extent Salumano settlers cultivated fields. Inhabitants of the site also engaged in a limited amount of trade, probably down-the-line regional trade because there is little variety in the trade goods and no certain evidence of contact with Indian Ocean trade networks, unless the poorly described shell beads are cowries.

Figure 7.2 Finds from the Three Phases of Salumano Occupation⁵¹

Phase	Copper	Iron	Clay	Shell	Ivory	Faunal ⁵²
Phase A, 4 th century BCE						2 individuals, only cattle ⁵³
Phase B, 5 th to 9 th century	1 ring 9 sheets 4 bangles	3 bodkins	11 figurines* 2 whistles	2 beads	bangle remains	24 individuals 62.5% bones from herding 12.5% from hunting (all bovids) 4.2% snaring 4.2% fishing
Phase C, 13 th century	1 thin sheet	5 wires 2 bodkins 1 iron bead 2 arrowheads 1 iron ring	2 beads			2 individuals, only cattle

* not described

To summarize, inhabitants of the Zambezi Hook region from the middle first to early second millennium lived on a frontier with links to the north and the south. They raised cattle from an early date and engaged in regional trade at least as early as the mid first millennium. Hunting remained an important occupation; indeed, bovid bones from Salumano and whistles in surprisingly high numbers at both sites might reflect greater organization of herding and hunting activities, with the possible use of trained hunting dogs in herding and hunting in the late first millennium. Yet, political life remained very local and social stratification was minimal.

⁵¹ This data is collected from Katanekwa, “The Iron Age in Zambia,” 9-11 and Plug, “The Fauna from Salumano.”

⁵² Calculations were only made for Phase B as the samples for Phases A and C were too small.

⁵³ If the radiocarbon date for Phase A was, indeed, associated with the cattle bones collected, this is one of the earliest dates for domesticated cattle in southern Africa.

7.1.4 Settlement Patterns around the Turn of the Millennium

If south central Africa has been host to “episodes of settlement” by makers of several archaeologically defined Early Iron Age cultural traditions—indeed, the languages of the region attest to such episodes and frontiers of interaction—there is only one such pottery tradition for which a detailed regional settlement and land-use history has been reconstructed: Gokomere.⁵⁴ Largely due to the sustained work of Joseph Vogel, we have a fairly clear story of the origins and spread of Gokomere and the facies that replaced it in south central Africa. We also have a history of how Africans living in this part of the continent organized their settlements over time.

Early Iron Age settlements related to the Gokomere tradition common south of the Zambezi first appear north of the Zambezi in far southwestern Zambia in the first millennium. It should be clearly stated that Vogel sees the spread of Gokomere as tied to and dependent upon the spread of people making this pottery, rather than a diffusion of knowledge about crafting such pots. Vogel explains that makers of this pottery were probably concerned with finding new places to replicate their successful farming system, which specialized in a very particular microenvironment: Kalahari Sands covered with *Brachystegia Isobelinia globiflora* (*miombo*).⁵⁵ The spread of these early peoples was related to farming; it was an extensive movement with

⁵⁴ This section draws from Vogel, “Microenvironments”; idem, “Iron Age Farmers”; idem, “Savanna Farmers.” Quote from idem, “Microenvironments,” 85. With the notion of episodes of settlement, Vogel is critiquing earlier scholarship for ignoring variety within the Early Iron Age or treating differences as aspects of the expansion of one monolithic culture whose chronology of expansion will fall into place once all sites are uncovered. Consider, as an example, R. C. Soper, “A General Review of the Early Iron Age in the Southern Half of Africa,” *Azania* 6 (1971): 5-37. Indeed, radiocarbon dates became an organizing and explanatory feature of early archaeological research such that Vogel claims “differently distributed date clusters are used to describe the spatial trajectory within an expansion paradigm,” in “Microenvironments,” 85. On the rejection of radiocarbon dates that fall outside expected chronology of the Early or Late Iron Age sequence, consider D. W. Phillipson’s rejection of early Twickenham Road dates, “Excavations at Twickenham Road, Lusaka,” *Azania* 5 (1970): 77-118.

⁵⁵ Vogel, “Microenvironments.”

neither population pressure nor the filling-in trend of segmentary expansion as the engine of change.⁵⁶ Rather, farmers built small settlements, which they occupied until, Vogel hypothesizes, the fields they had cut out of the *miombo* vegetation were infertile, at which point they moved to a new region with the familiar *miombo* microenvironment. In this way, farmers leaped from one *miombo* microenvironment to the next in a linear, extensive manner. They brought this pioneering agricultural system from the hook of the Zambezi to the seasonally flooded depressions between Sesheke and Livingstone.

By the ninth century, farmers changed this pattern, returning to the seasonally flooded depressions in the region between Sesheke and Livingstone, to the southeast of the Machili Basin. Farmers shifted from a pioneering to a cyclical use of the land; fields were used, fallowed, and used again. In this way, settlements accumulated large middens and layers of stratigraphy indicating prolonged occupation. Vogel hypothesizes that changes in social organization made this cyclical land use pattern possible. New social networks dispersed risk and were possible because residence was more stable. In this way, farmers filled in the local microenvironment, working it more intensively and over greater periods of time and using claims on relatives' labor to propel the intensified land use in the 9th century. Although Vogel assumes that the climate endured no significant changes in the last two millennia, it may be that the more intensive occupation of sites near seasonally flooded depressions was partially possible by the shift to a warmer, wetter climate around the 9th or 10th century, a local manifestation of the Mediaeval Warm Epoch.⁵⁷ Indeed, this intensive settlement of the *miombo* was far riskier than the

⁵⁶ Ibid, 95. Vogel names this initial offshoot of the Gokomere Tradition north of the Zambezi as the "Shongwe Tradition."

⁵⁷ Vogel, "Iron Age Farmers," 162.

pioneering strategy of extensive single occupation sites and would have required a careful use of wild foods alongside experimentation with intensive cultivation.

Vogel notes that around the turn of the first millennium people started making a new kind of pottery throughout the Kafue, Batoka, Falls, Machili, and perhaps even Zambezi Hook regions: Kangila, also called Early Tonga or Namakala. This new facies was related to the ceramics of the Kafue region and linked to ethnographically known eastern Botatwe populations, particularly the Tonga. Makers of this pottery settled alongside makers of Gokomere ceramics in the early centuries of the second millennium, a history described in Chapters 3, 4, and 6.

With the introduction of this new style of pottery came the introduction of a new settlement pattern. Concurrently, the climate shifted back to cool, dry conditions, changes that would have threatened intensive settlement of *miombo* lands along seasonally flooded pans. Farmers making these new Kangila pots knew how to settle a variety of microenvironments—a theme that is familiar from our history of the greater Kafue. Kangila makers built sites that were dispersed throughout the region, on highland sands and the heavy clays of *mopane* woodlands in valley bottoms, along seasonally flooded lands, and in forest clearings, on older deserted villages and in new, unfamiliar and, therefore, riskier areas. These peoples brought with them cattle and a new kind of hoe, which facilitated their diffuse settlement.⁵⁸ Indeed, Vogel claims that the social relationships that could be created with cattle exchange provided an intricate web of obligation between dispersed descent groups and, importantly, a wider distribution of risk and the potential

⁵⁸ In fact, Vogel claims that these innovators also introduced a new kind of hut building that required the use of a hoe because the immigrants dug wall trenches in building their homes rather than individual post holes. “Savanna Farmers,” 46-7.

for slightly more stratified relations.⁵⁹ Although farming techniques did not change all that much over the course of the first and second millennia in the stretch of land from the Zambezi Hook to Livingstone, settlement pattern and, Vogel hypothesizes, the social relationships that sustained that work did change significantly.

7.1.5 A Summary of Archaeological Evidence of Sandveldt Settlement

The archaeological evidence tells us that Africans living in south central Africa on the sandveldt between the Zambezi and Kafue Rivers in the first and second millennia were small communities who initially built ephemeral sites. We can recognize three periods in this occupation. In the mid to late first millennium, corresponding to a cool, dry climate regime, inhabitants of the region settled within the *mutemwa* teak forests and left evidence of economies that articulated hunting with herding activities on pasturelands used by both cattle and buffalo. Limited fishing and snaring supplemented this hunting and herding economy and small livestock were added for a brief period near the end of this phase. Trade with the emporiums of the Tsodilo Hills was very likely; there is little direct evidence for farming, even among pioneering shifting settlements in the Zambezi Valley. With the transition to the warm, moist conditions at the turn of the first millennium and early in the second millennium, settlement patterns shifted. Zambezi Valley inhabitants began to intensively and cyclically exploit seasonally flooded depressions. Communities in the Machili Valley farmed the woodlands of the upper reaches of the river system, smelted local ores and traded for glass beads and copper. Similarly, cattle grew increasingly important at Nqoma until that site was in the 12th century, probably because its

⁵⁹ Vogel, "Iron Age Farmers," 166; idem, "Savanna Farmers."

inhabitants took up nomadic herding and smithing. In the 11th century, the cattle herding site of Nanga was abandoned, though cattle were kept in the drier environment of Salumano into the 13th century a.d. With the transition to the cool, dry climate of the global Little Ice Age from the 14th to 16th centuries, the archaeological record of the Machili region grows silent. Farmers in the Zambezi Valley weathered this climatic change by broadening the range of microenvironments they farmed under the guidance of immigrant farmers from the Kafue region.

As Vogel notes, there were edaphic constraints to shifting cultivation, a likely facet of the economy in the Zambezi Valley and the upper Machili; farming did not produce enough surplus to support complex social hierarchies. Indeed, Vogel considers the sites on the Kalahari Sands of eastern Botswana to be a more complex form of the economy of the Kalahari Sands farmers of southwest Zambia.⁶⁰ Similarly, the limited trading of the regions' inhabitants did not finance high-status leadership as may have been possible at the Tsodilo Hills sites or, later, at Ingombe Ilede. These were small-scale societies with little social differentiation, although Vogel sees the shift in settlement pattern to reflect a shift in social organization: early farmers using pioneering slash and burn techniques drew on nucleated relations, probably closest-neighbor interactions. As communities resettled the seasonally flooded pans in the 9th century, they may have used a more segmentary organization with claims on others' (relatives'?) labor to manage cyclical land use. Finally, corporate groups, possibly created through cattle exchanges, may have sustained the risky ventures of farmers who brought with them new ideas about exploiting a range of environments around the twelfth or thirteenth centuries.⁶¹

⁶⁰ Vogel, "Savanna Farmers," 39-40.

⁶¹ Vogel, "Savanna Farmers"; idem, "Microenvironments"; idem, "Iron Age Farmers."

The historical development of wild resource use demonstrated in the linguistic data shows strong parallels with the eclectic economy of the archaeological sites of the west, in which inhabitants shifted emphasis between hunting, farming, herding, fishing, and gathering products to either consume locally or trade out. Innovation in hunting vocabulary occur across all forms of hunting, including spearcraft, archery, and trapping, rather than concentrating around spearcraft as attested in the linguistic and archaeological record of the Kafue and Batoka. Western Botatwe peoples worried about protecting their fields and herds with new traps and snares. The pottery traditions attested in the area suggest that lexical evidence will show signs of contact with people speaking languages with affinities to the south and southeast, probably Kusi languages, as well as people with linguistic affinities tied to the region of the Zambezi floodplain, probably Luyana languages.

7.2 On Trapping and Farming, c. 500 to c. 1400 C.E.

As Proto-Western Botatwe speakers moved into the Kalahari sandveldt, planting their fields along river valleys, they innovated a number of new words to talk about the trapping technologies that made precarious plantings safe from animals roaming the bush above the valleys. Sometimes, Proto-Western Botatwe speakers laid noose traps, *-swa (701), to trap small grazers and even birds on the margins of their sorghum and millet fields. Similarly, Proto-Western Botatwe speakers laid out fall traps, *-kúnj (702), along the guinea fowl runs on the edges of their grain fields. These *-kúnj were heavy wooden fall traps, similar to the stone fall trap, *-díbá (515), that had been inherited into the vocabulary of Proto-Botatwe speakers and

which it replaced amongst Proto-Western Botatwe speakers.⁶² The *-kúnj trap derived from an older Bantu root for firewood that was then applied by Proto-Western Botatwe speakers to a fall trap constructed from heavy sections of *mopane* logs, logs otherwise used as firewood. A well-placed *-kúnj trapped not only fowl but a wealth of small, edible game pests, like hares, that were attracted to the community's fields. These traps would produce some of the small game attested in the faunal remains of Salumano phase B and Nanga during the second half of the first millennium.

When Proto-Western Botatwe speakers enlarged the scale of the *-kúnj trap, they could protect their settlements and livestock from dangerous predators. The Proto-Western Botatwe era, the second half of the first millennium, corresponds to a period of cattle keeping at Nanga (7th to 11th centuries), Salumano (5th to 9th centuries), and Kangola (5th to 10th centuries) and it may be that the *-kúnj trap was used to kill cattle predators. Indeed, this trap is especially associated with capturing leopards. To catch a leopard with a *-kúnj trap and to kill it was no small feat, nor did it merely represent the removal of a danger to the community and its food supply. This act of protection provided the trapper with a precious hide, deeply embedded in the symbolism of authority amongst the neighbors of Botatwe speakers.⁶³ If it was not used locally, the hide could easily circulate into trade networks to the north or, perhaps, the south toward the trade entrepôt of the Tsodilo Hills.⁶⁴

⁶² BLR3 2042; C.S. 1218.

⁶³ For a history of the relationship between leopards and political authority in central Africa, see Jan Vansina, *Paths in the Rainforests: Toward a History of Political Tradition in Equatorial Africa* (Madison: University of Wisconsin Press, 1990), chapter 4. Leopard skins are not as frequently associated with political or ritual power in the Botatwe speaking regions of south central Africa.

⁶⁴ In personal communication with Vansina, James Denbow emphasized the importance of furs (but not explicitly leopard hides) in exports from the stunning trade entrepôt of Divuyu, occupied from the late 7th century into the 8th

By the early centuries of the second millennium, Proto-Machili speakers innovated another form of pitfall trap, replacing the inherited root *-lindi, with *-lili (703). The innovation may, in fact, represent a new pronunciation for the inherited form by reduplicating the first syllable. It could also be a reduplication of the first syllable of *-díbá, the inherited word for a stone falling trap. Of course, the matter of interest is what Proto-Machili speakers thought they could do with a *-lili pitfall trap. Long, deep pitfall trenches, particularly those used in large-scale game drives, are time consuming to construct and maintain because the walls are eroded by the rains and must be shored up in preparation for large scale hunting in the dry season. Yet, the diminutive noun prefix applied to the root in all three Machili languages tells us that this was a small pitfall, the kind placed at garden and field margins to produce a steady supply of game meat throughout the growing and harvest season. Settlement shifts from the hunting and herding sites of the lower Machili to the mixed farming sites of the upper Machili during the early centuries of the second millennium—corresponding with the Proto-Machili era—might help explain why Proto-Machili speakers innovated a new way to talk about traps laid along field margins.

7.3 Fishing Practices in the West, c. 500 to c. 1400 C.E.

Innovation in fishing was, perhaps not surprisingly, a minor focus of speakers of western Botatwe languages because the region was a dry area with few perennial water sources. Yet, the annual rains changed the landscape and, with the right tools, Botatwe peoples living on the

century. See Vansina, *How Societies*, 72n14. Hides were also manufactured locally at foragers sites near Nqoma, a second Tsodilo Hills site dating from the 9th to the 12th centuries. See Denbow, “Material Culture and Identity in the Kalahari.”

Kalahari Sands could produce high yields for a few months each year. Proto-Western Botatwe speakers innovated a new way to talk about entrapping fish by encircling them, probably with a net or fish fence. The verb they used, *-yamba (704), became such a common way to talk about fishing that it was also applied to fishing with a trap. The source of this root is difficult to ascertain, in part because scholars are uncertain about the relationship between roots with a first consonant with the value of /ɕʒ/, /ɕz/, /j/, and zero. There are a number of terms that might be the source of the Proto-Western Botatwe verb, though many may prove to be related genetically or as subsequent reborrowings. One possibly related attestation comes from Kaskazi languages in which *ambj means “large palm mat.”⁶⁵

Surprisingly, some western Botatwe speakers replaced the very ancient Bantu root for angling with *-shuta (705). This verb, glossing as “to angle, to fish with hook and line,” might suggest a new bodily movement in the act of angling. An attestation of *kusyuta* in Ila as “to scoop up, to pick up” suggests that this new form of angling may have including small nets used to gather fish on the end of a line, perhaps when fishing from a canoe in the deep waters of the Zambezi.⁶⁶ The root may be either a Proto-Zambezi Hook innovation dating to the early centuries of the second millennium or a Lozi root borrowed into Botatwe languages in a block all the way to the Falls region. Alternatively, the distribution of the root might be accounted for by both invention amongst Proto-Zambezi Hook speakers and spread from Hook language and Lozi into neighbors further east. In either case, the distribution of the root to the east and the known

⁶⁵ Ehret, *Classical*, 311.

⁶⁶ Dennis Fowler, *A Dictionary of Ila Usage, 1860-1960* (Hamburg: Lit Verlag, 2000), 687.

spread of Lozi influence from the floodplain eastwards firmly suggests an important role for the Lozi language as a vehicle of distribution of this root.

7.4 Hunting in the West, c. 500 to c. 1400 C.E.

As Proto-Western Botatwe and, later, Proto-Machili and Proto-Zambezi Hook speakers gradually brought their languages into the region between the Zambezi and Kafue Rivers through language shift and small scale movements of people, they reshaped their vocabulary to be able to talk about the challenges and opportunities of hunting in the game-rich lands beyond their river valley farmlands. They met with the challenge of bringing the tools and strategies they learned from their ancestors into these new, drier environments by pursuing invention in a far wider range of hunting activities than their Kafue neighbors. Like the story we know from the Kafue, western Botatwe communities were interacting with Kaskazi and Kusi communities who already lived in the area, often independently borrowing the same vocabulary.

7.4.1 Developments in the Technologies of Hunting, c. 500 to c. 1200 C.E.

As Proto-Western Botatwe developed new vocabulary to talk about the kinds of hunting they did beyond the river valleys, out in the scrub vegetation of the Kalahari Sands, they, like their Proto-Eastern Botatwe neighbors to the east, found that adopting new spear technologies facilitated hunting in the dry savanna grasslands. Proto-Western Botatwe speakers, like their Proto-Eastern Botatwe neighbors, borrowed the root *-weja (706, 610) from Kaskazi speakers but they did so independently. Moreover, the root was used by Proto-Western Botatwe speakers to talk about the action “to spear” rather than “to hunt,” probably because spearcraft did not come to be as common or important a form of hunting to western Botatwe peoples. Proto-

Western Botatwe speakers, again, like their neighbors to the east, adopted a new kind of (throwing?) spear, also from Kaskazi speakers, in a form showing progressive vowel assimilation, *-súmù (707).⁶⁷ Indeed, as both eastern and western Botatwe speaking communities borrowed the two roots simultaneously but independently from outlying Kaskazi languages, it may be that what one did with an *isúmù* was *kuweza*.

As they hunted with spears, western Botatwe communities, like their Botatwe neighbors to the east, worried about augmenting the skill of their hunting dogs. To talk about this concern, they share a word, *-kálula (708), for the act of medicating their dogs to make them fierce hunters. The innovation of this word for administering medicine to hunting (or herding?) dogs may date as early as the 6th century at the Proto-Western Botatwe level; the phonology is inconclusive on this point. This root is derived from the Proto-Bantu root *-kád- “to be bitter, sour, sharp, fierce,” the qualities desired in a good hunting dog.⁶⁸ The root was combined with a separative verbal extension, often used for an intensive or repetitive action. Thus, the root might be crudely glossed as “to be fierce at,” “to be fiercer and fiercer,” or ‘to be fierce at again and again,’ or, most likely, a combination of the three meanings at once.

If hunting dog medicine dates to the Proto-Western Botatwe era, it overlaps with the development of whistles unearthed at Salumano phase B (5th to 9th centuries) and Kangola (5th to 10th centuries), both upstream of the hook in the Zambezi River. The whistles were probably for communicating with dogs and it is quite likely that trained dogs were vital to the hunting and herding economy that characterized the region in the later half of the first millennium as far east

⁶⁷ The root is reconstructed as *-tú□mò. BLR3 3108, 3109; C.S. 1866, 1867.

⁶⁸ For *-kád, see BLR3 1657; C.S. 978.

as the lower Machili. Not only did trained dogs and whistles help with herding, they are used in spear hunting, including the hunting of predators of cattle. Likewise, the prevalence of buffalo compared to other game in regional faunal remains from this period of cattle herding remind us that those who protected cattle herds and hunted buffalo herds may not have seen much distinction in their hunting and herding efforts, especially when the technologies of the activities—spears, dogs, and whistles—and the environments of the activities—open grasslands—overlapped.

Proto-Western Botatwe speakers hunting the new Kalahari Sands environment in the second half of the first millennium also invented a new kind of arrow point, *-so (709). This word came to be the generic term for “arrow” or “arrowpoint,” attesting to the importance of this new technology in successfully hunting in the open environment beyond the river valleys of the Kalahari Sands.⁶⁹ In fact, Lozi, Mwenyi, and Thimbukushu speakers living to the west of communities of western Botatwe speakers eventually borrowed the word and, presumably, the technology to which it referred, though it is also possible that the root was initially borrowed into the Proto-Western Botatwe language from the ancestral language of Mwenyi and Thimbukushu.⁷⁰ Later, some Machili languages seem to have reborrowed the word again from Lozi. Indeed, the history of the borrowing of this word is complex and will only be fully understood when linguists have a better sense of the relationship between Thimbukushu and other Bantu languages of south and west central Africa. With the amount of regional smelting

⁶⁹ See Chapter 4.

⁷⁰ This loan was borrowed into Lozi in the 19th century; it is more difficult to date the loans into Mwenyi or Thimbukushu.

and smithing beginning in the Tsodilo Hills in the last centuries of first millennium and, closer, in Bulilia in the early centuries of the second millennium, it may be that what was new about *-so was an iron arrowpoint, a technology that would have inspired great borrowing back and forth between neighbors.

7.4.2 Developments in the Technologies of Hunting, c. 1200 to 1400 C.E.

By the turn of the millennium, speakers of Proto-Western Botatwe had successfully carried their way of living into river valleys draining to the Zambezi throughout the lands between the upper Zambezi and the Kafue Rivers. This spread slowly made it difficult for speakers living on the western and eastern frontiers to understand each others' speech. Gradually, these ends formed into their nodes of the Botatwe language family: Proto-Machili in the east along the maze of tributaries of the Machili and Zambezi Rivers and Proto-Zambezi Hook further west, perhaps spreading along the system of rivers now named Lumbe, Kweemba, and Njoko, east of modern the river towns Senanga and Sioma, and across the Zambezi to the Mulonga Plain in the southwestern extreme of modern-day Zambia.⁷¹

Proto-Machili speakers, like their Proto-Western Botatwe speaking ancestors, focused their hunting energies in a diversified way, rather than in a process of increasing specialization, as was the case with group spear hunting in the Kafue. Indeed, it is not until the late second millennium with the spread of elephant hunting guilds from the east and hunters' associations from the west that we have evidence of specialization in hunting at all. Rather, the vocabulary

⁷¹ This section focuses on Proto-Machili. The vocabulary of Proto-Zambezi Hook is notoriously difficult to reconstruct because Fwe has been greatly influenced by contacts with Mbalangwe and Subiya speakers in the Caprivi. Both Shango and Fwe, like the languages that diverged from Proto-Machili, have been further influenced by SiLozi. Moreover, with only two members of this branch, a single reflex of a root could be either a relict distribution or a result of recent innovation!

that can be reconstructed to the early centuries of the second millennium relate to new technologies to improve the different forms of hunting undertaken by the Proto-Machili speakers: *-weja and *-gúim-.

Among these terms, Proto-Machili speakers changed their words for both spear and arrow shafts, probably as they used new materials of construction. With respect to “spear shaft,” Totela, Mbalangwe, and Lozi speakers all use a form of the root *-teku (710). The absence of the root in any other Kusi languages suggests that the root was developed by Machili peoples, perhaps during the Proto-Machili speech community or soon thereafter and then borrowed into Lozi. It may be that *-teku represents either the use of a new hardwood (teak?) or the addition of an iron spear butt, perhaps taking advantage of the skilled Bulila metal-workers settled in the upper Machili Basin.

To talk about an arrow shaft, Proto-Machili speakers started using the diminutive of the root *-kuni. This was an inherited root with an original meaning of “firewood.” The root was later used to talk about a wide range of objects, including a wooden fall trap. The *-kakuni (711) arrow shaft tells us that the kind of wood Proto-Machili people understood to be *-kuni, perhaps *mopane*, was useful as both firewood and in constructing many of the everyday implements Proto-Machili people used around their homestead and in the bush. By the era of the Proto-Machili, Botatwe speaking peoples who had moved into the dry *mopane* and *mutemwa* teak woodlands of the west had become comfortable with their environment, indeed!

7.5 Honey Hunting on the Sandveldt, c. 500 to c. 1400 C.E.

The ancient craft of honey hunting was also a dynamic body of knowledge amongst Proto-Western Botatwe speakers. Significantly, Proto-Western Botatwe innovated *-pinda to talk

about traveling into the bush to find and collect honey (712), *kuhinda*. Though the application of *-pinda to honey hunting is limited to western Botatwe languages, other regional languages attest the root *-pind- for “to put across.” It is difficult to determine if this was a semantic innovation or a unique innovation. Regardless, we can imagine a number of motives for inventing a new word to talk about hunting honey: new pollens of unfamiliar flora affected the taste, texture, and viscosity of honey products, novel means of collection were necessary to gather honey in new kinds of natural hives, different people were charged with the work of honey hunting, or new incentives emerged (trade?) to go out and get honey.

Proto-Western Botatwe speakers also invented a new word for beeswax, *bulota (713). The etymology of this root is uncertain, though it might come from a Kusi root for ashes common to western Botatwe languages, *-dòtà, perhaps connecting the color of cinders and beeswax, the soft feel of beeswax and ashes, or their shared capacity to adhere to other surfaces. This important material was central to the work of crafting the joints of tools, such as arrows. It is surprising that Proto-Western Botatwe speakers invented new words for a material and activity with which they had long been familiar. Yet, both honey terms reflect not only the very different the experience of hunting for honey in the new sandveldt environment, but also how the very character of parts of the honey, such as the beeswax, might have changed when it was made from a different set of pollens.

7.6 Wild Resource Use in the West, c. 500 to c. 1400 C.E.

The drier rain regimes and less fertile soils of the Kalahari Sands aggravated climate shifts to cool, dry conditions in the west, rendering speakers of western Botatwe language far more exposed to the effects of climate change on subsistence patterns. Yet, as speakers of

Botatwe languages learned to make their homes on the Kalahari Sands of the west, they found inspiration in the diversified food system developed by their Proto-Botatwe speaking ancestors. The legacy of the west, then, is the strategy of eclecticism: the integration of a complex set of subsistence activities that defies categorization by terms like “farmer” and “forager” or even “agro-pastoralist,” “pastro-forager,” and “agro-forager.” These subsistence-based characterizations fall well short of any explanatory power for historical purposes and mask the contribution of eclecticism to our understanding of forms of economic complexity.

In the west, settlers of ancient sites and ancestors of speakers of Botatwe languages left behind evidence of a continuous shift in emphasis from one facet of the eclectic food system to another. If the second half of the first millennium offered opportunities in hunting and herding the grasslands, the rains of the early second millennium opened new lands to farming. Wild resources always supplemented food supplies, and often secured them from predators, but they also offered unique prospects to engage in regional trade, particularly for hunters. We have little evidence for the kind of sustained specialization in group hunting that occurred in the Kafue in the early second millennium because life on the Kalahari Sands was made successful by diffusing one’s strategies of food procurement, not concentrating them.

The character of economic possibility was to change, however, as an ever-intensifying trade in ivory and the ambitions of neighboring politicians striving to centralize state power coalesced, reconfiguring the regional economic landscape into centers and hinterlands. Engaging with trade as part of an entrepôt’s distant hinterland was not new for the inhabitants of the Kalahari Sands, but the potential for violence tied to trade and state-building profoundly reshaped who could successfully engage in trade, how communities could feed themselves, and what languages people used as they spoke to each other about their changing economic and

political opportunities. The process of language shift amongst speakers of western Botatwe languages as they were brought into the domain of the Lozi state effaced much of the history we can trace for western Botatwe peoples, yet such language shift and borrowing attests to their own particular historical circumstances, circumstances that draw our attention in Chapter 8.

CHAPTER EIGHT
WORK IN THE BUSH IN THE ERA
OF INERCONTINENTAL TRADE, c. 1300 TO c. 1900 C.E.

As Botatwe-speaking communities continued to spread out from one another, filling in the lands of the Batoka Plateau, Zambezi Valley, and Kalahari Sands in the middle and later centuries of the second millennium, interactions between peoples speaking very different languages to talk about the content of wealth and the character of successful communities left marks on Botatwe languages. These distinct linguistic traces were the newest chapter in an old story of contact. Although the Botatwe language family was to undergo one more divergence as Proto-Falls split into Toka and Leya around the beginning of the 18th century, borrowings and areal roots also provide data for the most recent periods of language history.

Continued borrowing and the multi-linguistic contact attested by that borrowing are important sources of evidence for understanding how communities living in south central Africa experienced several of the most important regional events of recent centuries: the struggle to centralized states and enforce tributary networks, the intensification of the early ivory trade, the development of the caravan trade, and the internal upheaval of the *mfecane*. These stories are

well known from other scholarship, but we know decidedly little about the experience of those living on the peripheries of these states and the hinterlands of intercontinental trade networks. Botatwe vocabulary change stemming from contact along these fluctuating state and trade frontiers illuminates the diverse cultural, linguistics, and political realities confounding efforts at centralization and access to ready sources of wealth, like ivory and slaves. Those who could collect wild produce through hunting, fishing, and foraging were instrumentally engaged in the process of state formation through tribute and in the extension of long-distance trade by supplying ivory, skins, dried fish and meat, and honey to traders. But such people, particularly mobile hunters with the skill to live in the bush for months on end and act violently on both animals and people, also embodied the ideology of successful politicking by composing communities with great breadth of knowledge (including knowledge of violence), both on the scale of neighborhoods and on the scale of states. A brief summary of the secondary literature on centers of regional trade and state formation sets the stage for the perspective of the periphery that we see with Botatwe word histories.

8.1 Political Innovation in Central and Southern Africa, c. 1300 to c. 1900 C.E.

By the fourteenth century, to the north of Botatwe speakers, the invention of the concept of *bulopwe* (divine right to rule associated with royal blood) and associations of titled and ranked officials coalesced as a foundation of political power in the emergent Luba kingdom north of the Upemba depression.¹ Such was the prestige of the ideology of *bulopwe* kingship and titled

¹ Thomas Reefer, *The Rainbow and the Kings* (Berkeley: University of California Press, 1981); Mary Nooter Roberts and Allen F. Roberts, *Luba* (New York: Rosen Publishing Group, 1997); idem, eds., *Memory: Luba Art and the Making of History* (New York: Museum for African Art, 1996); Jan Vansina, *Kingdoms of the Savanna* (Madison: University of Wisconsin Press, 1966).

political office that the Luba kingdom inspired struggles towards centralization to the north and, eventually the east of the Botatwe peoples. By the sixteenth century the Rund kingdom was founded by rivals within the Luban royal clan when these rivals moved into Lunda country to the west of the central Luba kingdom and married into the family of the local chief to establish a new kingship.² Rivalry between political leaders in central Africa inspired borrowing back and forth between Luban and Rund elites until they had developed a common pool of political ideals from which elites wrought various combinations of sacred kingship, political titles, emblems of leadership, and the dual concepts of perpetual kingship and positional succession into new polities.

Competition among elites precipitated a series of expansions whereby royal elites moved away from the capital, married into the leadership of new communities, and established a centralized system of political rule based on varying combinations of Luban and Rund political institutions. These new leaders respected the powers of indigenous “owners of the land” even as they introduced new ideas about power. In this way, kingship spread to the Lwena and Lunyana of the upper Zambezi River and further west, taking a new form as a raiding state, Imbangala, in the highlands of Angola. Yet, this expansion did not blanket the region. For example, communities farming on the Kalahari Sands between the Botatwe speakers and the Imbangala

² J. Jeffery Hoover, “The Seduction of Ruwej: Reconstructing Ruund History (The Nuclear Lunda; Zaire, Angola, Zambia)” (Ph.D. diss. 2 vols, Yale University, 1978); Robert E. Schechter, “History and Historiography on a Frontier of Lunda Expansion: the Origins and Development of the Kanongesha” (Ph.D. diss., University of Wisconsin, 1976); Vansina, *Kingdoms of the Savanna*.

vested political power in their own system of titled associations based on age and gender without the shift towards centralization.³

By the late seventeenth century, the Rund heartland served as the base for a second series of expansions, from which emerged new kingdoms based on the Lunda model, including the Yaka kingdom and the kingdom of Kazembe. The region of this Lunda Commonwealth stretch from the Kwango valley to the Luapula in the east, but the actual degree of association between the kingdoms and their control over the lands that separated them was rather minimal.⁴ A similar expansion of the central Luba state occurred in the seventeenth century, with leaders from numerous chiefdoms and small kingdoms seeking the emblems and status of affiliation with the central Luban kingdom. Indeed, one might ask what, besides greater social stratification and some degree of centralized political power, came of the spread of Luba and Lunda ideologies because these polities were far from being states with economic, judicial, and military power centralized in the hands of the king's government.

To the east of the Botatwe region, similar processes of political centralization characterized the mid to late second millennium. Far to the east, a series of polities emerged south of Lake Malawi beginning in the fifteenth century, in which leaders based their rule on their role as guardians of the spirits of the land, a concept of religious kingship that scholars suggest was borrowed from the emergent Luba kingdom.⁵ Between the eastern fringes of the

³ Jan Vansina, *How Societies are Born: Governance in West Central Africa before 1600* (Charlottesville, VA: University of Virginia Press, 2004): 206-60.

⁴ See the discussion of frontier zones in Giacomo Macola, *The Kingdom of Kazembe: History and Politics in North-Eastern Zambia and Katanga to 1950* (Münster: Lit, 2002).

⁵ Harry W. Langworthy, "A History of Undi's Kingdom to 1890: Aspects of Chewa History in East Central Africa" (Ph.D. diss., Boston University, 1969); Bridglal Pachai, ed. *The Early History of Malawi* (Evanston, IL:

Botatwe speaking communities and the kingdoms of the Phiri clan south of Lake Malawi, a new archaeological tradition, Luangwa, spread into the northern and eastern provinces of modern-day Zambia in the early centuries of the second millennium.⁶ The Luangwa tradition has been correlated with the spread of the Sabi languages.⁷ Speakers of these languages, particularly some speakers of Bemba, developed increasingly centralized chiefdoms during the second half of the second millennium, drawing on ideas from the influential Luba court.⁸ Others, such as Bisa speakers, specialized in trade and ivory hunting, linking the interior Lunda kingdom of Kazembe to the Indian Ocean networks of the Zambezi River by the eighteenth century.⁹

Across the Zambezi River to the south, the rising empire of the Mutapa dynasty (Monomotapa in European documents) was built in the tradition of Great Zimbabwe, redirecting trade away from Ingombe Ilede on the northern banks of the Zambezi River, probably leading to the abandonment of that trading center by the end of the fifteenth century.¹⁰ By the end of the

Northwestern University Press, 1972); Kings M. Phiri, "Chewa History in Central Malawi and the Use of Oral Traditions, 1600-1920" (Ph.D. diss., University of Wisconsin, 1975).

⁶ David Phillipson, *The Prehistory of Eastern Zambia* (Nairobi: British Institute in Eastern Africa, 1976); idem, *The Later Prehistory of Eastern and Southern Africa* (New York: Africana Publishing Company, 1977).

⁷ Christine Ahmed, "Before Eve was Eve: 2200 Years of Gendered History in East-Central Africa" (Ph.D. diss., The University of California, Los Angeles, 1996).

⁸ Harry W. Langworthy, *Zambia before 1890: Aspects of Pre-colonial History* (London: Longman, 1972); Andrew D. Roberts, *A History of the Bemba: Political Growth and Change in North-eastern Zambia before 1900* (Madison: University of Wisconsin Press, 1973).

⁹ Although a number of general works on pre-colonial trade in central Africa cover the Bisa hunters, the most comprehensive work is Judith Kingsley, "Pre-colonial Society and Economy in a Bisa Chiefdom of Northern Zambia" (Ph.D. diss., University of Michigan, 1980). See also Roberts, *A History of the Bemba*. For a discussion of more recent practices of Bisa hunting, see Stuart Marks, *Large Mammals and a Brave People: Subsistence Hunters in Zambia* (Seattle and London: University of Washington Press, 1976).

¹⁰ David Beach, *The Shona and Their Neighbors* (Oxford and Cambridge, MA: Blackwell Publishers, 1994); Aeneas Chigwedere, *From Mutapa to Rhodes: 1000 to 1890 A.D.* (London: Macmillan, 1980); Innocent Pikirayi, *The Archaeological Identity of the Mutapa State: Towards an Historical Archaeology of Northern Zimbabwe* (Uppsala: Societas Archaeologica Upsaliensis, 1993); idem., *The Zimbabwe Culture: Origins and Decline of Southern Zambezi States* (Walnut Creek, CA: AltaMira Press, 2001).

sixteenth century, Portuguese traders had established commercial centers on the lower Zambezi River and, by the early seventeenth century, Lisbon recognized the *prazos*, estates, of Portuguese settlers in the valley.¹¹ The influence of *prazeros* crept upriver as they established new estates and used private Chikunda slave armies to “tax” local free populations in the context of the collapse of the Mutapa and Malawian polities. By the eighteenth century, Chikunda slaves owned by the *prazeros* had extended their slave raiding and ivory hunting frontier into the middle Zambezi Valley. With the collapse of the *prazo* system in the nineteenth century, freed Chikunda led by Chikwasha and Kanyemba built their own hunting and raiding states further upriver, near the confluences of the Zambezi with the Luangwa and Kafue Rivers.¹²

Yet, the Portuguese and Chikunda were not the only regional actors to participate in the ivory and slave trades. By the middle of the nineteenth century, specialist traders like the Yao, Nyamwezi, and Kamba stretched their raiding and trading frontiers into central Africa.¹³ In fact, the Nyamwezi trader Msiri took advantage of fighting within Kazembe’s Lunda kingdom to establish his own kingdom, Yeke. Msiri monopolized Kazembe’s trade contacts in order to connect his own Indian Ocean coastal trade with the caravans of the Chokwe and Ovimbundu,

¹¹ Allen F. Isaacman, *Mozambique: the Africanization of a European Institution; the Zambezi Prazos, 1750-1902* (Madison: University of Wisconsin Press, 1972); Allen F. Isaacman and Barbara S. Isaacman, *Slavery and Beyond: The Making of Men and Chikunda Ethnic Identities in the Unstable World of South-Central Africa, 1750-1920* (Portsmouth, NH: Heinemann, 2004): chapter 2; Malyn Newitt, *History of Portuguese Overseas Expansion, 1400-1668* (London: Routledge, 2005).

¹² Isaacman and Isaacman, *Slavery and Beyond*, chapters 6-7. Some Chikunda initially continued working as hunters, porters, and canoemen by maintaining links with the trade centers of the middle Zambezi Valley, described by Isaacman and Isaacman in Chapters 3 and 4. Most freed Chikunda eventually joined the emerging Chikunda polities or were absorbed into other local communities, as described in Chapter 5.

¹³ The classic works on the extension of the Indian Ocean trade into central Africa remain relevant. Edward Alpers, *Ivory and Slaves: Changing Patterns of International Trade in East Central Africa to the Later Nineteenth Century* (Berkeley: University of California Press, 1975); Abdul Sheriff, *Slaves, Spices and Ivory in Zanzibar: Integration of an East African Commercial Empire into the World Economy 1770-1873* (Athens: Ohio University Press, 1987).

forming a trade network that linked the ivory and slave trades of the Atlantic Ocean to those of the Indian Ocean. By the nineteenth century, long established Chokwe and Ovimbundu caravans were active as far to the east as the Kafue River and were in close contact with elites of the Lozi kingdom of the Zambezi floodplain.¹⁴

Msiri's Yeke polity is a famous example of a far more common outcome of the intensification of the Indian Ocean trade in the 19th century. As local political leaders lost their ability to protect their communities from the raids and violence of the slave trade, they lost the power to govern. Enriched by the slave and ivory trades, opportunistic Big Men like Msiri filled the political vacuum and, in so doing, further extended the reach of the violence and uncertainty associated with the Indian Ocean caravan trade. The major causal force lay, ironically, in the uneven progress of abolition during the 19th century.¹⁵

A series of events in southeastern Africa added to the increasingly instable political world of south central Africa, reshaping the cultural and linguistic landscape on the borders of Botatwe speaking areas. In the early eighteenth century, good rains supported the rapid expansion of the agricultural and pastoral activities of the militarized Nguni chiefdoms of the southeastern lowveld. By the end of the century, the climate regime shifted to drier conditions, constricting the resources available to support the ambitions of would-be Nguni leaders who sought lands to establish their own chiefdoms. The *Madlatule* famine exacerbated the situation and prompted a

¹⁴ Joseph Miller, *Cokwe Expansion, 1850-1900*, Occasional Papers of the University of Wisconsin African Studies Program, no. 1 (Madison: University of Wisconsin Press, 1967); Idem, *Way of Death: Merchant Capitalism and the Angolan Slave Trade, 1730-1830* (Madison: University of Wisconsin Press, 1988); Achim von Oppen, *Terms of Trade and Terms of Trust: The History and Contexts of Pre-colonial Market Production around the Upper Zambezi and Kasai* (Münster: Lit, 1993).

¹⁵ Stephen Feierman, "A Century of Ironies in Eastern Africa," in P. Curtin, S. Feierman, L. Thompson, and J. Vansina, *African History*, 2nd ed. (London: Longman, 1995): 352-76.

series of wars and displacements as well as the establishment of new political alliances and polities, whose ramifications were felt as far north as the Botatwe speaking area.¹⁶

Central Africans saw the results of this series of events, the *mfecane*, in the violent expansion of the small, centralized, militarized raiding states of the Ngoni into east central Africa in the 1830s and the conquest of the Luyana-speaking Lozi state on the Zambezi floodplain by the Sotho-speaking Makololo about a decade later.¹⁷ Indeed, the expansionist goals of the Kololo Lozi state interrupted life among both the Ila and the Tonga, who were the subjects of persistent cattle raids (and ridicule) in the late nineteenth century by Lozi warriors and their Luso-African allies.¹⁸ Among western Botatwe communities, the expansion of Lozi influence under the Kololo followed an older pattern established by the Luyana elite some centuries earlier. Western Botatwe communities like the Shanjo, Fwe, Totela, Mbalangwe, and Subiya sometimes

¹⁶ The scholarship on the *mfecane* and subsequent political and economic reconfigurations across southern and central Africa is rich. The classic study is John Omer-Copper, *The Zulu Aftermath. A Nineteenth Century Revolution in Bantu Africa* (Evanston, IL: Northwestern University Press, 1966). Yet, a backlash of scholarship in the 1980s questioned whether the *mfecane* was a product of whites' ambitions in southern Africa and the need for propaganda to legitimize colonization as a way to end 'tribal warfare' in the region. Consider Julian Cobbing, "The Mfecane as Alibi: Thoughts on Dithakong and Mbolompo," *Journal of African History* 29 (1988): 487-519. Indeed, one wonders the extend to which British familiarity with the *mfecane* influenced early military interpretations of the Bantu Expansion. Other important reconsiderations of the *mfecane* and its outcomes include: Jeff Guy, *Destruction of the Zulu Kingdom: the Civil War in Zululand, 1879-1884* (London: Longman, 1979); Carolyn Hamilton, ed. *The Mfecane Aftermath: Reconstructive Debates in Southern African History* (Johannesburg: Witwatersrand University Press, 1995).

¹⁷ Control of the Lozi state shifted back to Luyana royalty in 1854. By 1885, a new ruler, Lewanika, united these fighting factions and brought the kingdom under more centralized control. Eugene Hermitte, "An Economic History of Barotseland, 1800-1940" (Ph.D. diss., Northwestern University, 1974); Mutumba Mainga, *Bulozi under the Luyana Kings, Political Evolution and State Formation in Pre-colonial Zambia* (London: Longmans, 1973); Gwyn Prins, *The Hidden Hippopotamus, Reappraisal in African History: the Early Colonial Experience in Western Zambia* (Cambridge: Cambridge University Press, 1980); Wim van Binsbergen, *Tears of Rain: Ethnicity and History in Central Western Zambia* (London and New York: Kegan Paul, 1991); Idem, "'Then Give Him to the Crocodiles': Violence, State Formation, and Cultural Discontinuity in West Central Zambia, 1600-2000," in *The Dynamics of Power and the Rule of Law: Essays on Africa and Beyond in Honour of Emile Adriaan B. van Rouveroy van Nieuwaal*, edited by Wim van Binsbergen in collaboration with Riekje Pelgrim (Münster, Hamburg, London: Lit, 2003):197-219.

¹⁸ See Chapter 9 for the vocabulary of ridicule emanating from the violent interactions between Lozi speakers and Ila and Tonga speakers.

acknowledged Lozi control through payments of tribute and at other times fled south of the Zambezi River, settling between it and the Linyanti River, a region that remained outside Lozi control until late in the nineteenth century.¹⁹

The political innovation of the mid-second millennium and the political and economic turmoil of the closing centuries of the second millennium left their mark on the words spoken by Botatwe peoples who struggled to understand how to build their own societies and take advantage of new economic opportunities while securing their villages and protecting their crops and cattle herds. Managing this balancing act between engagement and isolation was no small feat. Yet, even as Botatwe speakers invented words to talk about these momentous events, we must remember that Botatwe communities did not merely react to external factors but also internally innovated new ways to engage in the world outside their villages, fields, and pasturelands. Indeed, it is to this history of the innovations of Botatwe communities and their immediate neighbors, innovations internal to south central Africa, that we first turn our attention with a consideration of the final divergence in the Botatwe classification, that of the Proto-Falls speech community.

8.2 Wild Resource Use near the Mosi-o-Tunya Falls, c. 1000 to c. 1700 C.E.

The final divergence in our Botatawe classification is dated to the turn of the 17th century, though this glottochronologically-derived date is almost certainly skewed by more recent,

¹⁹ The name of this river changes as it changes direction from Cuando in Angola to Linyanti along the southern edge of the Caprivi to Chobe as it swings northward before eventually jointing the Zambezi River. Some of the history of the movement of these Botatwe communities is recorded in Thomas Tlou, *A History of Ngamiland, 1750-1906: the Formation of an African State* (Gaborone, Botswana: Macmillan Botswana, 1985). See also Maria Fisch, *The Caprivi Strip during the German Colonial Period, 1890-1914* (Windhoek, Namibia: Out of Africa Publishers, 1999): chapter 3.

unrecognizable loans because the two languages that diverged from Proto-Falls continue to live as close neighbors to the present day. It is possible that the Proto-Falls divergence occurred at a somewhat earlier date.

Proto-Falls speakers began to use a new word for bow, *-dandana (801), which replaced the inherited early Bantu word, *-tà. The underlying root from which this new word was made seems to be *-dànd-, “to follow,” with a reciprocal extension to make *-dandana, “that which follows itself (e.g. in a circular fashion into the shape of an arc).”²⁰ Some Kusi languages use the root to talk about different bent objects, though the application of the root to a hunting bow only occurs in Falls languages.²¹ The new meaning was either the innovation of Proto-Falls speakers or a semantic invention developed by Kusi speakers absorbed into Falls speech communities.

Oddly, Proto-Falls speakers invented a second word for bow, *kadali (802), with an agent deverbative suffix, -i, and the class 12 prefix. It may be that the abrupt transition from scrub *mopane* wooded grasslands on the escarpment above the falls to the dense, lush forests sustained by the spray of the mighty waterfall (which can be seen from miles away when the river is a full flow) prompted Proto-Falls communities to innovate new technologies of archery, perhaps smaller bows like those used in the denser vegetation of the equatorial rainforest. Indeed, the diminutive prefix on *kadali suggests that perhaps what was new about these bows was their small size. But, even more likely, *kadali was a borrowing from the Shona term for “mouth bow,” *chidandari*.

²⁰ C.S. 493 for *-dànd- and C.S. 654 for the osculant *-dònd-.

²¹ The closest another language comes to bow is Shona *chidandari* ‘mouth bow,’ a musical instrument.

A third root attests to further innovation in the manufacture of hunting tools. Toka and Leya speakers use the word *-d̥joka (803) today to talk about ferrules, specifically those formed by iron wire wound around the joint of a spear. This word spread to Subiya speakers living along the Zambezi River upstream from Leya speakers. Outside of the Botatwe family, other Bantu languages use the same root to talk about the action of twisting, turning, and winding and Kusi languages like Lozi and Tsonga refer more specifically to twisting around as a way to bind together two objects. Thus, the root may have been borrowed from Kusi speakers, though the shape of the root in Falls languages attests to an older borrowing than would have occurred if the word came from Lozi speakers. Regardless, the specific, narrower meaning seems to be an innovation of Falls languages, perhaps dating to the Proto-Falls era, though phonology is inconclusive on the dating.

8.3 Looking East: Contact with the Middle Zambezi in the Second Millennium

Throughout this study of Botatwe history, there has been evidence of contact between Botatwe languages and languages on the eastern frontier of the Botatwe zone. A particularly strong concentration of borrowing occurs between Sabi languages, especially Lamba, Bemba, and Bisa and the easternmost Botatwe languages: Lenje and Soli. In addition to sharing the vocabulary they inherited from their Botatwe ancestors, Soli and Lenje speakers also borrowed words into their own languages from their easterly neighbors. This eastern contact was more intense than contact between Botatwe languages in the west and their neighbors. In the west, the languages of interaction change more frequently, attesting to shorter, shifting interactions across

language boundaries, rather than long-term sustained interaction.²² The categories of work into which these areal forms fall indicate the kinds of activities shared by Botatwe, Sabi, and other communities of east central Africa as they traded, visited, and even lived within each others' territories.

Given the history of ivory hunting in the region of east central Africa, it is not surprising that one of the domains of work that Soli and Lenje speakers spoke about with their neighbors was hunting. Indeed, a number of roots attest directly to contacts resulting from inland ivory trade networks supplying Indian Ocean traders in the 18th and 19th centuries.²³ Other hunting vocabulary do not necessarily refer to elephant hunting and could, in fact, have been borrowed at any time after the divergence of Proto-Kafue, the divergence that produced Lenje as a distinct language. Thus, these words could have been borrowed at any point in the last seven hundred years!

For example, a *-coco (804) is a pointed, iron tip on a spear butt, derived from *-còoc-, “to poke in,” by adding the deverbative suffix -o for the instrument or agent of the verb, to mean “the thing that pokes in.” Speakers of Lenje, Soli, Bemba, and Bisa use this word, though phonology does little to determine which speakers innovated the word and which borrowed it. The limited distribution along the frontier of Sabi and Botatwe languages and its absence in the well-documented Tonga and Ila languages suggest that though the phonology is inconclusive, the root was likely an areal innovation.

²² It should be noted, however, that the better documentation of the languages of the eastern contact zone may skew this comparative characterization.

²³ See section 8.6, below.

Lenje, Soli, and Lamba speakers also exchanged words about collecting honey. They invented a new word for “honeycomb,” *-luko (805). When they went to collect honey from the hive, they used a new verb, *-panda (806). The source of this root is probably *-pànd-, “to split,” the action taken on the hive to remove the honey. The areal spread between eastern Sabi languages and adjacent Botatwe languages suggests a new way of collecting honey. Could honey and honey beer have been either a product circulated as tribute or sold to provision traders? Did the root *-panda suggest a new method of extracting honey without conserving or “eating from” (*kulida*) the hive?

The root *-shango (807) for “shield” further illustrates the often violent interactions on the eastern Botatwe frontier in the second half of the second millennium. The distribution of this word in south central African languages attests to contact among people living in the greater Zambezi River region. Glosses of the word in Bemba include the meanings “to catch, seize, grasp, cling to” and “to resist being taken captive.”²⁴ People who were using *-shango were talking about shielding themselves from the violence of the 17th and 18th century tributary demands of states to the north and south, from the Portuguese *prazos* of the middle Zambezi, from the raids of Chikunda states that filled the political vacuum created by the collapse of the *prazo* system, and from the slave raids that tore through the hinterland of trade routes reaching the Botatwe area from both ocean coasts. The broad range of meanings in Bemba are the result not only of a better quality dictionary, but also from the prevalence of raids in the Bemba

²⁴ See glosses from both Guthrie and the White Fathers in Appendix 5.

speaking areas.²⁵ The 19th century vocabulary of violence will be explored in greater detail in section 8.6, below.

Some words shared by Lenje and Soli are not attested in other languages; these words illustrate direct contact between Lenje and Soli speakers. For example, *malala (808) is a word meaning “a multiple night hunting trip.”²⁶ The word was developed by reduplicating an older Bantu root, *-dáad-, meaning “to lie down, sleep, spend night, be fallow.” It may be that one of the reasons Lenje and Soli share this word was not only that they spoke to each other about their hunting practices but that they needed to talk about the kind of hunting that is done far from home, often in the territory of other peoples. That is to say, this root may tell us that Lenje and Soli speakers undertook long hunting trips in the territories in which the others’ language was spoken. These longer sojourns into the bush provided the products sent into tribute and trade networks throughout the second millennium: ivory, skins, and perhaps honey and dried meat. The poetry of this root simply but effectively points to the importance of mobility from the village—with all its opportunities for acquiring new knowledge and social ties—as the key variable distinguishing new ideas about hunting from local, sedentary farming.²⁷

Among the words that entered the vocabulary of eastern Botatwe communities in the second half of the second millennium was a new word for fish spear, *-moondo (809). This spear

²⁵ Roberts, *A History of the Bemba*.

²⁶ An Mbalangwe word, bayachilala for ‘multiple days of hunting in a group’ could be related, though it could equally be the result of the reduplication of the last syllable of the Proto-Kafue root, *-cila, which may have spread to Mbalangwe speakers. Alternatively, Mbalangwe speakers may have innovated their word independently, also drawing on the old root for ‘lay down, sleep, spend night, be fallow’: *-dáad- (BLR3 795). Thus, the Mbalangwe word would loosely translate as ‘they go spend the night [in the bush].’

²⁷ For a discussion on the creation of difference between mobile hunters and sedentary farmers, specifically along gender lines, see Isaacman and Isaacman, *Beyond Slavery*.

is identical in shape and function to the older Botatwe fishing spear, *-umba. The sources of this word were Sabi and Kusi speakers participating in the eastern Zambezi areal zone. Its phonological form in Botatwe, Sabi, and Kusi languages suggests that Lamba speakers introduced the root to Lenje peoples who then shared it with their Botatwe neighbors, the Sala and Soli. The word's etymological origins may lie in an older Bantu word for war, *-kondo.²⁸ Sabi and Kusi speakers of the Zambezi areal zone drew on the meaning of the older root *-kondo to develop a new, generic word for "spear," *moondo.²⁹ Lamba and Cewa-Nyasa (a Kusi language spoken along the Zambezi river in eastern Zambia) speakers then applied this older, generic term for spear specifically to fishing spears.

A new word for a large fishing net, *kombe (810), also dates to the second half of the second millennium and was developed in the same Zambezi areal zone. Again, Sabi, Kusi, and the Lenje, Soli, and Sala communities share attestations for this root. Another possible cognate exists in Luban languages far to the north; the origins of this term could be Proto-Savanna, although an analysis of phonological forms and semantic domains indicates a more recent areal spread of the form attested in Kusi languages between Lamba (Sabi), Nsenga (Sabi), Cewa-Nyanja (Kusi), and Botatwe communities speaking Soli, Lenje, and Sala.

The innovation of the technologies to which these two roots referred reveals the shifting economic opportunities of fishers living in the Zambezi region in the mid to late second millennium. The application of the root for "war" to a word for a common warriors' weapon, the spear, is not particularly surprising. However, speakers in the Zambezi areal zone applied a

²⁸ BLR3 1942; C.S. 1147.

²⁹ The development of a term for weaponry along the middle Zambezi is suggestive of the violence that may have accompanied the extension of Indian Ocean networks into the region.

generic term for spear specifically to fishing spears during the period in which Indian Ocean trade was intensifying. Trade networks extended up the Zambezi River with the reoccupation of the trading settlement Ingombe Ilede in the 15th century and Portuguese settlements established as far inland as Tete by the 16th century. Like the word for a large fishing net, *kombe, the new word for hunting honey, *-pànd-, and the innovation of multiple night hunting trips in the bush, *malala, the semantic shift attributed to *moondo and its quick spread to neighboring communities living in rich fishing grounds suggests the important role these communities played in supplying trade settlements with dried fish, skins, meat, ivory, honey, and other commodities that had long been important in regional trade networks. People living in the very heart of the continent sought to tap into the wealth circulated along intercontinental trade networks and talked with their neighbors about their strategies for producing goods to trade out. Certainly the demand for trade goods among these inlanders, evidenced in the form of glass trade beads, cloth, and Chinese pottery in the south central African archaeological record, helped to shape the direction and content of trade along intercontinental routes.

8.4 Internal Contact: Innovations on the Batoka Plateau

Other areal forms tell us something of the history of contacts amongst Botatwe peoples themselves. The Batoka plateau was one such contact zone as speakers of the languages that diverged from Proto-Kafue filled in the lands from the Kafue floodplain to the falls but continued to move *throughout* the region to hunt, trade, and find new sites to build villages when soils of their old fields were exhausted.

Neighbors speaking Botatwe languages on the plateau shared a number of words to talk about hunting technologies, probably as they roamed through hunting territories dominated by

one or another speech communities. Lundwe, Tonga, and Totela speakers, for example, all share the word *-séngò (811) when they talk about using a “decoy hunting whistle.”³⁰ The whistle is used to attract duiker by mimicking the call of a mother for her foal.

It is notoriously difficult to reconstruct the content of particular medicines, unless they form part of the folk wisdom of kitchen pharmacopoeia because skilled healers and ritual specialists tended to their clients in competition with other such specialists. The innovation and novelty that formed the basis of effective medical treatment render most attempts at reconstruction problematic. However, the practice of certain kinds of medicine, such as *kubangula*, “to medicate a hunting dog,” presented in Chapter 7, and particular classes of medicines may be reconstructable. Thus, it may be that *kana or *kanamasaka (812), “medicine to protect a hunter” was a *class* of medicine, rather than a specific groups of materials, that can be reconstructed to the Proto-Eastern Botatwe or even Proto-Botatwe era; the phonology is inconclusive. However, the adjacent distribution of the languages attesting this medicine and the particularly innovative character of this field of knowledge makes it more likely that this was an areal innovation developed by Toka, Leya, and Totela people living above the Falls.

There are several possible literal meanings for *kanamasaka*, the homophonic resonance of which might be what made the word meaningful to Botatwe peoples. Among these multiple, homophonic meanings are, “little animal of the bush” (ka-nama-saka) and certainly “little child of the bush” (kana-[ma]-saka) and, most likely, “denier of, lord over the bush” ([ku]káana[ma]-saka).³¹ The development of this class of hunting medicine in the region along the Zambezi river

³⁰ BLR3 555; C.S. 327; Ehret, “Subclassifying,” 63.

³¹ For *-káan-, ‘to deny’ see BLR3 1701, C.S. 1000 and the Ila attestation, *kukanama*, ‘to rail at, abuse; to lord over; to climb’ in Dennis Fowler, *Dictionary of Ila Usage, 1860-1960* (Münster: Lit, 2000), 274.

where Toka, Leya, and Totela speakers were settling may be tied to the spread of other recent innovations tied to hunting, such as the spread of the Kusi word *-nyàngá for “horn” as a term for “ivory” downstream, or, upstream, among Botatwe speakers in the western region, as a term for “man of ivory” or “big ivory.”

Similarly, the ancient Bantu root for spear, *-gòngá (813) took on the specialized meaning of “elephant spear” among Ila speakers and, possibly, Tonga speakers who apply the word to long-bladed spears that are particularly suited to elephant hunting. Although it is possible that this semantic shift occurred earlier in the second millennium amongst Proto-Kafue speakers, none of the other Kafue languages studied attested this root. It is more likely, therefore, that the specialization of meaning was a result of the intensification of ivory trading to the east and west of the plateau region in the 19th century.

The Botatwe speech communities created by the divergence of Proto-Kafue continued to develop words to talk about new fishing tools, but the pace of innovation slowed dramatically for a number of reasons. Some of the societies that diverged from Proto-Kafue, such as the Tonga or Proto-Falls speech communities, moved into the drier southerly *miombo* environment with fewer rivers, streams, and flooded grasslands. Those Botatwe who moved into the Zambezi valley had to contend with the swifter waters of both the main river and the tributaries that flowed down the steep escarpment. Secondly, the climate again shifted to cooler, drier conditions from the 14th to the 16th centuries, limiting rainfall and constricting productive annual streams and fishing holes, except in places like the Lukanga swamps and Blue Lagoon wetlands of the Lenje and Sala, respectively. Finally, the intercontinental trade networks from which Botatwe peoples had been acquiring glass beads, shells, and other rare items for centuries, were now intensifying their

activities and extending their reach further into the interior. The intensification of this trade shaped new economic opportunities in particular ways, according a community's trade partners, the personal skills of its members, and the commodity demands on both sides of the exchange.

Lenje, Sala, and Tonga living on and to the northeast of the Batoka Plateau during the second half of the second millennium derived a series of words to talk about new forms of hunting and fishing by enclosing prey from an inherited verb, *-yala (814) "to enclose or encircle." As described in Chapter 6, the fishing innovation, *buyali, was a fish fence that was stretched across the river and used to drive fish towards a line of fishers with large, submerged trawling baskets or fish traps. These fences could also be used in a stationary fashion, in which case traps like *moonoo were inserted.

The inherited verb *-yala was also used to innovate hunting vocabulary and attests to overlaps in the skills and tools of food collection. In Tonga, the verb *kuyala* means "to hunt for birds." In Lenje it glosses as "to hunt in a group with nets" and in Soli as "to hunt in a group (by burning the bush or with dogs)." The distribution of *kuyala* among adjacent languages in the eastern Botatwe area and its same phonological form in all three languages suggest that *kuyala* was not inherited from a common ancestor but spread between the three languages after their divergence from their common ancestral language, Proto-Kafue. It was probably innovated by Tonga or Lenje speakers around the mid second millennium when they settled more permanently into drier environments. These speakers drew on an older, inherited meaning of *-yala, "to close, shut in, or to dam in," which is attested more broadly in eastern Botatwe languages, in order to invent the new meaning of *kuyala*; *-yala described the action of hunters, often using dogs, fire, and nets, as they encircled game when hunting in large groups in open savannas. The timing of this innovation, coinciding as it does with the extension of intercontinental trade networks into

the middle Zambezi river valley, suggests that Botatwe hunters, now residing in the hinterland of those trade networks, developed new forms of hunting to meet the demands for ivory, meat, and skins. We will explore this history in more detail below.

8.5 Linguistic Evidence of the *Mfecane*: Lozi State Expansion in the West

In the western Botatwe region, the history of fishing technology was most dynamic in the mid to late second millennium, after the divergence of Proto-Western Botatwe. Similar to developments in the eastern Botatwe languages, western Botatwe peoples expanded their vocabulary, adding words to talk about fishing with nets, traps, and spears. Just as they had learned many new words for riverine antelopes and wetland ecologies, western Botatwe societies acquired much of their fishing vocabulary from fishers living in the Zambezi floodplain.

Initially, the keen fishers of this region spoke Luyana, a Western Savanna Bantu language. In the 19th century, when the Sotho-speaking Makololo were pushed northward as a result of disturbances associated with the *mfecane*, they sought refuge near the Batoka Plateau after hearing of plentiful cattle in the region. Ndebele attacks prompted the Makololo toward the Luyana-speaking Lozi kingdom of the Zambezi floodplain, which they conquered. Thus, the language of the Lozi kingdom shifted to Kololo-Sotho when Kololo peoples gained power, though what came to be known as SiLozi or Lozi was strongly influenced by Luyana and other neighboring languages, including Botatwe languages. The Lozi language of which we speak here is, therefore, a Kusi language and became the regional *lingua franca* as the Lozi empire expanded throughout the 19th century, remaining so even when control of the Lozi kingdom shifted back to the Luyana royals.

The political prestige of the Lozi language and the strength of the new Lozi polity precipitated a number of changes in the vocabulary of speakers of Botatwe languages. As the Lozi polity spread eastward, speakers of Botatwe languages borrowed heavily from this new *lingua franca*, often losing much of their inherited vocabulary. Yet, Lozi speakers also borrowed from Luyana and western Botatwe languages as they settled amongst and sought to rule over speakers of these languages. Indeed, as Lozi speakers adopted local words into their language, they helped to spread those words.

With respect to the vocabularies associated with wild resource use, most reconstructions attest to two motives for exchanging words associated with wild resource: the exchange of fishing technologies and the need to talk about the tools of violence, tools that overlapped with hunting vocabulary. Botatwe knowledge of these vocabularies, particularly the overlapping lexicon of predation on animals and people, spread as Lozi elites sought to extend their tributary control over the region between the Zambezi and Kafue Hook and the reach of their raiding parties well into the Kafue and Batoka Plateau regions. But let us first consider the shared words of fishing.

Botatwe societies as far to the east as the Mosi-o-Tunya waterfall, for example, adopted a word for angling, *-shuta (815), either replacing the ancient inherited root *-dób- or simply using both words interchangeably. As noted in Chapter 7, it is difficult to determine whether the root was a Proto-Zambezi Hook innovation that spread under the influence of Lozi adoption or whether the root itself was originally Lozi; regardless, the status of SiLozi as a regional *lingua franca* by the late 19th century was an important factor in the distribution of the root.

Lozi speakers spread other words all the way to the eastern edges of the Botatwe region. For example, the Lozi introduced a new kind of fishing net, *kanyandi (816), to the eastern

region, though it is not certain that the term was originally a Lozi word. Although its distinguishing features are hard to reconstruct, the *kanyandi net may have been strong enough to use for both fishing and hunting as Botatwe speakers today apply the term to nets used in both activities. Botatwe speakers also borrowed Lozi words to name the fish they caught. Mbalangwe and Fwe speakers living along the western edge of the Zambezi hook and in the swampy areas of the Caprivi Strip borrowed the Lozi attestation of the Kusi word for “bream,” *mbuC_y (817). Finally, a number of Botatwe communities adopted the Lozi word *ingweshi (818) “for tiger fish.” This compound noun combines *-gùè, “leopard” and *-tj, “fish.”

A final reconstruction helps us to understand why Botatwe speakers were so keen to borrow Lozi words to talk about fishing activities, activities that they had been practicing for millennia and for which they had inherited Botatwe words. Just as the concentration of areal innovations in fishing vocabulary along the Zambezi region in the middle of the second millennium tells us that Botatwe societies, along with some of their Sabi and Kusi neighbors, were augmenting their fishing knowledge as intercontinental trade routes extended into the region, so too did western Botatwe societies in the 19th century take advantage of changing economic opportunities by learning more about fishing and carefully choosing the words and technologies they employed when practicing this craft. Among Lozi speakers, the word *-ndui (819) was an attestation of a Kusi term for “fisher.” For Totela, Subiya, and Fwe speakers, this term was adopted and for the Subiya in particular it took on the meaning of a professional or very skilled fisher. As these communities fled the expanding polities centered on the floodplains (first that of the Luyana speakers and then that of the Kololo speakers), they moved into the swamps of the Caprivi region. Subiya speakers saw the economic advantage of specializing in the resources of the new environment. Moreover, the immediacy of fish as a source of food must

have figured prominently in strategies to cope with raids, abandoned fields, and displacement as well as means to feed mobile raiding parties, trading caravans, and other displaced people. Yet, the decision to use Lozi rather than Botatwe words suggests that some speakers of western Botatwe languages were responding specifically to the opportunities of sending fish into the tributary systems of the Lozi state.

Vocabulary for the overlapping technologies of hunting and warfare suggest that sometimes these skills were talked about not in terms of exchanging ideas but because they were used by speakers of one language, usually Lozi, against the speakers of other (Botatwe) languages. For example, Lozi speakers introduced the *-tèbè (820), “shield,” a tool of war for which Botatwe languages seem not to have had a word before the violence of 19th century. Yet, this tool was probably not invented by the Lozi specifically to give them an advantage during raids against Botatwe peoples because glosses in Sotho and Lozi hint at etymological connections with medicine, presumably for the success of war parties. It is likely that this shield was invented as a kind of war medicine, either during the period of Sotho consolidation under Moshoeshe on the eastern highveld or during the *difaqane* on the western highveld. Kololo people moved north from the highveld around Dithakong, raiding Tswana states east of the Kalahari before warring with the Ndebele and eventually settling in the Zambezi floodplain and taking over the Lozi kingdom of the Luyana.

Similarly, a new word for “quiver” appears in western Botatwe languages in the form attested in Lozi for “bag of any kind”: *mukotana (821). The root derives from *-kota, “to encircle, to surround,” with a reciprocal extension to describe encircling on itself to “hold” or

“contain.” form a container.³² Yet, it is such a simple semantic extension that it may be that the innovation occurred multiple times. What is important about the invention of a word to talk about a container used to carry a number of arrows is that a quiver, carried at the side, is useful in warfare but probably a hindrance in hunting.³³ The areal form *mukotana is indirect evidence of the violence associated with the arrival of the Kololo and their expansion of the Lozi state. Generally, the ethnographic record, fieldwork, and the phonology and distributions of words for “quiver” in adjacent languages demonstrate that Botatwe speakers did not use quivers in hunting in the past. The introduction of quivers was almost certainly tied to the violence and warfare of the last three hundred years.

8.6 Violence and Uncertainty in the East: 19th Century Slave and Ivory Trading

Just as the impact of the *mfecane* was felt in the western region of the Botatwe speaking world as Kololo people conquered the Luyana-speaking Lozi state and sought to expand the influence of their new state eastwards and southwards into Botatwe speaking areas, the disruptions of the *mfecane* were equally felt in east central Africa. Yet, very little Botatwe vocabulary attests to the *mfecane* in the east because Sabi speakers buffered Botatwe speakers from the direct effects of the raiding and state-building of well-organized Ngoni military bands.

³² The meaning of quiver exists in noun class 3 in both zone J in the Great Lakes region and in the Botatwe borrowings of the Lozi term. See BLR3 8285 for the zone J reconstruction.

³³ In hunting, archers needed few arrows because they applied poison to the tip of the arrows and needed only to graze the animal once to bag it. After hitting or grazing the target, the hunter needed to chase after the scared animal, often running and stalking over long distances for several hours. I have found little evidence of poison used on arrows used in warfare and suspect that hitting the enemy, rather than poisoning him, was the goal of military archers. Perhaps the goal was to lame the enemy to take away his capacity for violence, rather than to kill him.

Rather, vocabulary associated with wild resource use, the overlapping activities of predation on people, and exchange through trade in the east attest to the complicated interplay between the opportunities and violence of the 19th century caravan trade. For example, the near universal block distribution of *(i)nkoli (822), “club, knobkerrie,” in Botatwe languages and their Sabi neighbors suggests that this weapon is a recent loanword that spread rapidly through the region. Indeed, attestations in Sabi languages to the east, particularly in Bisa and Bemba (languages spoken by the active raiders and traders living between the Botatwe and the frontiers of the Yao and Nyamwezi) suggest that the knobkerrie, along with rarer, more expensive guns, was one of the weapons of slave raiders provisioning Indian Ocean merchants with slaves and ivory. This low cost, simply constructed weapon could have been used by local populations in self-defense during travel to and from fields, neighbors’ homes, and relatives’ villages. Though it was not likely used to capture slaves, the *inkoli* may also have been deployed against slaves during the march to the coast. The constant violence spreading through east central Africa in the 19th century was an entirely new experience that required novel vocabulary to discuss.

Another word new to Botatwe speakers living on the Batoka Plateau attests to the violence on the fringe of the caravan trade. The *-linga (823) was a kind of point, usually of a spear, though the same root was also used to refer to a stockade. The dual meanings of this root as a weapon and a fortified shelter speak directly to the violence endured by Botatwe speakers and their neighbors to the east in recent centuries. Indeed, the word probably spread from the east, though the exact source is uncertain.

The literature on the extension of the ivory and slave trades into south central Africa focuses on the disastrous effects on local communities: the dissolution of villages, the instability of older forms of political power, the scarcity of food and shelter. Vocabulary like *-linga and

*(i)nkoli attest to the constant fear and profound social upheaval experienced by many people living in south central African in the late 19th century.³⁴ Yet, the distribution of other words related to ivory hunting remind us that the infamous Yao, Nyamwezi, Kamba, and Chikunda traders and hunters may not have been the only entrepreneurs profiting from the intensification of Indian Ocean trade in ivory and demand for slave labor to and at the coast.

For example, *nkombalume* (824) were elite, professional ivory hunters who traveled through the greater Zambezi valley and its hinterland with an entourage of assistant hunters, cooks, camp keepers, and hangers-on.³⁵ This word probably spread from either Shona or Chikunda hunters of the middle Zambezi north of the river to the lands of Bisa, Soli, and Lenje hunters.³⁶ The word had certainly reached Soli and Lenje speakers by the late nineteenth century with the meaning ‘professional hunter’ but its origins probably lie in an earlier history of the middle Zambezi.

It is most likely that the oldest meanings of the root can be seen in Shona, as Shona attestations follow a phonological pattern demonstrating inheritance with the meaning “successful hunter.” Shona speakers also attest a probable source root as well the widest range of meanings derived from that root. These meanings derive from *-komba*, “to bend, esp. metal; to

³⁴ For south central Africa, the classic work is Marcia Wright, *Strategies of Slaves and Women: Life-stories from East/Central Africa* (New York: L. Barber Press, 1993). See also Alpers, *Ivory and Slaves*; Isaacman and Isaacman, *Slavery and Beyond*; Sheriff, *Slaves, Spices, and Ivory in Zanzibar*.

³⁵ For descriptions of *nkombalume* at work, see Marks, *Large Mammals and a Brave People*, 61-3; Isaacman and Isaacman, *Beyond Slavery*, chapter 3.

³⁶ For a history of Chikunda contacts with Botatwe speakers living along the frontier of Chikunda elephant hunting, see Isaacman and Isaacman, *Beyond Slavery*, chapter 3. However, Isaacman and Isaacman do not say anything about the spread of the vocabulary or technologies of elephant hunting to these other communities.

be striking, important, beautiful, strange, valuable etc.”³⁷ This root produces a set of words that are tied to the ideals of fame and bravery; some meanings also imply fame that comes from sexual exploits.³⁸ It is likely that Chikunda elephant hunters were borrowing these older (Proto-Shona?) ideas about heroism and bravery and their links to fame deriving from sexual behavior when they named themselves *nkombalume*. When we consider the constellation of meanings tied to the root *-kòmba*, it comes as no surprise that Isaacman and Isaacman argue that Chikunda, who relied on elephant hunting as a way to make a living and sustain new polities once they were freed from the status of military slaves with the collapse of the *prazo* system, wove together ideas about elephant hunting and masculinity to create a Chikunda ethnic identity.³⁹

The Shona origins of *nkombalume* immediately raise the question of the role of ivory hunting in tying different outlying regions on the Zimbabwe plateau to neighboring societies from the 13th century.⁴⁰ At the height of the Great Zimbabwe state, outlying zimbabwe were often situated to exploit local resources: salt pans in the far west, gold in the midlands and to the southwest, north, and east. In areas without such obvious mineral wealth, taxation on trade and hunting for ivory were, with herding and agriculture, central to financing the social stratification and culture of the wealthy. From the 15th century, successor states built on the Great Zimbabwe

³⁷ M. Hannan, *Standard Shona Dictionary*, 2nd ed. (Salisbury, Southern Rhodesia: Rhodesia Literature Bureau, 1974): 71, 278. See also *-kúmb- ‘to bend’ BLR 3 2120; C.S. 1266 with a distribution in zones B C D H J K and L.

³⁸ It is difficult from the dictionary entries to determine whether sexual exploits were sanctioned or accepted because missionaries, colonial officials concerned about the spread of sexually transmitted diseases, and anthropologists whose research simplified recognized forms of marriage and sexual relationships probably influenced glosses like “adulteress” or “lover of a married woman.”

³⁹ Isaacman and Isaacman, *Beyond Slavery*. This argument appears throughout the text but is most carefully considered in chapters 1, 2, and 3.

⁴⁰ Beach, *The Shona*, 90-1.

model, defining tribute in ivory as a ruler's right and exterminating nearly all the elephants in the Zimbabwe heartland.⁴¹ Attempts to extend the reach of Mutapa's territory into the Zambezi Valley were likely tied to the decimation of local elephant herds.

Soli and Lenje speakers may have paid tribute in ivory to Mutapa or, later, to Chikunda states; indeed, they may have joined the entourage of famous *nkombalume* hunters, even achieving that rank themselves. Many Chikunda freed from positions as warrior-slaves on the *prazos*, either joined Soli, Lenje, and Tonga communities, were asked to settle near them to help protect local communities from the raids of Ngoni, Yao, and Swahili, or accepted Botatwe peoples into their own settlements. There was ample opportunity to exchange knowledge of elephant hunting from Chikunda *nkombalume* to Botatwe hunting apprentices.⁴²

Other terms attest to similar contacts with the Indian Ocean trade of the Swahili and extends the territorial scope of the history of the social aspirations of Swahili speaking slaves and lowborn freemen. Lenje speakers used the word *fúndi* (825) when they spoke of professional hunters, specifically those who used a gun. The root spread to the eastern Botatwe region through Swahili speaking ivory and slave traders, either via Bisa and Bemba speakers who worked in close connection with Swahili speaking traders in the northeastern region of modern-

⁴¹ Ibid, 103.

⁴² Indeed, there is some evidence that Chikunda introduced hunting axes and other tools to the Tonga: Barrie Reynolds, *The Material Culture of the Peoples of the Gwembe Valley* (Manchester: Manchester University Press for the National Museums of Zambia, 1968): 17, 59, 75, 189, 194, 197. For settlement among or near Botatwe peoples, see Isaacman and Isaacman, *Beyond Slavery*, chapter 6, especially 209 and 211. For Chikunda contacts with and settlement amongst Gwembe Tonga, see Timothy Matthews, "Portuguese, Chikunda, and the People of the Lower Gwembe Valley: The Impact of the Lower Zambezi Complex on Southern Zambia," *Journal of African History* 22 (1981): 23-41.

day Zambia or through direct contacts between Lenje, Soli, and Swahili speaking traders.⁴³ As was the case with *cibínda (826), whose range of meanings emphasized expertise, Swahili speakers similarly developed the term *fundi* from an older, Mashariki root, *-tund-, “to teach.”⁴⁴ In its original meaning, *fundi* referred to a “craftman, skilled worker, or expert”; the meaning of “professional hunter (usually with a gun)” was a development of the Indian Ocean ivory trade. This extension tells us that those involved with the caravan trade of the late 19th century not only saw themselves as specialists but that they understood their knowledge—rather than their superior tools—to be the underpinning of their success and their labors to be more akin to those of blacksmiths and other craftsmen than those of traders.

When a Swahili speaker, particularly a slave, introduced himself to south central Africans as a *fundi*, he asserted a status of specialist craftsman. When know from Jon Glassman’s detailed analysis of the strivings of Swahili slaves that the power to act autonomously and to build relationships with others beyond the bonds to the master rested on a slave’s ability to redefine his position within the language of patronage. Claimants to *fundi* status had greater opportunities to achieve the autonomy and standing of a client. When a Lenje, Bisa, Bemba, or Soli speaker appropriated the term in describing the Swahili-speaking traders he knew or even in describing himself as a “*fundi*,” he created a discursive space in which the aspirations of Swahili speakers from the coast came to have meaning. Sites beyond coastal society, at the far reaches of the caravan routes may have been places where slaves established impermanent but autonomous households and practiced the lifestyle of an urban Swahili merchant, essential steps in asserting

⁴³ On *fundi* hunters, see Alpers, *Ivory and Slaves*; Marks, *Large Mammals*; Roberts, *A History of the Bemba* and Jonathon Glassman, *Feasts and Riot: Revelry, Rebellion, and Popular Consciousness on the Swahili Coast, 1856-1888* (Portsmouth, NH: Heinemann, 1995): 85-96.

⁴⁴ BLR3 3122; C.S. 1876.

client (rather than slave) status through the ideals of patriarchy shared with the master.⁴⁵ Perhaps Lenje, Soli, and other central Africans were the clients and slaves of Swahili slaves. The geographic mobility of enslaved Swahili *fundi* was certainly tied to their capacity to accumulate the relationships necessary to display their social mobility to their peers in caravan.

The words of the Indian Ocean ivory and slave trades were not limited to east central Africa. Hunters, traders, and the people whose lands they moved through carried a word for specialist ivory hunter, *-nyanga (827), into the western Botatwe region. This noun derives from a Kusi innovation for “horn,” *-nyàngá. However, the root spread along the Zambezi as an areal with the meaning “ivory” in the Yao, Bisa, and Lwena languages, undoubtedly during the late second millennium ivory trade, probably in the 19th century.⁴⁶ The root spread into the western Botatwe languages, perhaps via Lozi or up the Zambezi River, in a form referring to “specialist hunter,” surely a specialist elephant hunter, given the gloss for this root in other languages.

The distribution of the different semantic innovations applied to the Kusi innovation for “horn” tell us about the directions and contacts developed during the closing centuries of the second millennium as central African people found themselves on the frontiers of the Atlantic and Indian Ocean ivory trades. Coupled with roots like *nkombalume* that spread along the Zambezi and Luangwa Rivers and into their hinterlands, we are able to outline two major sources of the later 19th century trade. Indeed, the Luangwa and the north-south corridor from the Zambezi floodplain to the wetlands of the Linyanti and Chobe are still migratory paths for elephants.

⁴⁵ Glassman, *Feasts and Riot*, 74-8, 85-96.

⁴⁶ Ehret, “Subclassifying,” 136.

8.7 Conclusion

The history of societies living on the hinterland of regional processes of state building and the intensification of trade remain little known, despite the important role of these societies in supporting, extending, and confounding attempts by courts and traders to regulate commercial and political life on the frontier. Though the development of a uniform court culture was supposed to facilitate tribute, centralize power, and justify state violence, the actual experience in the territories courts sought to control followed an older pattern of cultural and linguistic mixing. The unique historical context of state building transformed the character and significance of older patterns of mixing and interaction because the interests of the state and, later, of powerful traders were tied to the productive capacities and specialized skills of some people more than others. No one in Botatwe speaking lands could match the importance of the elephant hunter whose potential contributions of ivory to state coffers and traders' merchandise and whose renown as a specialist in predation and violence could both realize the aspirations of the courts and traders and also symbolize the capacity to thwart such ambitions. The ever-higher stakes in trade and ever-graver threats of violence undermined older Botatwe methods of incorporation, which had been unfolding since the 6th century, a shift that can be seen in the territorial scope and predominance of languages like Bemba, Nyanja, and Lozi on the margins of the Botatwe area.

The words that have entered the vocabularies of Botatwe languages in recent centuries testify to the violence and uncertainty of life in 19th century central and southern Africa, a history we know from other kinds of sources. Yet, a survey of terms related to wild resource use reveals that some unique speakers of Botatwe languages saw, in these new kinds of contact, ways to take

advantage of the needs of traders, raiders, and displaced communities to achieve wealth and social standing, even as they sought to protect themselves from the dangers of these kinds of contact. These strivings did not occur in a social vacuum; the possibilities exploited by ivory hunters, for example, required a complicated rethinking of sources of wealth, the means of building networks of people, and the locations of authority within the social fabric of the local and regional community. To understand how Botatwe speaking communities were able to successfully participate in the wealth and prestige of tributary and trade networks without succumbing to the control of centralized states nor developing their own centralized systems of political rule requires that we consider the motives of those talented individuals who produced the products in such high demand. The history of words for skilled hunters, explored in the next chapter, suggests that in addition to a tradition of decentralized leadership, reputations for great skill and knowledge were an important check to the consolidation of wealth and authority.

PART THREE

**STRATEGIES OF POWER AND WORK
IN THE BUSH, CA. 1000 B.C.E. TO CA. 1900 C.E.**

CHAPTER NINE HUNTING REPUTATIONS: POLITICAL CULTURE IN THE EAST¹

A Tease as a Preface

Sometime between 1906 and 1934, the Reverend John Price returned to the Primitive Methodist mission station at Kasenga, on the fringe of the Kafue floodplain in Northern Rhodesia, after the day's journey through local communities. As was his habit, Reverend Price typed short notes in an uneven, ever-changing orthography about the words, proverbs, and stories he had heard on the house verandahs and in the fields of the Ila speakers amongst whom he lived.² On one occasion, he had witnessed an unnamed Ila man, known to be a poor hunter,

¹ This chapter focuses almost entirely on developments in communities that spoke languages of the Eastern Botatwe branch because the better ethnographic record and rich dictionaries support a more detailed assessment of the relationship between wild resource use and notions of power.

² In 1893, as part of the missionary scramble for Africa, the Primitive Methodists established their mission at the large village of Kasenga. This mission was to produce one of the finest bodies of language documentation in the region, rich in ethnographic details, long in its period of collection, and careful in the delineation of borrowed words and attestations from neighboring 'dialects.' Although all the missionaries at Kasenga lived in the shadow of the amateur anthropologist and linguist Edwin Smith, the Reverend John Price remains one of the least known figures attached to the mission because he never published an ethnography or memoir detailing his three decades living with Ila people at Kasenga and, later, Nanzila. Yet, Price returned from his work each day to type notes that form the largest contribution to the Ila lexicon collected at the mission. For a wonderful biography of Edwin Smith and the

return to the village from the bush, carrying his quarry. The villagers made a great song and dance, as they do welcoming home successful hunters up to the present day. But, according to Price's notes, this particular turn of events, the success of a poor hunter, called for Ila people to share the tale of the boastful old man:

Kanyama kayaya mukando, kabilabila kavunukulwa. 'Ubwasunu ndayaya cinicini, tulalya kabotu, ndi ucoolwe!'
 "An old man killed a very small animal, and kept opening the pot to see it boiling.
 'Today I've made a magnificent kill, we'll have a feast. I'm so lucky!'"³

With this episode of teasing in early twentieth century Ila country, we capture a glimmer of a far deeper story about the importance of reputations to the activities of the village and the bush and to the work of building relationships of loyalty and affection that shaped the politics of people living on the central African plateau thousands of years before Reverend Price's daily note taking.

This chapter seeks to understand why Botatwe speakers invented words for people with reputations, especially reputations in hunting, and why those words shifted meaning from the 11th to the 19th centuries. Unlike the historical arguments presented in previous chapters, here I focus on the changing meanings of one word, *mwaalu*, "successful, respected, celebrated hunter," to demonstrate the potential theoretical and historiographical contributions of a deep history of reputation building. Historicizing how people made and contested reputations in ancient central Africa foregrounds the affective dimensions of power and identifies new loci of

work of the Primitive Methodist Mission, see W. J. Young, *The Quiet, Wise Spirit, Edwin W. Smith (1876-1957) and Africa* (London: Epworth Press, 2002).

³ Dennis G. Fowler, *The Ila Speaking: Records of a Lost World* (Hamburg: Lit, 2002), 174.

authority and processes of network-building that could function both within and outside the political reach of institutions typically historicized for the precolonial African past.

As scholars have studied the ancient past of Africa, they have constructed a gap between our understanding of the development of institutions of political, social, and economic life and historically contingent ideas about individuality as experienced by those who peopled such institutions. On the one hand, this would seem to be a methodological problem: how can we know what it meant to be a unique individual at particular moments in the past when our historical data so rarely unearths evidence tied directly to individuals we know to have been unique among their peers (in the case of archaeology) or cannot do so (in the case of linguistic data)? On the other hand, scholars of Africa's precolonial past have inherited a historiographical focus on the development of institutions. This focus is, in part, a legacy of the evolutionary and structuralist interests of anthropologists writing the ethnographies used to interpret archaeological, oral, and linguistic traces from far earlier periods.

The early history of south central Africa poses a challenge to the institutional focus of precolonial history: how do we historicize relationships that bound together networks of individuals when the institutions typically thought to organize and legitimize them—lineages, clans, chieftaincies, economic guilds, and ritual specialists—are either absent or of relatively recent time depth? The evidence from south central Africa suggests that precolonial politics followed the classic model of a Big Man society: personal achievement was the qualification of acquiring and wielding power to build ephemeral communities of followers. But historical evidence for people who acquired reputations for their unique skill in common activities, such as hunting, planting, or cooking, tells us that reputations were not only wielded by leaders with political aspirations. This chapter traces the history of the word *mwaalu*, “successful, respected,

celebrated hunter,” to understand how the contingent content of being recognized as a uniquely skilled individual contributed to the political work of gathering together individuals with the capacities to build a successful community.

In Chapter 6 we learned that a series of innovations in the technology and organization of hunting unfolded during the early centuries of the second millennium within the floodplains of the Kafue River, allowing the *mwaalu*, a new kind of skilled and respected hunter, to create ties of indebtedness by sharing the spoils of the hunt. As discussed in Chapter 8, the intensification of intercontinental trade networks and the spread of currencies facilitated the movement of people and the things they traded. These changes transformed the political potential of the work of a *mwaalu*. As we will see, from the 14th to the 19th century, Botatwe speakers borrowed words to talk about new kinds of hunters who had reputations for great skill and bravery: elephant hunters. As the definition of how one acquired and demonstrated skill and renown in hunting changed with the opportunities of the ivory trade, so too did the way Botatwe speakers thought about the importance of, *mwaalu*. A *mwaalu* came to be esteemed as an “elder” on the Batoka Plateau and in the Kafue Region and valued as a “friend” and “companion” on the eastern fringe of the Botatwe area, where participation in the ivory trade was most intense. The redefinition of “*mwaalu*” from a hunter of great skill and reputation to an “elder,” “friend,” and “companion” allowed people to emphasize connections with these uniquely skilled people on the basis of affection and respect. These bonds drew on familiar ideas about obligation and indebtedness that were shared by lineages and clans, but within relationships that stood outside the power dynamics of kinship, which were manipulated to sell “family” into slavery by the 19th century.

Thus, to understand the potential contribution of the history of reputation to the study of power in precolonial Africa, we need to know more about the political and social institutions of

ancient south central Africa and current research on individuality in the African past. Armed with the interventions of these literatures, we can better understand how the history of building reputations in ancient African history has the potential to contribute to what we know about the loci of power within networks of people and the processes of building such networks, only some of which innovated the ideological and material resources to effectively perpetuate themselves as the familiar institutions of precolonial African history: clans, ritual cults, and chiefs.

9.1 Clans, Ritual Leaders, and Chiefs in Botatwe Societies

Although the legacy of structuralism severely limited which loci of power and what processes of network building were recognized within African societies, the scholarship on the history of precolonial institutions is far from being bankrupt. At the heart of this work are ongoing critiques of evolutionary models of political development and of the social institutions, like lineages and clans, which were once understood to be building blocks in the linear development of centralized political complexity. By treating social institutions as products of history rather than systems with an internal scalar logic that drove development toward hierarchically organized complexity, these historians and anthropologists broaden our understanding of the domains in which power was used to build communities around both control of material resources and the capacity of people to harness speech, knowledge, and other non-material sources of power. These institutional histories highlight the diffusion of power and the possibility that complexity can be heterarchically organized. They also shift the explanation of precolonial state building from the layering of increasingly larger scale institutions atop one

another to the means by which recognizing a shared leader across webs with multiple loci of power helped different kinds of leaders ensure the well-being of their communities.⁴

There is a tension, however, in this body of historical scholarship, for both the leaders and the members of those institutions typically historicized in the precolonial African past—royalty and chieftaincy, lineages and clans, guilds, healing cults, etc.—shared a group identity based on historically contingent ideas about what it meant to be a particular kind of individual—a descendant of the same ancestor, a skilled hunter, a widow or an infertile woman. While we know a great deal about the development, organization, and leadership that collected and perpetuated groups of individuals by inventing the ideologies and material realities underpinning institutions, we know decidedly little about the historically contingent content of the multiple individualisms experienced by people living in the ancient past. The point is not to reject or supplant institutional history with the history of individuality, but, rather, to recognize that the experiences of what it meant to be both an individual and to belong to institutions at particular moments in the past were deeply interconnected; we cannot study them in isolation from each other because separating them creates a false distinction between them. Indeed, to study institutions and individuals in isolation is to fall into the trap of privileging either agency or social structure, when it is the historian's task to highlight contingencies and connections in the development of each.

⁴ Susan Keech McIntosh, "Pathways to Complexity: an African Perspective," in Susan Keech McIntosh, *Beyond Chiefdoms: Pathways to Complexity in Africa* (New York: Cambridge University Press, 1999). See also chapters by de Maret, Schoenbrun, and Robertshaw in that volume as well as Andrew Apter, *Black Kings and Critics: The Hermeneutics of Power in Yoruba Society* (Chicago: University of Chicago Press, 1992); Steven Feierman, *Peasant Intellectuals: Anthropology and History in Tanzania* (Madison: University of Wisconsin Press, 1990); Holly Hanson, *Landed Obligation: The Practice of Power in Buganda* (Portsmouth, NH: Heinemann, 2003); Neil Kodesh, "Networks of Knowledge: Clanship and Collective Well-Being in Buganda," *Journal of African History* 49 (2008): 197-216.

Although a complete reconstruction of precolonial social and political institutions is well beyond the scope of this project, the histories and ethnographies of Botatwe speaking peoples, though few in number, can tell us something of the development of such institutions. Botatwe communities were politically decentralized before 1900; indeed, many remain so to the present day. Despite a rich body of scholarship questioning the historical salience of categories like lineage, clan, kin and family in other regions of Africa, the sparse scholarship on precolonial history of south central Africa has yet to catch up.⁵ Historians and archaeologists presume that societies in south central Africa were generally egalitarian and that relationships based on kin (real or fictive) and organized into lineages and clans dominated social organization and political opportunity.⁶ For example, Ahmed notes that “[c]lan membership played the primary role in the political structure of the rest of the matrilineal people in this region [aside from the Bemba]... before the post [sic] 500 years, the clans probably formed independent political entities.”⁷

⁵ Consider, among many: Adam Kuper, “Lineage Theory: A Critical Retrospect,” *Annual Review of Anthropology* 11 (1982): 71-95; Wyatt MacGaffey, “Changing Representations in Central African History,” *Journal of African History* 46 (2005), 189–207; Megan Vaughan, “Which Family?: Problems in the Reconstruction of the History of the Family as an Economic and Cultural Unit,” *Journal of African History* 24 (1983): 275-283. Jane Guyer outlines the relationship between earlier anthropological categories like ‘lineage’ and Marxist revisions to this vocabulary through studies of the ‘household’ in “Household and Community in African Studies,” *African Studies Review* 24 (1981): 87-137. Later, with Belinga, Guyer argued that the violence and social collapse initiated by colonialism rendered other options of social organization untenable such that kinship relations came to the foreground as the (remaining) central building blocks observed by Europeans. Jane Guyer and S.E. Belinga, “Wealth in People as Wealth in Knowledge: Accumulation and Composition in Equatorial Africa,” *Journal of African History* 36 (1995), 91–120.

⁶ Consider, for example, Kenneth Vickery’s argument that the egalitarian and decentralized nature of Tonga political organization and flexible marriage and settlement patterns were among a set of reasons that the Plateau Tonga developed a successful peasantry capable of competing against white settlers during the colonial period. Other reasons for the success of the Tonga relate to local ecology, the placement of the railway through the Plateau, and the spread of the plough. Kenneth P. Vickery, *Black and White in Southern Zambia: The Tonga Plateau Economy and British Imperialism, 1890-1939* (New York, Westport, CT, and London: Greenwood Press, 1986): Chapter 6.

⁷ Christine Ahmed, “Before Eve was Eve: 2200 Years of Gendered History in East-Central Africa” (unpublished Ph.D. diss., University of California, Los Angeles, 1996): 159.

Some central African communities have slowly, over the last 500 years, innovated a hierarchy among clans in which one dominated the others as the royal or chiefly clan. The concept of clan hierarchy and even some of the names of royal clans spread to Sabi speakers living to the east of Botatwe communities, who were probably borrowing Luban ideas about legitimizing political power. The use of royal clans by Sabi speakers and other south central African societies was a means of using connections to the prestigious Luban state to legitimize power, a well documented history.⁸

In the Botatwe region, only Soli and Lenje communities, who we know to have been in close contact with societies speaking Sabi languages, shared this innovation. Soli speakers borrowed a form of Nyangu clan chiefship, perhaps in the 19th century.⁹ Lenje speakers innovated the Mukuni chiefship, which probably has slightly earlier roots and seems to have mirrored the slow development of royal clans among Sabi speakers because the Lenje Mukuni clan, like the royal Ng'andu clan of the Bemba, claim links to the Luba kingdom. We are left with the impression that other Botatwe speaking societies were organized into clans, each ruled by a chief and forming its own unique polity. Indeed, Ahmed postulates that this political landscape of “numerous clan-chiefdoms with a decentralized political organization... probably dates back to the early Iron Age.”¹⁰ A consideration of the evidence for chiefship tests the proposed antiquity of this form of political organization.

⁸ The Bemba Ng'andu (Crocodile) clan is the best-known example, though Ahmed notes similar developments among the Nsenga, Lala, Bisa, Lamba, and Ambo. Ahmed, “Before Eve was Eve,” 160-1; Andrew Roberts, *A History of the Bemba: Political Growth and Change in North-eastern Zambia before 1900* (Madison: University of Wisconsin Press, 1973): Chapters 2 and 3.

⁹ Apthorpe 1959, 107 in Ahmed 162.

¹⁰ Ahmed, “Before Eve was Eve,” 161.

As with many other parts of the continent, with the advent of colonial rule in south central Africa, the British built the familiar ladder of indirect rule. Elizabeth Colson explains this process amongst Tonga speaking communities:

Before the coming of the Administration, political organization as we know it, with an orderly relationship between groups or statuses mediated through a set of official positions, did not exist. From the beginning, the Administration sought to build up some sort of local authority to maintain order and provide for the peaceful settlement of disputes. But here, contrary to the situation in many parts of Central Africa, it had to construct its hierarchy of authority anew since there were no local institutionalized foci of authority through which it could work.¹¹

Colson's observation for a lack of indigenous forms of chiefly authority is reflected in Botatwe vocabulary for "chief." There is no one word for "chief" in the Botatwe languages.¹² The phonological skewing of one word commonly glossed as "chief," *mfumu*, and its block distribution tells us that this word was recently borrowed, probably from the Bemba, whose political system impressed the British and served as a model throughout Northern Rhodesia. In a far older meaning, the root *-fúmú carries the meaning "big man" and "fame."¹³ The skewed first consonant value of /f/ rather than the shift to /v/ indicating an inherited word tells us that the Botatwe speakers borrowed the inherited form from Bemba speakers, who had already shifted its meaning to reflect the new role of "chief."¹⁴ The spread of this term into Botatwe languages was a result of either Botatwe speakers' earlier engagement with new Bemba ideas about political

¹¹ Elizabeth Colson, *Marriage and the Family among the Plateau Tonga of Northern Rhodesia* (Manchester, UK: Manchester University Press for the Rhodes-Livingstone Institute, 1958): 10.

¹² As Colson asserts: "Any figure comparable to that of a chief was non-existent," *Marriage and Family*, 31.

¹³ Jan Vansina, *Paths in the Rainforests: Toward a History of Political Tradition in Equatorial Africa* (Madison: University of Wisconsin Press, 1990): 274-5.

¹⁴ Inherited forms would follow a sound pattern with *mfumu* in Lenje and Soli and *mvumu* or *mhumu* in remaining eastern and western Botatwe languages.

organization around chiefs or of the British process of chiefmaking as part of the policy of Indirect Rule, which was meant to expedite the work of governance while seeming to maintain so-called traditional, indigenous forms of political organization.¹⁵

It is unclear why, in the absence of reconstructed words attesting to a deep history of chiefship, clan-chiefdoms may be traced into Early Iron Age politics of Botatwe speakers. Rather than assume that clans always had centralized leadership and were an enduring facet of Botatwe social organization, we need to understand why Botatwe speakers developed clans and how they defined their members. Linguistic and ethnographic evidence raise questions about the antiquity of an institution of clanship organized by an idea(l) of centralized clan leadership. Ila attestations of the term glossed as ‘clan,’ *mukowa*, also mean “family, generation,” suggesting that for Ila speakers in recent times the distinctions between family, generation, and clan were not crystallized into hierarchical categories of increasing scale and potential for centralized leadership.¹⁶ Elizabeth Colson explains that for the Tonga, clans “are not corporate bodies. They own no property, have no ritual centers or leaders, and never on any occasion assemble as a

¹⁵ Debates still rage about the role of the British in both appointing chiefs and creating ethnicities as part of a process of the ‘invention of tradition.’ Terence Ranger, “The Invention of Tradition in Colonial Africa,” in Eric Hobsbawm and Terence Ranger, eds., *The Invention of Tradition* (Cambridge: Cambridge University Press, 1983): 211-262; Idem., “The Invention of Tradition Revisited: the Case of Colonial Africa,” in Terence Ranger and Olufemi Vaughan, eds., *Legitimacy and the State in Twentieth-Century Africa* (London: Macmillan Press, 1993): 62-95. For a survey of the literature on the invention of tradition, creation of tribalism, and crystallization of customary law, see Thomas Spear, “Neo-Traditionalism and the Limits of Invention in British Colonial Africa,” *Journal of African History* 44 (2003): 3-27. For a descriptive example of these processes in the region, read Landeg White, *Magomero: Portrait of an African Village* (Cambridge: Cambridge University Press, 1987).

¹⁶ “Mukowa n.2 – a clan, family, generation. Ukulwila bamukowa takuzimwa (p) One must not hesitate to fight for one’s clan. Inkondo ilamana; njamukowa, telambilwa mulambo (p) The fighting is finished; since it was a clan affair, it was not necessary to be smeared with white clay.” D. G. Fowler, *A Dictionary of Ila Usage, 1860-1960* (Münster, Hamburg and London: Lit Verlag, 2000): 446.

group.”¹⁷ A *mukowa*, Colson explains, is a dispersed, unnamed matrilineal group, a much smaller corporate kinship group “guiding inheritance, succession, provision and sharing of bridewealth, vengeance and common ritual responsibility.”¹⁸

This definition relates well to the ephemeral sense of clan as family as generation in the Ila attestation of *mukowa*. Indeed, Colson notes that “matrilineal groups [*mukowa*] are bound together, however, by ties which are purely temporal and tied to the life-span of particular individuals.”¹⁹ In fact, Tonga on the Plateau might use any of a number of terms to talk about the ideas of the kind of relatedness Colson defines as the “matrilineal group”: *citiba*, *cilongo*, *cibuwa*, *mukwaasi*, *cikoto*, *cikombo*, *iciinga*, *luzubo*, and *cipani*. These words speak more to the fluid nature of the talk about kinship relations and debates about what a *mukowa* was and how it could be used to mobilize people than to an institution whose structure, rules, and shape can be reconstructed with any certainty into the deep precolonial past of Botatwe speakers.

Colson goes so far as to claim that Tonga people are honorary members of their father’s matrilineal group. Indeed, throughout her work, one sees a tension between trying to define the social organization of the supposedly “matrilineal” Tonga with the confining terms of structural-functionalist anthropology and the complicated reality created by communities whose social networks were extremely fluid. By the end of the 20th century, after more than sixty years of fieldwork among the Tonga, Colson concludes that freedom to move and shift associations and alliances was at the heart of Tonga social, political, and religious life; a pragmatic approach to

¹⁷ Colson, *Marriage and Family*, 15. See also idem, “Clans and Joking-Relationship among the Plateau Tonga of Northern Rhodesia,” *Kroeber Anthropological Society Papers*, Nos. 8 and 9 (1953): 45-60.

¹⁸ Colson, *Marriage and Family*, 16.

¹⁹ Matrilineal groups may even break apart based on personal differences. Ibid, 20.

making a living, rather than preserving current conditions, characterized the flexible, casual approach to concepts of neighborhood and kinship, which provided the idioms of the social networks and the material of the politics that make living possible.²⁰

It is perhaps not surprising, then, that the reconstruction of *mukowa* for ‘clan’ is strongly debated for the so-called matrilineal belt, despite the supposed antiquity of both matrilineages and matriclans. Vansina, who has worked with languages spoken to the west of the Botatwe languages, analyzed a reconstruction of the root, *-kóba. He argues that the distribution of the root across most of the matrilineal belt glossing as “navel cord,” “(matri-)lineage,” and “matriclan” demonstrates the phonological and semantic outcomes of diffusion and borrowings in multiple directions, rather than early invention of an idea passed down through inheritance.²¹ If *-kóba was invented as a strategy to limit inheritance, the concept of matriclan delineated by the root *-kóba, may have been borrowed from southern Angola into Zambia after the 8th century as a way of managing the inheritance of cattle herds and spreading the risk of cattle disease. Indeed, *mukowa* takes the shape of a loanword in Botatwe languages and must date, at the earliest, to the end of the divergence of Proto-Kafue, Proto-Machili, and Proto-Zambezi Hook in the 14th or 15th centuries.²² Yet, this history does little to grapple with the complex manipulation

²⁰ Idem, *Tonga Religious Life in the Twentieth Century* (Lusaka, Zambia: Bookworld Publishers, 2006): chapter 2, esp. pp. 28-9, 32-3.

²¹ He argues that the innovation from navel cord to matrilineage took place in southern Angola as part of the history of developing systems of cattle inheritance and loaning to disperse the risks associated with cattle disease. Yet, we have little sense of what, exactly, a matrilineage was or what a matriclan looked like when the root *-kóba spread to Zambia and took on the meaning ‘matriclan’ (why?), a point for which I am indebted to David Schoenbrun. See Jan Vansina, *How Societies are Born: Governance in West Central Africa before 1600* (Charlottesville, VA: University of Virginia Press, 2004): 88-98, esp. 94-5 for a discussion of the history of *-kóba and p. 97 for the conclusion that the creation of the so-called matrilineal belt “resulted from the coalescence of the areas of different diffusions from several independent centers.”

²² People use the word *mukowa* throughout the Botatwe area but the inherited form would take the shape *mukoba* in Soli and Lenje and *mukoba* and *mukova* in most other Botatwe languages.

of kinship that comes from the ethnography and semantic domains of Botatwe words like *mukowa*.

The complicated, changing content of terms like “clan” and “lineage” tell us that speakers living long ago used these words not to refer to some kind of stagnant, naturalized backdrop to the social and political stage but in specific historical contexts as part of the real doings of social and political life. Though kinship might have been used to explain the relationships that underlay clans, a growing body of scholarship suggests that, like other institutions thought to be defined by kinship, clans and lineages defined access to networks of both knowledge and material resources and developed to address particular concerns like inheritance, health, and safe travel.²³ Colson’s observation that Tonga matrilineal groups can disintegrate based on personal differences is a powerful reminder that people define kinship relations, kinship relations don’t define people.²⁴ The point underlying these observations is that kinship and an individual’s kin were resources tied up in both instrumental and ideological claims whose historical context ensured that the relationships between people and notions of kinship were mutual and dialectic.

Thus, to understand the nature of social organization in early Botatwe societies, we should focus on what people thought they could do by claiming kinship and consider what Colson calls “the basic Tonga formulation: those who help one another in a particular fashion are

²³ Schoenbrun and Vansina argue that lineality and its manipulation to define clans and lineages (matrilineal and patrilineal) developed in the context of concerns over the inheritance of new forms of wealth (perennially fruiting banana trees and cattle herds). Schoenbrun, *A Green Place, A Good Place*; Vansina, *How Societies*. Kodesh theorizes clans as networks of knowledge bringing together healers, barkcloth makers, diviners, etc. across expansive territories. Kodesh, “Networks of Knowledge.”

²⁴ Colson, *Marriage and Family*, 20. The literature on this point is vast; for a start, refer to citations in n.3, above.

relatives and those who do not so help one another are to be considered unrelated.”²⁵ If power did not adhere in clan chiefs until at least the 14th or 15th century and claims to help and indebtedness based on ties of kinship could be pragmatically made and broken, where else might Botatwe speakers have located the power to build communities?

The ethnography tells us to look in two places for ideas about power: in claims about firstcomers, whose links to the ancestors that made settled lands productive, and in accumulations of wealth and prestige. For example, among Tonga speakers “One man may receive recognition as the unofficial leader of the whole neighbourhood. He is referred to as the *sikatongo* (“owner of the neighborhood” [literally “man of the ancient settlement”]) or the *ulanyika* (“owner of the land” [literally, “eater of the bush”]).”²⁶ The ability to claim firstcomer status depended on lineality, for it was conferred on the person who himself or whose ancestor first moved into an area and converted it from bush into farmland. With the shifting of household settlements as soils lost fertility, families feuded, or the reputations of adept rainmakers and healers waxed and waned, the hereditary power imbued in a *sikatongo* or *ulanyika* was as ephemeral as the community of people who settled with him. The greatest continuity of leadership occurred in places where the position of *sikatongo* became linked to the custodianship of local shrines, but even such shrines were impermanent. Colson explains “his [*sikatongo*] authority... is dependent largely upon his personal qualities” until he is succeeded by “new leaders who in turn have their brief moment of authority.”

²⁵ Ibid.

²⁶ Colson, *Marriage and Family*, 30.

Another common Botatwe word that acquired the gloss “chief” with the advent of colonial rule, *mwami*, has an older meaning that illustrates earlier ideas about the ephemeral nature of authority. In Tonga, “[t]he term *mwami*, now commonly translated as ‘chief’, meant simply ‘important man’, ‘rich man’, ‘highly respected man.’”²⁷ Similarly, *mwami* is defined as “chief” in Fowler’s ethnographically rich Ila dictionary, but the gloss is followed by four proverbs that corroborate Colson’s depictions of leaders in Tongaland: that leaders need followers and should not exclude potential settlers, that leadership was not guaranteed by birthright, that personal qualities were at the heart of leadership, that “the authority of a leader is nebulous at best” for he is a man with flaws, that leaders were not necessarily followed.²⁸

Mwami n.1—a chief. *Mwami, ataakutanda ati wabona muntu mweelenze umpusi, umbyaabi, ati ‘Bamuvwe bantu bali bolya mbeelenze’; ati wayaya cisi cako* (p) O chief, do not drive away a man because he is an idler or poor or a bad character, saying ‘Such worthless characters must go away’, because you will depopulate your district! *Kwina mwami owakalizyala* (s) No chief ever gave birth to himself [i.e. chiefship is not hereditary]. *Kwina mwami owakalila mumpande* (s) No chief ever ate from an impande shell [i.e. though a chief wears the shell, he must eat from a plate like everybody else]. *Mulimo wamwami tokasya kulisala injina* (s) Working for a chief doesn’t stop one from hunting one’s own fleas [i.e. look out for yourself].²⁹

One of Colson’s informants summarized the plight of leaders when he shared a common Tonga saying of the mid-20th century: “Any man may call himself a chief, but that does not mean that I will obey him.”³⁰ At least in the late 19th early 20th centuries, positions of leadership were open to those who could build claims to relationships with the ancestors, spirits and the land or to

²⁷ Ibid, 31.

²⁸ Colson, *Marriage and Family*, 30-31.

²⁹ Fowler, *Ila Usage*, 502. All contents in [brackets] are interpretations listed in the dictionary.

³⁰ Colson, *Marriage and Family*, 31.

pools of wealth and influence but these claims were ephemeral and highly dependent on the personal qualities, skills, and knowledge of the leader.

Ehret reconstructs *-àmǐ to the Proto-Eastern Savanna speech community early in the last millennium B.C.E. as a word for a ritual leader mediating between members of clans and ancestors. While the ethnographic evidence might support this inherited meaning of *-àmǐ as a ritual authority who was “certainly no [political?] leader” into the earliest Botatwe communities, Ehret’s reconstruction of *-àmǐ as, specifically the ritual authority over a clan is far more dubious. First, the Botatwe term for clan, *mukowa*, dates to the 14th or 15th century and, second, clans are not explicitly linked to leaders called *mwami*, though Ehret asserts that this link does exist in among the Botatwe.³¹

The impression from the linguistic and ethnographic sources, then, is that amongst Botatwe societies, power was decentralized and rooted in the personal capacity of would-be leaders to mobilize ideas about the protective powers of family, ancestors, and neighborhoods, the productive powers of wealth and charisma, and the importance of skill in healing, rain-making, and arbitration to build up ephemeral networks of followers. Politicking in precolonial Botatwe history seems to illustrate the pattern that has been observed in other central African societies: Big Men attracted followers to build communities with great potential for success. Yet, Botatwe vocabulary, especially about skilled hunters, raises other questions about *who* undertook the work of network-building in precolonial societies and to what ends?

³¹ I have tried to determine where Ehret makes the link between *mwami* and ritual leadership over clans but I am uncertain about his source. Christopher Ehret, *An African Classical Age: Eastern and Southern Africa in World History, 1000 B.C.E. to A.D. 400* (Charlottesville, VA: University of Virginia Press, 1998): 146-8. See also *-jámi BLR3 3183 with a distribution in zones D, F, H, J, K, and M; C.S. 1911.

9.2 Putting Bantu into the Singular: Theorizing Reputation in Central Africa

Reconstructed vocabularies about the technologies and practitioners of wild resource acquisition suggest that speakers of ancestral Botatwe languages were concerned with identifying individuals who had developed and demonstrated their skill in bushcraft, particularly hunting, despite the fact that they were farming communities tending fields and herds. Botatwe speakers developed a series of words to be able to talk about persons skilled in bushcraft. The alternate meanings of these words—elder, friend, companion—raise questions about how the capacities unique to a skilled individual allowed him to achieve forms of status (elderhood) and develop personal associations (friends, companions) that could bolster or fall outside the control of those institutions typically historicized for the ancient African past: lineages, chiefdoms, spirit cults, guilds, etc.³²

As I continue to work with these data, trying to elucidate how skill was developed and recognized and what it allowed Africans living long ago to do, I have faced a methodological and theoretical dilemma: how do we historicize concepts of remarkable personal skill in the deep past when employing a methodology, comparative historical linguistics, that tells us not about the actions of specific persons but rather the accumulated consensus about how to talk about skilled people as a *kind* of individual?

Focusing on how people talked about reputations, what people were known for, foregrounds individuals within a dataset that reflects community thinking by highlighting the social process of acknowledging, naming, and transposing skill. That is to say, reputation as a

³² For an interesting parallel argument for setting aside the vocabulary and speech used to tag institutions in order to better understand social relations in the scholarly world of semiotics, see Asif Agha, *Language and Social Relations* (Cambridge: Cambridge University Press, 2007).

social process lets me put *bantu* ('people', the plural of *muntu*, 'person') into the literature on what it means to be singular. Situating historicized vocabulary for reputedly skilled hunters within a set of literatures that enticingly skirt around the problem of how skilled practitioners of particular types of work (and play?) were recognized in the precolonial past may contribute to our understanding of foundational concepts in African Studies, especially wealth in people," and the ancient politics of decentralized societies. Moreover, historicizing reputations moves our attention away from the false contradiction between individuals and institutions to the historian's conundrum in tracing agency within structure, in order to understand how discourses about recognizing skilled individuals were products of both human agency and tools for creating and changing social and political structures.

9.2.1 *Wealth in People*

Among the enduring, defining concepts of African Studies, the wealth in people model, acknowledged or not, permeates our work and serves as the foundation of other important models in our fields, from the prebendalism of political scientists to the internal African frontier used by historians.³³ Although its roots reach back into the anthropology of rights-in-persons, the model is usually attributed to Miers and Kopytoff, who sought to explain the variety of subservient relationships described in the scholarship on African slavery.³⁴ Demography lies at

³³ Jane Guyer, "Wealth in People and Self-Realization in Equatorial Africa," *Man* (n.s.) 28, no. 2 (1993): 243-65; Idem, "Wealth in People, Wealth in Things: Introduction" *Journal of African History* 35, no.1 (1995): 86. On prebendalism, see Richard Joseph, *Democracy and Prebendal Politics in Nigeria: the rise and fall of the Second Republic* (Cambridge and New York: Cambridge University Press, 1987). On the internal African frontier, see Igor Kopytoff, ed., *The African Frontier: The Reproduction of Traditional African Societies* (Bloomington: Indiana University Press, 1987).

³⁴ Igor Kopytoff and Suzanne Miers, "Introduction: African 'Slavery' as an Institution of Marginality" in Suzanne Miers and Igor Kopytoff (eds.), *Slavery in Africa: Historical and Anthropological Perspectives* (Madison:

the heart of this model; unlike Europe or Asia, for most of its history and geographic expanse, an abundance of land and a relative paucity of people have characterized Africa.³⁵ Thus, African political leaders seeking to ensure the success of their communities and consolidate their claims to power faced the problem of attracting and then retaining people, rather than land.

The wealth in people model begs the question why leaders sought adherents in the past. Developed in an era of Marxist scholarship overshadowed by the work of Claude Meillassoux, initial historical explorations of this question understood adherents to be at the heart of the processes of production and reproduction, activities considered central to the survival of any community and the underpinnings of political power. As a result of this understanding of how the wealth in people political economy worked, scholars over-emphasized the importance of polygamous marriage, social organization into lineages, slavery, clientship, and other institutions through which Big Men collected followers and claims to the wealth and status that followers produced.³⁶ By the early 1990s, however, scholars organized by Jane Guyer and Achille

University of Wisconsin Press, 1977): 1-81. Karen Hansen provided the important corrective on the deep anthropological roots of the 'wealth in people' concept.

³⁵ There are, of course, exceptions to this model. The dense population of the Great Lakes region after the adoption of bananas and cattle allowed leaders to use (contested) control over land for banana gardens and cattle pastures to bolster political power and exclude access to source of wealth serves as one precolonial example. David Lee Schoenbrun, *A Green Place, A Good Place: Agrarian Change, Gender, and Social Identity in the Great Lakes Region to the 15th Century* (Portsmouth, NH: Heinemann, 1998). In another precolonial example, climatic and environmental shifts (often resulting from human intervention) have been important to processes of renegotiating the value placed on adherents vis a vis pastureland. Jeff Guy, *The Destruction of the Zulu Kingdom: the Civil War in Zululand, 1879-1884* (London: Longman, 1979).

³⁶ Jane Guyer and Samuel M. Eno Belinga, "Wealth in People as Wealth in Knowledge: Accumulation and Composition in Equatorial Africa," *Journal of African History* 36, no. 1 (1995): 118.

Mbembe returned to the question at the heart of the wealth in people model: why and how leaders attract followers.³⁷

In the most influential revision of the wealth in people concept, Guyer and Belinga historicize the model, explaining its central principle as “one of numbered addition and controls of pools of wealth in people as producers and reproducers analogous to the dynamics of capitalism.”³⁸ Guyer and Belinga bring wealth in people out of this theoretical framework by claiming that “wealth in people was a regime of quality as well as quantity.”³⁹ They demand that scholars consider both that the people accumulated were unique individuals and that knowledge cultivated and mobilized by these unique people was a key resource of the political economy.⁴⁰ “Ethnographic data from the equatorial region make clear,” Guyer and Belinga write, “that it was knowledge—knowledge of the forest, knowledge of things, knowledge that generated things and things that embodied knowledge—that constituted both the material and human basis of life in these societies.”⁴¹ Scholars, Guyer and Belinga explain, needed to better understand that *who*

³⁷ Jane Guyer and Achille Mbembe organized scholars who were returning to the theme of the wealth in people in their research into an African Studies Association symposium in 1992. Some of this work was subsequently published in a special edition of the *Journal of African History* and, in the case of Jane Guyer, related pieces appeared in other publications throughout the mid-1990s. Starting from the problem of revisiting the concept of wealth in African history to better understand the possibilities for accumulation, Guyer seeks to unite the concepts developed in Melanesian ethnography connecting the cultural creation of persons to transactions in things to similar patterns in scholarship on African history through the sources of equatorial ethnography, history, and art.

³⁸ Guyer and Belinga, 106.

³⁹ Guyer, “Self-Realization,” 246.

⁴⁰ But we should not take the rejection of the concept of numeric accumulation of people as a rejection of the analytical power of concepts from the literature on the commodity, namely alienability and currency. Rather Guyer rejects the opposition of the gift and the commodity, arguing that blending the concepts from both literatures allows her to more accurately explore those processes that interest her as an economic anthropologist: valuation, transaction, accumulation, destruction, alienation, and so on. This position is stated most forcefully in Guyer, “Self-Realization,” 259.

⁴¹ Guyer and Belinga, 109. They are inspired, in part, by Jan Vansina’s arguments about the abundance of knowledge developed by equatorial peoples about their environment, an abundance that far exceeded the practical

leaders attracted as adherents was a central consideration because knowledge was an asset; successful leadership involved composing the specialist knowledge and remarkable capacities embodied in singular individuals into a healthy community with good prospects for the future.

9.2.2 Singularity and Reputation

For Guyer, singularity comes from one's life's work of personal capacity-building—of acquiring, demonstrating, changing, dismissing, and constantly innovating new constellations of knowledge about how to act effectively on the world. Singularity, then, is the outcome of exceptional success in personal capacity-building, a self-authorship rooted in particular forms of work (divining, rain-making, carving, dancing, and so on).⁴² For the historian working with lexical data to access ancient history, singularity, as the concept bridging wealth in people to wealth in knowledge, is seductive because it hints at the importance of reconstructing ideas about individuality in order to understand the changing means of building power in the deep past.

However, reconstructed words are a kind of historical data with peculiar limitations: we cannot use them to recover specific demonstrations of the singular capacities of particular individuals in the past. With reconstructed words we can only partially reconstruct the way that communities talked about people with capacities that were valued enough by the group to deserve a distinct name; that is to say, we can historicize named classes of kinds of skilled people, such as “respected hunter” or “green-thumb, gifted sower of seeds.” Reconstructed

information equatorial peoples needed to successfully make a living in their forests, marches, riverfronts, and savannas. Jan Vansina, *Paths in the Rainforests: Toward a History of Political Tradition in Equatorial Africa* (Madison, WI: University of Wisconsin Press, 1990).

⁴² Indeed, singular people can be the same as singular objects or they can be antagonistic to one another. This observation opens great potential for archaeologists and historical-linguists to identify singularity in evidence from the material world.

words, then, provide evidence for a *longue durée* history about individuals whose skilled work merited a special lexicon. The shifting meanings of the words in these lexicons are the residue of earlier debates about changes in how skilled people were identified, why they were assets, and what they could do as unique kinds of persons.

It deserves explicit restatement that reconstructed words do not attest to *specific* (and changing) command over the constellations of things, skills, and knowledge that individuals developed to undertake remarkable feats as examples from which to historicize the concept of singularity. Yet, the fact that certain people were known for remarkable (talked about) capacities demonstrates the potential of the concept of *reputation*⁴³ to represent a community's ideas about *kinds* of singularity, *types* of exceptional capacities, *classes* of reputed individuals.⁴⁴ Some of the seductive quality of Guyer's notion of singularity can be captured by studying talk about what kinds of remarkable capacities inspired the imagination of the community as attested in the

⁴³ Reputation has long been a central concept in business and art and literary criticism but has gained increasing scholarly attention in sociology, history, and political science, and other fields. It is important to note that some scholars merely use reputation as a replacement for earlier anthropological scholarship on prestige and renown; most, however, attempt to make varying kinds of distinctions based on the particular work they think reputations can do, especially after the death of the figure of repute or in the hands of various forms of reputation transmitters (persons, media, etc). For a summary of the study of reputation in the field of sociology, its place in the literature on celebrity, and reflections on the concept of a bad reputation, see Gary Fine, *Difficult Reputations*. On reputation in other fields, some influential works include: Gladys Lang and Kurt Lang, *Etched in Memory: The Building and Survival of Artistic Reputation* (Chapel Hill, NC: University of North Carolina Press, 1990); John Rodden, *The Politics of Literary Reputation: The Making and Claiming of 'St. George' Orwell* (New York: Oxford University Press, 1989). For a study that bridges older ideas about prestige, renown, and fame from anthropological literature and more recent work on reputation, see Leo Braudy, *The Frenzy of Renown: Fame and Its History* (New York: Oxford University Press, 1986);

⁴⁴ This marking of people by talk is important because the development of particular vocabularies about skill may be one of the few ways that we can elucidate how people knew and told each other which kinds of novelty and invention in knowledge and skill 'worked' well in the world, physical and metaphysical. In this sense, vocabulary invention was similar to the process of valuing people through currency as described by Jane Guyer in her various publications. Or, from Weber's perspective, the invention of words is one of the ways we can find the 'proof' of charisma in the ancient past. On Weber and charisma, see William Murphy, "The Sublime Dance of Mende Politics: An African Aesthetic of Charismatic Power," ms. cited in Jane Guyer, "Traditions of Invention in Equatorial Africa," *African Studies Review* 39, no. 3 (1996): 1-28. See also Guyer, "Traditions," 18.

development of words to refer to them. While individuals elude the historical linguist, the history of individualisms do not.

At the heart of the concept of reputation is the idea that personal capacity for knowledge is a social process.⁴⁵ So, of course, is the recognition of singularity. The difference between the two is that singularity carries a degree of uniqueness that cannot be reconstructed with word histories about kinds of people. By focusing on reputation rather than singularity, we have a concept that can contain the dialectic between degrees of difference that may be grouped as similar, a dialectic that stems from the nature of the evidence of reconstructed words. Words that ancient communities invented to talk about reputed adepts attest to the social process of recognizing kinds of qualities in kinds of persons; with this evidence we can begin to recover the stakes in play in being reputed to belong to a recognized group of adept, remarkable persons in the ancient past.

Reputation, however, is not merely a theoretical tool to address a methodological problem. It is also at the heart of how Botatwe people understood the ways in which remarkable skills and knowledge could be accumulated, stored, and passed from person to person. For example, as in many other parts of Africa, when a Tonga person was observed to have skill in a particular kind of activity, such as hunting, the newly minted reputation of that person as skilled in that craft was based on the presumed inheritance of the skills of an ancestor whose reputation in that domain of work was still remembered.⁴⁶ The political potential of reputations, then, came

⁴⁵ As Guyer argues, “the creation and enactment of difference is as much a cultural and social project as the solidarity, control and unanimity of past theory.” See Guyer, “Traditions,” 11. Guyer’s work raises the question of the degree to which individuation and the creation of solidarities reinforce each other through the social organization of expertise.

⁴⁶ Elizabeth Colson, *The Plateau Tonga of Northern Rhodesia: Social and Religious Studies* (Manchester: Manchester University Press for The Rhodes-Livingstone Institute, 1962), 12-13. See also Chapter 6.

to be tied up in ideas about lineality and descent. With this ethnographic gem, we see that while the individual has been ignored in favor of social groups in much precolonial African history, ideas about individuals were, in fact, at the heart of making successful social groups. Thus, reputation allows us to think about the acquisition of knowledge in a conceptual framework that follows Botatwe ideas about the relationships between the physical, social, and spiritual worlds.⁴⁷

9.2.3 Honor and Reputation

A detour is in order to distinguish the kind of questions we can consider with the study of reputation from recent scholarship focused on honor. The defining work for Africanists is John Iliffe's masterful *Honour in African History*.⁴⁸ Iliffe argues that historicized conceptions of

⁴⁷ The Melanesian literature is rich with ideas about how to consider the reputation of past owners as contributing to the singularity of objects (and vice versa, so as to almost melt the person-thing divide). We know that knowledge was held by ancestors and other kinds of spirits; there is a rich contradiction to be explored (with a different kind of historical data) in the idea that peoples across Africa inherited the skills, the knowledge, and the tools central to the work of self-authorship from other persons. That is to say, the cultivation of one's *personal* singularity could be built, in part, on the *singularity of others* as remembered in their reputation (the content of which we can imagine was also constantly influx through the work of various reputation managers). This is different from the personal skills honed in cultivating access to particular spiritual forces as part of one's network of toolset for working as, for example, a healer. As Koch explained of hunting 'luck' in southern Cameroon: " 'luck' (*ebet*) is something alive, that one carries in oneself without having searched for it, that one can lose easily.. (It) can be inherited but it is essentially *personal*... it is predestined to be satisfied in solitude", "it is courage that confirms a man in his luck (my emphasis)." For citation information, see Guyer, "Self-Realization," 255. As Guyer herself notes: "Persons were particular as well as being kin or leaders. As ancestors, they may be points of descent group segmentation, but *they are also remembered for their individual careers, building up stories of capacities that remain accessible to the living* via the multiple pathways for communication between the living and the dead [e.g. reputations] (my emphasis, my insertion)" Guyer, "Traditions," 9. On the idea of entrepreneurial work of reputation management, particularly of the deceased, see Gary Fine, *Difficult Reputations: Collective Memories of the Evil, Inept, and Controversial* (Chicago: University of Chicago Press, 2001).

⁴⁸ John Iliffe, *Honour in African History* (New York: University of Cambridge Press, 2005). See also David Lee Schoenbrun, "Violence, Marginality, Scorn and Honour: Language Evidence of Slavery to the Eighteenth Century," in Herni Médard and Shane Doyle, *Slavery in the Great Lakes Region of East Africa* (Athens: Ohio University Press, 2007): 38-75. With respect to the literature on the concept of honor in African societies, Iliffe himself claims to have been inspired by the scholarship of Boubakar Ly, a sociologist. Boubakar Ly, "L'honneur et les valeurs morales dans les sociétés ouolof et toucouleur du Sénégal," Thèse pour le Doctorat de Troisième Cycle de

honor rooted in specific value systems help us to understand the past because honor was a powerful force shaping human behavior in African societies across the continent: “[u]ntil the coming of world religions, honour was the chief ideological motivation for African behaviour. It remained a powerful motivation even for those who accepted world religions.”⁴⁹ Iliffe draws extensively on the historical study of honor in European and Asian societies and he accepts Frank Henderson Stewart’s definition of honor as “a right to respect,” which exists both subjectively and objectively in the experience of the individual seeking honor and the contested criteria of the group(s) conferring it.⁵⁰ The notion of honor as a “right” is important, for it foregrounds the enforcement of that right. Stewart breaks down his definition of honor into the categories of vertical and horizontal honor. Vertical honor, called “heroic” honor by Iliffe, develops from rank; it is the respect earned by superiors. Horizontal, or “householder” honor, is the right to the respect of one’s peers.⁵¹

Sociologie, Université de Paris (Faculté des Lettres et Sciences Humaines), 2 vols, 1966; idem, “L’honneur dans les sociétés ouolof et toucouleur du Sénégal,” *Présence Africaine*, 61 (1967), 32-67. He also acknowledges the influence of the following scholarship on honor in Africa: Pascal Bacuez, “Honneur et pudeur dans la société swahili de Zanzibar,” *Journal des Africanistes*, 67, no. 2 (1997): 25-48; Karin Barber, *I could speak until tomorrow: oriki, women, and the past in a Yoruba town* (Edinburgh: Edinburgh University Press, 1991); Paul Spencer, *The Samburu: a study of gerontocracy in a nomadic tribe* (Berkeley: University of California Press, 1965); Marc Swartz, *The way the world is: cultural processes and social relations among the Mombasa Swahili* (Berkeley: University of California Press, 1991); Catherine Ver Eecke, “Pulaaku: Adamawa Fulbe identity and its transformations,” unpublished PhD thesis, University of Pennsylvania, 1988. However, it is important to recognize another body of scholarship to which Iliffe is indebted, the literature on honor in Mediterranean, Asian, and Medieval European communities and, to a lesser degree, the historiography of the American South.

⁴⁹ Iliffe, *Honour*, 1. The historical argument of the monograph turns on the idea that colonial conquest created a “crisis of honour” during which time Africans had to profoundly shift their ideas about how to acquire, perform, and protect their honor; yet, remnants of older ideas about honor survived and were later expressed in independence movements and even responses to the AIDS epidemic.

⁵⁰ Frank Henderson Stewart, *Honor* (Chicago: University of Chicago Press, 1995): 21, as cited in Iliffe, *Honour*, 4.

⁵¹ Sumarized in Iliffe, *Honour*, 1-8.

In his characteristic continent-wide sweep, Iliffe explores the history of honor from a diversity of historical circumstances, including analyses from centralized states and stateless societies, from a range of time periods, from perspectives as diverse as women's concerns about fertility, old men's status as householders, and youths' heroic exploits. Yet, a methodological problem underlies Iliffe's work. As he seeks to make a case for the place of honor in African history, Iliffe gets caught up in the complicated task of translation, claiming, for example, that honor should replace prestige in Paul Spencer's comparison of notions of honor and competitions for prestige among the Samburu (Kenya) because most studies of honor show it already to have a competitive nature and because the Samburu language, Iliffe argues, does not contain a distinction reflecting Spencer's two concepts. The point, as Iliffe himself notes, is that any study of African concepts must be undertaken with adequate knowledge of the relevant African language(s).⁵² And, indeed, the next step for this research program must be the reconstruction of a lexicon of ideas about honor, renown, reputation, and fame alongside the vocabulary of skill, adeptness, giftedness, and luck.

Both Stewart and Iliffe explicitly focus on the ability to enforce the right to honor. Not surprisingly, then, it is through the records of the institutions guarding and judging claims to honor—the records of guilds, epics of the exploits of nobility, the songs of the king's court, and the documents of the colonial courts—that Iliffe accesses his history.⁵³ Iliffe uses these sources to consider how ordinary people acquired honor and finds it in the good living of common people, the idea of “householder honor,” which, like heroic honor, is a right to respect that was

⁵² Iliffe, *Honour*, 7. For an example, see Schoenbrun, “Violence.”

⁵³ We should state here that Iliffe's treatment of the precolonial period focuses primarily on the nineteenth century for methodological reasons. He does try to reach into earlier periods, using, for example, epic traditions from West Africa.

contested in institutions such as the colonial courts. It is in attempting to define honor so broadly that Iliffe is both at his most imaginative and at his least focused. As one review suggests: “[s]ome difficulty arises from the very broad definition of ‘honour’ adopted, which seems potentially to include any system of values which involves some element of seeking approval from fellow-members of society, and thereby arguably leaves very little of human activity excluded.”⁵⁴ It may be that we can redefine the limits of honor without losing Iliffe’s insights into the “honorable” living of ordinary people and the importance of their recognition by peers by considering their reputations for outstanding success in manipulating the moral visions and material realities that drew the line between aspiring to and achieving good living, rather than a generalized enforceable “right” to respect.

We know from the ethnographic sources and from words and their meanings in African languages that people can be known for something without being honored for it. Consider, for example, how Ila speakers in central Zambia believe that certain persons have *chesha*, “a lucky-hand for sowing, and their services are in general request.”⁵⁵ Another dictionary translates *ceesya* as “‘green fingers’, good fortune with crops; a good crop; *Wezu muntu ulikwete ceesya*. ‘This person has green fingers.’”⁵⁶ We might say that they have a “green thumb” that derives from skill but also a “gift” for planting. Significantly, there is no special place for such people in Ila planting or harvest rites. They have no guild into which they may be initiated to achieve this status. They are noted to be skilled planters and are talked about with a special word that

⁵⁴ Robin Law, “Respect, Heroism and Disgrace,” *Journal of African History* 47 (2006): 139-40.

⁵⁵ Edwin Smith and Andrew Dale, *Ila-Speaking Peoples of Northern Rhodesia*, 2 vols, reprint (New Hyde Park, New York: University Books, 1968): vol. 1, 139.

⁵⁶ D. G. Fowler, *A Dictionary of Ila Usage, 1860-1960* (Münster, Hamburg and London: Lit Verlag, 2000) 90. The different spellings of the two attestations are the result of changes in the orthography of the Ila language.

describes their gift, but they do not acquire an enforceable right to honor as a result. That is to say, honor always hinges on reputation, for they both require recognition from the community. However, one can have acquired a reputation through an exceptional performance (usually of skill or knowledge) without being honored for that performance. One can even have a bad reputation, as we saw with the Ila tale of the boastful old man.⁵⁷ Honor, then, is a particular outcome of reputation but its study, especially as a “right,” masks the other reasons reputations were acquired and used. For these motives, let us return to the wealth in people literature.

9.2.4 Leaders, Reputed Adepts, and Precolonial Politicking

The twin concepts of vertical and horizontal honor, respectively the honor due to superiors and honor bestowed by peers, miss the one direction of acknowledgement that is developed so clearly in Guyer and Belinga’s revision of wealth in people into wealth in knowledge: the recognition by leaders of the knowledge, skill, and other qualities of their potential or actual followers in the process of composing communities. The study of reputation amongst skilled persons in the precolonial past allows us to consider the ways in which political or social “inferiors” were valued by “superiors” in a reversal of Steward’s vertical honor; this was possible because if wealth in knowledge was the motor of the wealth in people model, these skilled persons were potentially both a threat to and a consolidating force in the work of politicking.⁵⁸

⁵⁷ Lozi speakers were particularly active in using hunting vocabulary borrowed from Botatwe speakers as a strategy of ridiculing hunter-warriors living just on the edge of the expanding Lozi polity in the mid to late 19th century. See 9.3, below.

⁵⁸ For a similar argument, see Marc Bloch’s analysis of feudalism, *Feudal Society*, L. A. Manyon, trans. (New York: Routledge, 1961).

The work of Stewart and Iliffe similarly informs the literature on wealth in people as wealth in knowledge by arguing that historians should pay attention to how community members—horizontal peers, not leaders—viewed each other. That is to say, worrying about reputations and all that they represented (and honor as a kind of reputation) was not only the work of politicians. As Guyer herself notes, recasting wealth in people as they study of wealth in knowledge opens the possibility of considering the role of “the distinctions amongst men at levels *below* charismatic leadership.”⁵⁹ Indeed, Neil Kodesh’s recent work on the origins of Ganda clans theorizes clans as networks of knowledge whose emergence in the particular historical context—the shift to intensive banana farming on the shores of Lake Victoria between the 14th and 16th centuries—conditioned their development as therapeutic healing networks that ensured members’ access to people with other vital skills in divining, barkcloth making, healers, and so on.⁶⁰

Careful historical reconstruction of the ways in which community members found worth in each other’s skilled work—in the bush, in the garden, around the cooking pot—foregrounds the seasonal and daily rhythms of living in negotiations of power in the distant past. These rhythms shaped the processes of building successful communities. Reconstructed words for reputations in skilled work can help us imagine that a Tonga person worried about filling the cooking pot was concerned that her local leader brought a *ceesya* (green thumb, gifted sower of seeds) or *mwaalu* (respected, celebrated hunter) into the community along with the effective rain-makers or diviners who usually populate histories and ethnographies from Africa. If we take

⁵⁹ Guyer, “Self-Realization,” 256.

⁶⁰ Kodesh, “Networks of Knowledge.”

seriously the argument that we consider the composition of knowledge within communities and seek to expand the data that underlies that composition, we must push this argument further to ask how leaders and ordinary people identified and valued knowledge or skill in less esoteric, quotidian spheres of activity such as cooking, fishing, or home-building.⁶¹ When we consider the ways in which people found worth in those with great skill in quotidian work and even, as we saw in Chapter 6, sought to define it as something more than quotidian, we begin to see new loci of power, different characteristics of and time scales in processes of building communities, and the understudied affective experiences that sustained them.⁶²

9.3 Reputed Adepts in South Central Africa, ca. 1000 C.E. to 1900 C.E.

It bears stating from the start that I did not set out to study ideas about work or skill, or even reputation or honor, in precolonial history. Rather, I came to these questions through the

⁶¹ Guyer skirts around this idea. Consider: “[I]t was not only the great figures but everyone who seems to have had the possibility of authorship of something, however small” in Guyer, “Self-Realization,” 255; “The ethnographic record suggests the... ‘deliberate’ dispersal of skills far and wide...” in “Traditions,” 7; “The living cultivated particular expertise... In a striking passage Teggman writes of the Fang at the turn of the century: ‘There is not, among the Pahouin, any artisanat in the European sense of the term... Everyone knows and practices the simplest manual activities, and then begins this characteristic specialization that one encounters in all domains: they push it so far that the father of a family may be unable to make a baby-carrier made out of two leather straps joined by a stitch, while a spoon-carver may be unable to make any other wooden object, even a cooking spoon. The one who makes stools has no facility in making anything else but stools, a bow-carrier makes only that object, a specialist in men’s carrying baskets makes only that. Since in any one village there are only one or two of these ‘artisans’ the inhabitants have to go to all four corners of the country to obtain the simplest objects; it can happen that a person has to travel very far to procure a stool, a bow or any other object’.” quoted in “Traditions,” 6-7; “The kinds of work that created personal ‘reality’ were culturally delineated; they excluded but also included activities that a western concept of labour does not” in “Self-Realization,” 255; “The qualitative valuation of people’s work and capacities, manifest in part in currency values [or special lexicon!], produced at one and the same time the vast efflorescence of material and artistic culture at the top, as represented in the museum collections and the musical repertoire, and almost complete dispensability at the bottom, represented in people sloughed off into slavery or, if female, as the equivalent of *metut* [low status women amenable to being exchanged at a husband’s discretion]. *In between, and in relation to both, one infers the varied struggles of people to value themselves in some publicly demonstrable way* [emphasis mine]” Guyer “Self-Realization,” 256.

⁶² On the role of affect, in this case love, in the politicking of precolonial and colonial Buganda, see Hanson, *Landed Obligation*.

patterns of glosses for words whose primary meaning was “hunter” and/or “fisher.” The shifting meanings of words for “hunter” and “adept, celebrated hunter” introduced in previous chapters are particularly suggestive of the potential for understanding how and why individuals built up networks based on skilled work, networks that could lead to a status akin to Big Man or *mwami* or could instead more closely resemble cohorts of friends or helpful neighbors. Either form of network had the potential to exploit the affective ties of friends, family, and lovers in the process of consolidating power, yet the later remain a little understood aspect of central African social and political history.

By the late first millennium and early second millennium CE, as the Proto-Eastern Botatwe speech community was itself in the process of diverging into Proto-Lundwe, Proto-Kafue, and Proto-Falls, Botatwe peoples speaking the emergent dialects of Proto-Eastern Botatwe borrowed a new word to talk about celebrated hunters, *-pàdú, from their Luba speaking neighbors to the north. As we learned in Chapter 6, a *mwaalu* could give assistance in the form of meat and skins, honor personal ancestors and local leaders with offerings and remembrances, and build up his own personal reputation by leading communal hunts and supplying feasts. A *mwaalu* shared the spoils of the hunt within the complicated social ties of kin, neighbors, friends, and lovers and within the ephemeral political webs created by ritual specialists and local Big Men.

In chapter 6 the borrowing of the term *mwaalu* was contextualized within a new emphasis on communal spear hunting, *chila*. *Chila* may have served as “a statement of community solidarity and strength in the face of the forces of the bush” and it probably served an integrative

function, just as it does with groups of neighborhoods joining for *chila* today.⁶³ Perhaps *chila* communal hunts were one of the ways in which Botatwe and neighboring Kusi speakers came to form a single community in the early centuries of the second millennium.

When we look at archaeological data to contextualize this innovation, we find an astonishing period of innovation in hunting technologies and practices concurrent with an increasing investment in pastoralism.⁶⁴ In the material culture for this period, we see a flourishing record of tool-making, particularly in spear parts (points, ferrules, end-spikes) and arrow forms. Similarly, we see a shift in the faunal record from the entirety of the animal carcass being represented in the bones unearthed in villages to specific portions of the carcass being brought back to the village; in addition, the numbers of animals killed increased dramatically. These shifts probably reflect new practices in the distribution of meat under the control of the leader of the hunt and organized around particular contributions of each hunter (first to hit the quarry; hunter to serve the death blow) and, sometimes, their hunting dogs.

If we situate this change in game distribution and consumption in the context of increasing investment in pastoralism, we find a historical problem: why hunt more when less meat was needed? We might expect that cattle were kept only for milk and wild game was needed for iron. But, if wild animals were killed in ever-greater numbers but only selectively, wastefully butchered, hunting was no longer a central source of protein and iron; it had a new value in addition to nutrition. Likewise, the development of a word delineating hunters into

⁶³ Colson, *Tonga Religious Life*, 105.

⁶⁴ This investment in cattle herds was modest by the standards of eastern Botswana and the Zimbabwean plateau, though it was a distinct shift in the archaeological record of the Kafue and Batoka region.

categories of adept and ordinary suggests that hunting was no longer a pursuit for survival employed by everyone; it was part of the work of distinguishing oneself.

The development of sudden interest in the *chila* form of communal hunting amongst Botatwe speakers and the borrowing of a new word for skilled hunter, *mwaalu*, unfolded during the incipient stages of social stratification within the early Luba polity at Sanga, north of the Botatwe communities. It is worth recalling what we learned of *mwaalu* and *chila* in Chapter 6. *Mwaalu*, literally “he who gives again and again” or “he who projects, aims, or gives at something,” was an early areal root shared by Luban and Sabi speakers to the north and northeast of Botatwe communities. Proto-Eastern Botatwe speakers south of the Luba kingdom probably supplied Luban peoples with skins and ivory, most likely after having observed Luban hunters at work. Indeed, *chila* communal net hunting was borrowed directly from Luban peoples. Botatwe talk about the importance of hunters and, if they supplied hunted products to Luban peoples, the place of hunting in the economy was transformed by contact with Luban peoples working hard at Sanga to consolidate control of the material and ideological underpinnings of political power. Similarly, the historical trajectory of the Luban polity was shaped by the decisions of Botatwe hunters not only to learn from their Luban peers about new methods for successful large-scale hunting, but to independently elaborate on the tools and organization of communal hunting discussed in Chapter 6.

Botatwe speakers wove the new opportunities of hunting into older ideas about wealth and authority in a manner that did not hinge on the process of centralization that was occurring among their Luba neighbors. If Botatwe people had borrowed not only knowledge about hunting techniques but also changing Luban ideas about what kinds of political aspirations could be achieved by controlling the wealth produced by hunters, our teaching of the precolonial history

of the southern savannas would be very different, indeed. Changing Botatwe ideas about the political potential of the meat, skins, and ivory produced by skilled hunters, *baalu*, did support the development of the idea that work in the bush was distinct from work in the fields, a process described in Chapters 5 and 6. However, these changing ideas did not result in the development of specialist hunting clans, guilds, or secret societies guarding the status of *baalu*. While future research might date the practice of inheriting the hunting skills of ancestors to this period, we have no evidence that *baalu* transformed their status into a permanent, inherited form of political power.

The history of this particular root becomes more interesting for our purposes here, for as the vocabulary to talk about different kinds of skilled hunters developed over the course of the second millennium CE, the root *-pàdú took on new meanings. By the turn of the first millennium CE, we have noted that the Proto-Kafue speech community, along with Proto-Falls and Proto-Lundwe, diverged from its predecessor, Proto-Eastern Botatwe. Proto-Kafue was a particularly short-lived speech community, which, after only a few hundred years, itself diverged around the 13th century into the proto-forms of the extant Lenje, Tonga, Ila, and Sala languages. During the remaining years of the second millennium, from the 13th through the 19th centuries, the intercontinental trade networks that had begun in the 9th century, grew in size and intensity. Exotic goods like glass beads and copper bracelets tell us that people living in the Kafue and Batoka areas were involved in long-distance trade from at least the 9th century; Botatwe speakers probably supplied ivory and skins into these networks.

The geography of trade networks throughout the second millennium put Botatwe speakers in the immediate hinterland—the supply lands—of trade centers like Ingombe Ildede

and Nqoma and the trade routes that extended from them across central and southern Africa.⁶⁵ In addition to the increasingly influential Luba polity to the north, by the 16th and 17th centuries, the Botatwe were also part of the distant hinterland of the Lunda commonwealth to northwest. To the southwest, the trade centers of Divuyu and, later, Nqoma at the Tsodilo Hills northwest of the Okavango Delta had long supplied networks trading across the Kalahari between the Atlantic and Indian Ocean coasts and between the copper centers of the hills of central Namibia and the Copperbelt of northern Zambia. During the 12th century, as gold began to flow from the Zimbabwe plateau into networks tied to the Indian Ocean trade, Nqoma went into decline because trade routes were reorganized around the vibrant trade and cattle-keeping polity on the plateau of Zimbabwe. People living on the Zimbabwe plateau by the 13th and 14th centuries were responsible for a complex cattle economy, elaborate gold mining and working, a commanding trade position within the Indian Ocean network with access to Chinese celadon dishes and glazed Persian faience, and, of course, the dry stone constructions of the Great Zimbabwe capital. By the 15th century, this capital was in decline but peoples familiar with the economy and politics of this culture settled further north, establishing an outpost of the former polity at Mutapa (Monomotapa in European documents), near the Zambezi River. They continued to trade gold with merchants linked to the Indian Ocean and controlled the Zambezi River from Zumbo to the sea until the mid 17th century.

In the last centuries of this millennium, caravan trade transformed life in the region. In the 18th century, the Ovimbundu kingdoms, with the support of Luso-African traders connected to the Atlantic Portuguese and Brazilian networks, were sending trade caravans from the

⁶⁵ The next few chapters summarize historical developments discussed in Chapters 6, 7, and 8.

Benguela highlands of western Angola eastward to the upper reaches of the Zambezi River and beyond. By the 19th century, many of the states, chiefdoms, webs of trade partnerships, and aspiring Big Men around the Botatwe communities tied their fortunes to the intercontinental ivory and slave trade on either coast. For non-participants, the 19th century caravan trade wore away at established nodes of authority at all levels of political and social organization, from household heads to the royal courts. Slave raids paralyzed many small communities of south central Africa even while they provided others with new opportunities for consolidating wealth in the form of foreign trade goods, especially guns and cloth. We know from their vocabularies that Botatwe peoples were part of all of these economic developments and played an important role supplying one of the core items, ivory, to intercontinental trade networks throughout the second millennium.

Changes in the content and terms of trade in the middle and later centuries of the second millennium posed challenges to the older moral visions and forms of material wealth underpinning the status of *mwaalu*. Ivory opened new opportunities for trade and came to be an important form of tribute sent to polities with traditions of statecraft emphasizing a very different form of centralized politics than the ephemeral, heterarchical webs of debt and obligation that characterized Botatwe politics up to the 14th or 15th centuries.⁶⁶ As Botatwe speakers learned new ways to acquire and use ivory, they invented new terms for elephant hunters. But these new

⁶⁶ Archaeologists Susan Keech McIntosh and Roderick McIntosh base their arguments about the importance of heterarchy as a foundational principle of precolonial politicking on the archaeology of the Inland Niger Delta. For shorter statements of place of heterarchy in African history, see Susan Keech McIntosh, "Pathways to Complexity"; Roderick McIntosh, *Ancient Middle Niger: Urbanism and the Self-Organizing Landscape* (New York: Cambridge University Press, 2005): 187-189; Idem, *The Peoples of the Middle Niger: Island of Gold* (Malden, MA: Blackwell, 1998): 5-10. Consider also Vansina, *How Societies*, chapter 5.

hunters complicated the distinction *baalu* could claim by redefining the forms of wealth and kinds of networks successful hunters manipulated to achieve fame and honor.

Among the words that help us understand the networks into which Botatwe peoples traded ivory, skins, and other items, three are particularly relevant for thinking about the history of reputation based on skill in hunting. During the second millennium CE, probably in the middle to late centuries, as Indian Ocean trade networks penetrated up the Zambezi River, peoples living in the eastern province of current-day Zambia developed a guild of professional hunters, *nkombalume*. In the east, among Sabi peoples like the Bisa, these guilds were closely connected to chiefly power; chiefs claimed one of the tusks, usually the ground tusk to maintain control over the flow of wealth.⁶⁷

As noted in the previous chapters, speakers of the Botatwe languages Soli and Lenje, who had long been in close contact with Sabi peoples to the east, were the only Botatwe peoples to adopt this word. Perhaps these two speech communities only borrowed the word to talk about the professional elephant hunters to their east. However, concurrent lexical developments in these languages, particularly the new meaning Lenje speakers added to *mwaalu*, considered below, make it more likely that skilled Soli and Lenje hunters sought and gained entrance to *nkombalume* guilds, extending the elephant hunting lands of those guilds into the Lenje and Soli-speaking areas. We learned in Chapter 8 that *nkombalume* derived from *-kómbe, a Shona word describing something striking, important, beautiful, or valuable and deriving a set of words tied to fame and bravery. Lenje and Soli speakers to whom this word was applied probably

⁶⁷ The ground tusk is the tusk used to scratch bark from trees and dig earth. Informants often claim it is the left tusk. Among the Bisa, to the east of the Botatwe speakers, this tusk is called the *chimbo*. Stuart Marks, *Large Mammals and a Brave People: Subsistence Hunters in Zambia* (Seattle and London: University of Washington Press, 1976): 62.

outcompeted local *baalu*, perhaps, in part, by drawing on the specialist knowledge, tools, and trade contacts of *nkombalume* guilds.

Similarly, in the western regions of the Botatwe area, among Botatwe peoples living along the Machili River and the hook of the Zambezi, another word spread with the extension of the ivory trade into central Africa, *sinyàngá*, “professional ivory hunter.” This word has its origins in a community of eastern Bantu peoples (Kusi) who had spread as far west as the Zambezi River in the first millennium CE and used the word in a different noun class to refer to “horn.” The root spread up the Zambezi River with the meaning “ivory” during the middle centuries of the second millennium CE, reaching as far as the western Botatwe communities and even Bantu languages to the west of the Zambezi floodplain, all of whom used the root to talk about the “man of ivory,” *sinyàngá*, the professional elephant hunter. Thus, the procurement of ivory for the Indian Ocean trade reached as far as western Zambia and eastern Angola, with a particular meaning in the westernmost areas as “professional elephant hunter,” rather than “ivory.”

The two words for professional elephant hunter, *nkombalume* and *sinyàngá*, attest to two distinct zones of ivory hunting, each focused on one of the region’s north/south migratory paths of elephants. *Nkombalume* spread across the Zimbabwe plateau and north along the middle Zambezi River and up the Luangwa River, certainly by the 17th century and possibly as early as the 12th century, if people in this region borrowed the term to supply ivory as tribute to the rulers at Great Zimbabwe.⁶⁸ Though *-nyàngá was probably borrowed from Kusi speakers into the languages of the western region by the middle of the second millennium, the *sinyàngá* hunting

⁶⁸ David Beach, *The Shona and their Neighbors* (Oxford, UK and Cambridge, MA: Blackwell, 1994).

along the corridor west of the Zambezi River and down to the swamps of the Caprivi and Chobe areas later supplied Ovimbundu caravans tied to the ivory and slave trades of the Atlantic Ocean in the 18th and 19th centuries.

Professional ivory hunters in the second millennium CE enjoyed access to new kinds of economic returns on their labor, which revolutionized the way that people thought about older kinds of adept hunters. Changing meanings of *mwaalu* in distinct Botatwe languages who had inherited the word from their Proto-Eastern Botatwe and Proto-Kafue ancestors attest to these new ideas. As noted above, the underlying meaning of the word was “adept, celebrated hunter.” As words spread to talk about a new kind of adept hunter, the professional ivory hunter, Tonga and Ila speakers living on the fringes of this work in professional ivory hunting (these languages attest neither *nkombalume* nor *sinyàngá*) added the gloss “elder” to the older meaning of “skilled, celebrated hunter.” In fact, early 20th century dictionaries first gloss the term as “elder,” but then add that the “proper meaning is ‘hunter’ or ‘senior hunter’.”⁶⁹

The influence of elders in political matters is clear in the 19th and 20th century ethnographic record for Tonga and Ila peoples, as it is in many other areas of Africa. The shifting meaning of *mwaalu* speaks to us of the appreciation such skilled hunters could build from their material generosity and the affective loyalty they could muster from shared exploits in the bush. When *mwaalu* shared the products of their skill—an exciting, successful chase and the feast of meat—the relationships they built with others gave them the status of elder. We can expect future research to test whether this status as an elder influenced the political terrain navigated by lineage heads, rain-makers, and aspiring Big Men, who based their own power on the relevance

⁶⁹ On the Batoka Plateau, Tonga speakers have even begun to change the noun class of the root to talk about an ‘unhonored’ elder with the term *calu*!

of religious, political, and social institutions to the well-being of communities and, of course, their ability to provide material security in times of duress.

Among the Lenje, who do attest *nkombalume* for “professional ivory hunter,” *mwaalu* came mean “friend, companion.” Similarly, another word inherited into Lenje (and other Botatwe languages) with an underlying meaning referring to expert in hunting (and other crafts), *-binda, took on the additional meaning “companion” by dropping the noun class prefix and adding the masculine (“father of”) prestem element, *sibinda*. Here, again, we see the effects of the spread of new economies of hunting, especially ivory hunting, on older ideas about who could be considered a skilled hunter and on what basis. Lenje speakers transformed the inherited words *mwaalu* and *sibinda*, skilled hunters, into “friend, companion” probably in part by drawing on ideas about the cooperative organization of the work of hunting and its affective outcomes just at the historical juncture when the practical and discursive terms in which one was recognized as an adept hunter were increasingly tied to the specialization, even professionalization, of the work. Older forms of hunting, particularly *-cìlà communal hunts may no longer have been stages for performing expertise to acquire great reputations; other adept hunters taking greater risks and reaping greater economic returns were inspiring new words and building up great reputations.

Although the outcome of this hunting might not produce the kind of reputation attached to professional elephant hunters, skill in this hunting was still something to be pursued for the meats collected could still be shared amongst friends, the skins of lechwe still distributed to favorite wives and lovers as skirts, the exploits of the day still mulled over beer around the evening fire. Further research into the lexicon of camaraderie and friendship may demonstrate that these affective forms of influence over others were implicated in the process by which

people built up their own personal pools of wealth in people and wealth in knowledge alongside, within, or in the absence of pools of wealth and knowledge organized by clans, lineages, and so on. To be a Lenje-speaking *mwaalu* in the late second millennium CE was to carry forward and emphasize an older set of motives for and outcomes of hunting (building networks of friends and companions) in the face of the greater economic rewards of elephant hunting.

Yet, there was an instrumental value to calling on *baalu* as friends and elders because one could discursively manipulate both the obligation to help and the reciprocity of relationships of indebtedness. The political and social turmoil accompanying the ivory and slave trades of the 19th century suggest another historical motive for these semantic shifts. Calling on *sibinda* and *mwaalu* as friends, companions, and elders created the ties of obligation that we often associate with claims to kinship, claims that could bring assistance in times of need, as noted above for Tonga peoples who defined kinship in terms of the potential for rendering assistance. A *mwaalu* had the skill to defend and produce food for communities unable to plant and tend crops in the violence and uncertainty created by the caravan trade. Creating ties of dependence and claims for assistance outside the rubric of kinship allowed Lenje, Tonga, and Ila speakers to demand help outside the idiom that was deployed by powerful people, such as skilled hunters, to sell “relatives” to slave caravans.⁷⁰ To claim help from those with access to important food resources as kin was to make oneself vulnerable to those powerful people; to make claims based on

⁷⁰ Marcia Wright argues that kinship served as an important medium for seeking protection from the slave trade for persons already made vulnerable by their status of slaves within the community. These slaves, particularly women, made claims as the child of or mother of a member of the owner’s lineage. Marcia Wright, *Strategies of Slaves and Women: Life Stories from East/Central Africa* (New York: L. Barber Press and London : James Currey, 1993). Ties of dependence to friends and elders of the community was a more productive strategy for less vulnerable communities members who still sought to create a discourse of dependence outside the dangerous idiom of kinship.

friendship and the responsibility of elders to help solve the problems of the community was to protect oneself with a different form of affective relationship.⁷¹

The material resources and moral ideas available to convert ambition and skill into reputation varied by the scale of the community through which hunters moved in the closing centuries of the second millennium. Local and regional levels of repute brought varying duties and debts. Ground tusks were gifts of tribute from professional ivory hunters with great regional mobility, while a *mwaalu* had the skills to defend and provision local communities in times of plenty and under the duress created by slave and ivory trading of his compatriot hunters, *nkombalume* and *sinyàngá*. But reputations that traveled widely were endangered by communities with different moral visions and material resources. Nowhere is this more clear than the vocabulary developed by Lozi speakers to ridicule Botatwe hunters.

Just as the frontier of the slave and ivory trades reached into the eastern fringes of the Botatwe speaking area, the violence accompanying the political aspirations of the Lozi Litunga (king) steadily advanced into the Kafue floodplain and the western fringes of the Batoka Plateau in the middle and late 19th century. Lozi speakers expanding their political reach into the greater Kafue region added a number of derogatory meanings to words they borrowed from Botatwe speakers to talk about Botatwe hunters and fishers. Lozi borrowed the word **-yala*, which was invented as an areal form on the eastern Batoka plateau to describe a kind of hunting undertaken by encircling game. Lozi speakers borrowed the verb into their language, making it into a noun,

⁷¹ This idea is borrowed from Jon Glassman who writes a far better documented history of how slaves on the Indian Ocean coast shifted the kinds of claims they could make on masters by redefining their relationship within the idioms of kin, patronage, and paternalism. Jonathon Glassman, *Feasts and Riot: Revelry, Rebellion, and Popular Consciousness on the Swahili Coast, 1856-1888* (Portsmouth, NH: Heinemann, 1995). See also Hanson, *Landed Obligation*.

imayala “an unlucky person who always comes back empty-handed from fishing or hunting, etc...”⁷²

Similarly, when Lozi spoke of *sibinda*, they spoke not of hunting but of “ungovernability, fig. strong-headed person.”⁷³ Lozi speakers borrowed the word *mwaalu* in the form *mwalu* to talk about a “perplexity, embarrassment, bewilderment.”⁷⁴ This borrowing identifies the source of the surprise and frustration of Lozi warriors when their expansion into the Kafue and Batoka was sometimes held back by Ila and, to a lesser extent, Tonga warriors, who probably came from the ranks of the *baalu*. If Lozi speakers borrowed the root *-shuta from western Botatwe speakers to talk about fishing with a hook and line, they added a meaning, which may have summarized their assessment of Botatwe fishing skills: “to miss the target, the goal, the aim, etc.”⁷⁵

Though none of these examples attests to the ridicule Lozi speakers deployed when talking about Botatwe hunters as well as the appropriation of the word *-yala, the density of derogatory and critical meanings added to words shared by Lozi and Botatwe is unprecedented in other neighboring languages. It seems that ridicule was used to belittle a set of skills, particularly in hunting, that were highly valued among Botatwe peoples living just beyond the reach of the expanding Lozi polity, a set of skills that transferred from the hunt to battle to maintain the safety of Botatwe communities from physical, if not verbal attacks from the Lozi.

⁷² A. Jalla, *Silozi-English Dictionary*, 3rd ed. (Lusaka: National Educational Co. of Zambia, 1982): 85.

⁷³ Ibid, 372.

⁷⁴ Ibid, 290.

⁷⁵ Ibid, 389. Consider also the secondary, derogatory meaning of the *kanyandi* fishing net, the origins of which are uncertain but the spread of which was probably at least partly due to Lozi speakers: ‘fig. a whore (sometimes applied to dissolute man)’ Ibid, 102. The metaphor of ensnarement is easy to see here.

9.4 Conclusion

The reasons for which one could be identified as a skilled, celebrated hunter shifted for peoples living in the eastern Botatwe region in the mid to late second millennium CE. The status of elderhood and networks of friends and companions were emphasized in new meanings attached to *mwaalu* in the face of the economic wealth and political power one could muster by becoming a professional elephant hunter, *nkombalume* or *sinyàngá*. As a way of considering the deep African past, the study of personal achievement and reputation certainly tells a different part of the story of the development of political complexity and the competition of institutions and their members for access to power in the precolonial past. People with a reputation for skill in quotidian and highly specialized work could build up ties of indebtedness and affection among colleagues, friends, family, and lovers, ties that could be brought into the pools of knowledge composed by Big Men, chiefs, clan leaders, ritual specialists, and other figures who populate narratives of precolonial African history. Yet, such networks could also undercut attempts to consolidate power around other material resources, such as agricultural surplus, and other moral visions, such as the importance of firstcomers.

A deep history of concerns about building reputations foregrounds processes of network building and loci of power that could undercut, contribute to, or crosscut the kinds of networks we know about for the precolonial African past. But the history of reputations can also keep the material needs and moral visions of the community at the heart of ambitions to define the individualisms experienced by members of the community at particular moments in the past. As a historical linguist, I find the grammar of Botatwe languages to be an eloquent metaphor for the potential of the history of reputations to reshape how we write about the precolonial African past.

Botatwe speakers add the honorific plural to a root to refer to great people; for example, a person who is a hunter, *mufwimi*, may be called *bafwimi* (lit. “hunters; numerous *mufwimi*”) if he is skilled at his craft. Perhaps the plural not only indicates the unique worth of such an individual, but also the numerous people who sustain his claim to this status each time they speak.

CHAPTER TEN
COLLECTING FOOD, CULTIVATING PERSONS:
CONCLUDING REMARKS

Wild resource use formed an innovative pool of Botatwe knowledge and practice for three thousands years, despite a shift from a hunter-gatherer to a mixed farming economy around the turn of the Common Era. Wild resource use was made dynamic through the efforts of Botatwe farmers, herders, hunters, fishers, and foragers who saw the success of their settlements to lie in effectively managing the variety of talents embodied in individual members of the community. These efforts were undertaken in historically specific contexts, with the result that the descendants of Proto-Botatwe speakers created many paths toward securing food, building communities, and cultivating virtuosity.

Interactions between Botatwe speakers and neighbors speaking other languages, particularly outlying Kaskazi and Kusi languages, were a central feature of life on the savannas and the source of much of the innovation around wild resource use. Lexical evidence for borrowing demonstrates the extent to which Bantu peoples valued the exchange of ideas and

information. From about the 11th century B.C.E. to the 15th century C.E., these exchanges produced a diverse, cosmopolitan social and linguistic landscape. The readiness of Botatwe speakers and their neighbors to adopt new ideas and practices produced a history of change and development that confounds the conservative, primordial, unchanging stereotype of ancient African societies.

In the earliest periods of Proto-Botatwe settlement, diversity was the key to food security and, toward the end of the Proto-Botatwe period, wild foods certainly sustained individuals and families who chose to experiment with the novel opportunities of food production. Wild foods did not sustained an “affluent” society, for Botatwe speakers took up the laborious tasks of sowing seeds and processing ripe grainheads.¹ Nor were wild foods collected merely to stave off ever-encroaching hunger. The vocabulary of Proto-Botatwe speakers and their descendants suggest that collecting and cultivating foods were interwoven threads of a single food system. But, that did not mean all foods were alike or that all capacities at producing and processing them were equally appreciated. For example, sustained innovation around the vocabulary for honey from the earliest Proto-Botatwe era some three thousand years ago and well into the second millennium suggests that Botatwe consumers cared to be fastidious about some wild foods. Honey hunters, mead makers, and consumers were meticulous as they compared the distinctive character of honey products made by different kinds of honeybees from various collections of pollen and, perhaps, as they discussed who could acquire the most selective grades.

Proto-Western Botatwe speakers and their descendants faced a unique challenge in the dry Kalahari Sands environment, a challenge they met with an old strategy of eclecticism,

¹ On the “original affluent society” thesis, see Marshall Sahlins, *Stone Age Economics* (Chicago: Aldine, 1972).

shifting their emphasis from one or another facet of the food system while continuously innovated in all facets. In the last half of the first millennium, herding and hunting proved to be complimentary activities from the hook of the Zambezi to the lower Machili Basin. The location of Proto-Western Botatwe settlements placed them in the periphery of the successive trade centers of the Tsodilo Hills. Indeed, the food consumption patterns at Divuyu (game meat) and Nqoma (increasingly, beef) may have influenced the emphasis on herding and hunting in the archaeological and linguistic records of the western Botatwe region from the middle of the first millennium to its close because settlers in the Kalahari Sands were well within trading range of Tsodilo communities. By the early centuries of the second millennium, better rains supported efforts in cereal agriculture, especially in the upper reaches of the Machili River system; a broad range of wild foods supported these shifts. Throughout this period, Botatwe societies in the west traded for rare glass trade beads and metal jewelry, setting the stage for participation in innovative forms of exchange tied to the rise of centralized states and long-distance trade routes from the middle of the second millennium.

To the east, Botatwe speakers took a different path. A diverse food system was an important strategy for exploiting the variety of microenvironments in the greater Kafue. Nowhere is this more evident than the numerous innovations for fishing tools to harvest from all manner of water features found throughout the region. Indeed, the settlement pattern, ethnographic record, and lexical evidence for semantic distinctions between food collected near the village and in the distant bush suggest that it was in the second half of the first millennium that we begin to see indications of ideas differentiating settled spaces from the bush. Proto-Eastern Botatwe speakers and, later, Proto-Kafue speakers focused innovations in hunting vocabulary around a dense lexicon for spearcraft, suggesting some degree of specialization.

Eastern Botatwe hunters invented words for novel parts of spears: ferrules, shafts, and new kinds of points. They also created a new status of hunter, *mwaalu*, whose skill (probably with a spear) was widely celebrated. As exceptional hunters, *baalu* probably directed the final innovation tied to eastern Botatwe people's emphasis on spearcraft: group hunting. With these neighborhood-wide endeavors, Botatwe speakers created an important economic and social arena for interacting with neighbors speaking non-Botatwe languages, neighbors who would be absorbed into Botatwe speech communities in the first centuries of the second millennium. Yet, the organization of group game drives emphasized individual achievement and recognition alongside community building and set the stage for new specialists, elephant hunters, to recast the material wealth and social capital that realized recognition as a skillful hunter.

By the middle of the second millennium, Botatwe languages were spoken throughout the western, southern, and central provinces of modern-day Zambia. This region lay at the frontier of states that had begun to experiment with centralization around the turn of the first millennium. Throughout the second millennium, many central African communities either took up the challenge of effectively centralizing power, often along the models developed in the Luba and Zimbabwe heartlands. Some saw their leaders absorbed as a lower level of political control under immigrants claiming royal status. Others still, like the Botatwe, lived on the fringes of these negotiations, never fully becoming part of territories claimed by central courts but always remaining within the lands contested by ambitious states through demands of tribute. As the intercontinental trade networks intensified and extended their reach, these new systems of commerce offered opportunities for wealth that far exceeded exchanges with centers of earlier periods of Indian Ocean trade like Divuyu and Nqoma at the Tsodilo Hills and Ingombe Ilede at the confluence of the Zambezi and Kafue Rivers.

Lexical innovations in Botatwe languages provide a perspective from the frontiers of well-known narratives of state and trade expansion. This perspective illuminates a new phase in an old story of linguistic and cultural contact. Now the outcome of contact was not the absorption of non-Botatwe speakers into Botatwe communities. The political prestige of other languages, like Lozi, had far exceeded the regional standing of Botatwe languages. Increased interaction across larger spaces broadened the territories with which people identified and some speakers of new *lingua franca* sought to establish their own communities near Botatwe lands, often incorporating neighbors by means of violence. Botatwe societies spoke with their neighbors, inventing and learning new strategies to engage with tributary and trade networks. Later still, they spoke about the violence and political uncertainty that confounded attempts to build safe communities.

The history of the hunting, fishing, and foraging activities of Botatwe farming communities demonstrates the danger of emphasizing the role of collected food as merely supplemental to cultivated food. To do so belies the complexity of the contributions of such activities not only to instrumental concerns with meeting caloric needs, but also to historical concerns that probably featured just as importantly in the minds of Botatwe people: cultivating communities with strong bonds across the socially, geographically, and metaphysically constructed divides of kinship, territory, and ancestorhood. The work of hunting, fishing, and honey collection provided Botatwe people, especially those known for great skill in these crafts, with products to withhold or to share with those they respected, those for whom they felt great affection, or those with whom they had ties of indebtedness.

The story of Botatwe hunters, fishers, and honey gatherers that emerges from linguistic evidence shows us how skills embodied in individuals were collected together to build

communities with great potential for successful living. It was the politics of community composition that drove contact across linguistic frontiers and innovation in fields of work that supported individual distinction. The dialectical relationship between contingent forms of individuality and community requires us to think differently about themes that dominate early African history: the origins and subsequent development of institutions governing social and political life, the centralization of political power, and methods of procuring food. The study of historically contingent modes of being recognized as a skilled or unique individual in the precolonial past can illuminate new processes of group making, not all of which developed institutions to perpetuate such groups. Historicizing ideas about individuality and the institutions to which individuals belong holds great potential for understanding the deep history of decentralized societies because greater attention to the multiple reasons for which individuals were valued may illuminate new loci of wealth and authority that diffused power. The particular geniuses of Botatwe individuals who came together to secure each other's future compel us to see that not all producers contributing to a disembodied, seemingly monolithic food system were the same; in the act of coming together to pool their intellectual and material resources, Botatwe people both collected successful communities and cultivated great individuality.

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APPENDIX ONE

INFORMANTS AND LOCATIONS OF FIELDWORK

The following people are some of the over one hundred people who shared with me their words and ideas about life in the village and in the bush, in the present and in the past. This list includes only the information informants wanted to share and is, therefore, neither complete nor standardized. In some cases, such as Ila and Fwe, speakers designated the name of one or a few people who helped me to navigate through community life as I interviewed members of the village. In other areas, all informants wanted to be named, sometimes with pseudonyms. For other languages still, there were few informants to interview because the language and culture are well-documented, as is the case with Ila, or because the language is not widely spoken, as is the case with Lundwe. Generally, people from minority languages in southwestern Zambia and in the Caprivi Strip of Namibia, where linguistic identity is highly politicized, preferred to remain anonymous. Details about anonymous informants respectfully remain in the author's possession.

FWE

Noreen Majanga, Katima Mulilo, Namibia
Francis Mungu and neighbors and friends, Sibbinda, Namibia
Kerrister Matakala Numwa, Sachona, Namibia
Tubalike Numwa, Sibbinda, Namibia

ILA

Catherine Mudenda and female friends, Mukaza, Zambia, wild foods and medicines
Peter Mulonga and family, Musonde and Mukaza, Zambia

LENJE

Samson Ntaulu Chibiya, Chibiya Village, Chief Liteta, Kabwe District, Zambia
Samuel Muswolomoki, Kalabo Village, Zambia
Mercy Mwashalenga, Chief Chitanda and Lusaka, Zambia
Philmour John Mwashalenga, Chief Chitanda, Zambia

LEYA

Patson Kero and colleagues, Mukuni Village, Zambia
Regina Lwambi, Mukuni Village, Zambia
Dolika Makole, Mukuni Village, Zambia
Beatrice Makole, Mukuni Village, Zambia
James and Bruno Makole, Mukuni Village, Zambia
Bedyango Siloka I, #18, Mukuni Village, Zambia

LUNDWE

Frederick Chikuta and wives, Chokola, Zambia

MBALANGWE

Petrona Masaka with neighbors and friends, Kaenda and Savelo, Namibia

Ellen Sikalumbu and family, Muketela, Namibia
 Richard Nzundamo, Kanono Village and Lizauli Village, Namibia

SALA

Jennifer Shimbabo, Mulela Village, Zambia
 Eunice Shimbabo, Mulela Village, Zambia
 Tommy Kazoka, Nampuntwe Village, Zambia
 Mr. Rabson Mwemba, Mulela Village, Zambia
 Bors Mugwanda, Mulela Village, Zambia
 Lillian Ntalasha, Mulela Village and Lusaka, Zambia
 Savior Muzeta, Mulela Village, Zambia

SOLI

Godfrid Levi Makankila Shamulenge with neighbors and friends, Chongwe and Shamulenge Village, Zambia
 Ian Shamulenge, Chongwe, Zambia
 Andrew Dixon Mukutu with family, neighbors, and friends, Chongwe and Munyanya Village, Zambia
 Patrick Malaya, Mwanamunga Village and Chongwe, Zambia, hunter

SHANJO

Catherine Maswabi with family, neighbors, and colleagues in the market, Ongwezi and Sesheke Market, Sesheke District, Zambia
 Edina Mangala, Malindi Village, Sesheke District

SUBIYA

Mbiyana Morongwe, Satau Village, Chobe Enclave, Botswana
 Josephine Nanzala Msiwa and market women, Satau and Kasana, Botswana
 Catherine Matafela Dambe, Kazungula, Botswana
 Josephine Masiziani, Kavimba, Chobe Enclave, Botswana
 Masene Samunzala, Mabele Village, Chobe Enclave, Botswana, healer
 Edie Motho, Kasane, Botswana
 Charles Iluba Mutumba, Kasane, Botswana
 Reverend Ozias Kamwi Nsefwe Kalundu, Satau and Kasane, Botswana
 Moses Mowa, Parakarungu, Chobe Enclave, Botswana
 Kasaila Muniango, Mabele Village, Chobe Enclave, Botswana
 Dismoni Kamwi, Nankomba, Caprivi Strip, Namibia
 Victor Siamani, Imbala Village, Namibia

THIMBUKUSHU [not a Botatwe language]

Kenneth Masiala Kufwa, Katima Mulilo, Namibia
 Benson Sitongo Muroto, Ruvunje Village, Namibia
 Mapayi Rularo, Ruvunje, Namibia
 Godwin Tuhemwe, Ruvunje, Namibia
 Febian Tutavuke, Ruvunje, Namibia

Shadrack M. Mwayisithiya, Ruvunje, Namibia
 Charles Disho, Ruvunje, Namibia
 Victor M. Sitongo, Ruvunje, Namibia

TOKA

Golio Sekwelukuba, Mapalanga Village, near Senkobo, Zambia
 Wilson Chidi Siachinga, Mapalanga Village, near Senkobo, Zambia
 Claris Miyoba, Mapalanga Village, near Senkobo, Zambia
 Agnes Matimba, Mapalanga Village, near Senkobo, Zambia
 Estnat Nasilele, Mapalanga Village, near Senkobo, Zambia
 Elina Cabbage, Mapalanga Village, near Senkobo, Zambia
 Christina Munshindu, Mapalanga Village, near Senkobo, Zambia
 Malita Njambe Nukamapulanga, Mapalanga Village, near Senkobo, Zambia
 Jennifer Sikusibwidu, Mapalanga Village, near Senkobo, Zambia
 Zinnia Musole, Mapalanga Village, near Senkobo, Zambia
 Lambi Kashikwa, Mapalanga Village, near Senkobo, Zambia
 Robin Kajiko, Mapalanga Village, near Senkobo, Zambia
 Philimoni Siamisindo, Mapalanga Village, near Senkobo, Zambia
 Alfred Simanungu, Mapalanga Village, near Senkobo, Zambia

TONGA

Jackie Ng'andu, Lusaka and central and southern provinces, Zambia
 Alice Habanyama and family and neighbors, Nalolo Village, near Chikuni, Monze, Zambia
 Timothy Mukanda and wives and neighbors, Nalolo Village, near Chikuni, Monze, Zambia
 Maria Namwemba, Nalolo Village, near Chikuni, Monze, Zambia
 Raphael Moonga, Mukanzubo Cultural Research Institute, Chikuni, Zambia
 Georgina Makondo, Nalolo Village, near Chikuni, Monze, Zambia
 Evans Chimwaya, Nalolo Village, near Chikuni, Monze, Zambia
 Justin Mwiinga, Nalolo Village, near Chikuni, Monze, Zambia

TOTELA

Mapenzi Tubalike, daughters, grandchildren, male neighbors, and an unnamed village hunter,
 Nkasa, Kasheshe, on the Katima Mulilo to Kongola Road, Namibia

APPENDIX TWO
CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
1. I	Mebô Ime	Amebo Ume	Nébo	Ime	Ame
2. You [s.]	Uwi Webo	Uwe Amwebo	Wébo	Iwe	oße
3. we	Tu Ifwe Swebo	Tu Uswe Aswebo	Tu Swébo	Tu Iswe	Afwe
4. Who?	Ni	Nguni?	Wani Ngani?	Ngani?	-Ani?
5. that [dem.]	Oyo Uya	Wezo -lya	Uyo uliya	-ya	-sa
6. all	Yonse Boonse	-onse	-onse	Tonse Boonse	-onse -oonse
7. many	Bangi	-nji	-ngi -nji	-ngi	-ingi βanji

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection. Where one or the other exists, pronominals and emphatic pronouns were only compared as cognates and counted against each other.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
8. other	Mwenga Mbiia Mwi	-mwi -nji	-mwi -mbi	-mwi	Nabamo person Nabimo smthg
9. one	Imwi Omwe -Mo	Omwi	-omwé komwí	Komwi	-mo
10. two	-bili bobilo	-bili	-βilo -βili -bilo	Tobilo -bile	-bili -βili
11. three	Bôtatwe Batatu	-tatwe	-otatwe -tatu	-otatwe	-tatu
12. four	Bôni bani obanda bone	-ne obanda	Obanda -ne	Bone	-na
13. five	Bôsanwe basanu	-sanwe	-osanwe -sano	Bosanwe	-sanu
14. big	Pati	-kando	-nene -kulu -kando	Chinene -pati	-nene

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
15. small	Kanini -shonto	-shonto -dini	-nini	Lishoonto -syoonto	-ng'ana
16. long	Lamfu -lahu [-lafu]	-lamfu	-lamfu -lale	Chilamfu	-tali
17. short	-fwifwi -hahwi [-fwafwi]	-fwafwi	-fwifwi	Chifwaafwe	-fupi
18. old	-kulukulu -pati -chakandi	-kulumpala -cembele	-kulu -chembele -kalekale	Kuchembala	-keendi
19. new	Pia -pya	pya	Pia -pya	Chanyowani -piya	-linolino
20. good	Botu	-botu	Wotu -botu	Chibotu -luleme	Kwina -ina
21. ripe	Bizwa	Bizwa (to be -) Bizu (adj)	-pia -pya	Chapya	-pya

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
22. unripe	Chikwange -gwangi [-kwangi]	Bishi -bisi	βisi Chibishi	Chibishi	-besu
23. white	Tuba	tuba	Tuβa -tuba	Chituba -tubwa	-tuba
24. black	Siya	siya	Shia -shya	Chishiya -siya	-shipa
25. red	Subila	-subila	Fwela Fubela -salala	Chisalala	-fubela
26. man	Ndaba Mwalumi Musankwa	Ndumbana Musankwa	Mwanaluma Musankwa Ndaba	Musankwa	Mutuloba
27. woman	Mwanakazi Mukaintu	mukazhi	Mukashi Mwanakazi	Mukaintu	Mutukashi
28. person	Muntu	muntu	Muntu	Muntu	Muntu

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
29. fish	muswi	inswi	Inswi	Inswi	Inswii Inswi
30. bird	Myune Muyuni	muzune	Ciyuni	Muyuni	Keni Kakeeni
31. dog	Mbwa Mubwa	mubwa	Mbwa	Mbwa	-bwa
32. louse	Injina	injina	Njina	Njina	-inda
33. tree	Musamu	Isamu	chisamu	Chisamu	-tondo
34. seed	Imbutó Inseeke	imbuto	Imbotu Lúseke	Imbuto	Nsele Imbuto
35. leaf	Iteô matuhu [matuvu]	itovu	Liteu	Liteu Matuvu	Tewu Liteu/mateu

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
36. root	Miyanda	muzanda	Mwiyanda	Miyanda	-yanda
37. bark	Chikwa magwa [makwa]	Cipande Cipapu	Chipande Chiyula Chipapu	Chipapu	Kwati Chipampasha
38. skin	Lukanda -ganda [- kaanda]	Lukanda	Chikanda chipaya	Chikanda	-paya
39. meat	Inyama	Buzani Inyama	nyama	Nyama	Nyama
40. egg	Iji	iyi	Liyii Lii	Liyi/mayi	Liyi
41. horn	Luja	Luya Lwiya	Lwija Licha	Meja	Licha
42. tail	mujila, mudʒila, muchila [muchila]	muchila	muchila	Muchila Chiyeye	Muchila

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
43. feather	ipepe	ipepe	Lipepe	Lipepe	Lipepe
44. hair	Ishushu Masusu	masuso	Lisusu	Masusu	Mishishi
45. blood	Buloa Bulowa	buloa	bulowa	Bulowa	Milopa
46. bone	Chifua ihuwa [ifuwa]	Chifua Cifuwa	Chifua Chifuwa	Chifuwa	Chifupa
47. head	Mutwi Mutwe	mutwi	Mutwi	Mutwi	Mutwi
48. heart	Moyo	mozo	Moyo	Moyo Mozo	Moyo
49. liver	Chini Muni	muni	Chini Lini	Muni	Mpafwa

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
50. ear	Kutwi	kutwi	kutwi	Kutwi	Litwi
51. eye	Linso/lisyo	Linso	Liso/linso	Linso	Linso Liinso
52. nose	Impemô	monongo	Nsyono Inshono	Mpemo	Impembo
53. mouth (outer mouth/ lips)	mulomo	mulomo	Mulomo	Mulomo	Mulomo
54. tooth	Lino Linyo	Lino	Lino	Meno	Lino
55. tongue	Lulimi mulaga [mulaka]	mulaka	Lulimi Mulaka	Mulaka	Mulemi
56. nail/claw	Lwala Luwala/mala	lwala	Luala/maala	Maala	Luyala

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
57. foot/leg	Kulu igulu [ikulu]	itende kulu	Mwendo	Mweendo leg	Mweendo
58. knee	Izwi igondo [ikondo]	ivhwi	Linungo	Linungo	Linungo
59. hand/arm	Ijansa kubogo [kuboko]	kuboko	Lyansa Mukono	Lyansa arm Lupaka hand	Chikasa
60. belly	Bumbô Ida	ibumbu	Lifumo Mimba	Livumo Mwifwu	Ntampa lißunda
61. neck	Insingô	inshingo	inshingo	Inshingo	Insingo Inshingo
62. breast	Lukolô	lukolo	Inkolo Liße	Inkolo	liße
63. sun	izuba	izuba	Lisuba	Lizuba	lisuða

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
64. moon	mwezi	mwezhi	Mwenshi	Mwezhi Mwezyi	Mweenshi
65. star	inyenyezi	intongwezhi	Nyenyeshi Nyenyenshi	Inyenyezhi	Lunyenyenshi
66. water	Manzi Meenda	menzhi	Manshi	Manzi Manji Maanzi	Meenshi
67. rain	Invula imhula [invula]	invula	Imfula	Invula Munvula	Imfula
68. cloud	igumbi [ikumbi]	ikumbi	Likumbi	Likumbi	Likumbi
69. smoke	Busi	Busi	Busi Bwishi	Bushi Busyi	Bwishi
70. fire	Mulilô	Mulilo	Mulilo	Mulilo	Mulilo

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
71. ashes	Itwe Idiota	itwe	mulota	Mulota Itwe	Mulota
72. earth	Inshi	inshi	Insi	Inshi Insi	Panshi
73. sand	Musenga Luseye (>Soli?)	isenga	Musenga Museese	Bulongo -senga	Museya
74. stone	Ibwe	ibwe	Libwe	Libwe	Libwe
75. path/road	Inzila	inzhila	Nshila	Tukondo Mukwakwa	Mukondo Nshila
76. mountain	Mulundu	ilundu	Mulundu	Mulundu	Mulundu
77. cold	Mpeyo Kutontola	Impeyo kuntontola	Mpeyo Kutontola	Mpeyo -tonola	Kutontola

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
78. night	masigu [masiku]	mashiku	Mashiku	Mashiku Masiku	Mashiku
79. name	ihina [izina]	izhina	Lina	Lizhina	Liina
80. fat [n.]	mahuta [mafuta]	mafuta	Mafuta	Mafuta	Mafuta
81. milk	magupa [makupa]	mukupa	Makupa Mukupa	Mukupa	Mukaka
82. drink	Kunyua Kunywa	kunwa	kunwa	Kunwa	Kunwa
83. eat	Kulya	Kulya	-lia kulya	Kulya	Kulya
84. bite	Kuluma	kuluma	Kuluma	Kuluma	Kuluma

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
85. burn [itr.] “to be burnt”	Kupya	kupia	-pia -pya	Kupya	Kupya
86. burn [tr.] “to burn s.”	Kutenta gumpa [kumpa]	kutenta	kutenta	Kuyoka Kutenta	Kutenta
87. see	Kubona	Kubona	kubona	Kubona	kuβona
88. hear	Kuvwa	kutelela	-nyufwa kunynfwa	Kutelela	Nyumfwa Kunyunfwa
89. know	kuziba	Kushiba kuzhiba	Kushiba	Kuzhiba	Inshiba Kwiishiba
90. sleep	guona [kuona]	Kuona	-ona kuoona	Koona	Kona Koona
91. die	guhwa [kufwa]	kufwa	Kufwa	Kufwa	Kufwa

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
92. kill	Kujaya	kuyaya	-jaya kuchaya	Kujaya	-shiina kushina
93. fly	Kuluka guluga [kuluuka]	kuuluka	Kuuluka	Kuuluka	-luka kuuluka
94. go	Kuya goya [koya]	kuya	-ya -enda	Kuya	-enda kuya
95. come	-eza gobola [kobola]	kwenza	-isa	Koza Kaza	Kwisa
96. stand	Kuima Kwimikila	kuzhima	Ima Kunyamuka	Kwima -yima	Kwimana
97. sit	Kukala	kukala	Kukala	Kukala	Kwikala
98. say	Kuamba Kwaamba	Kuamba	-amba	Kwamba	Kwamba

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Tonga, M64	Ila, M63	Lenje, M61	Sala, M631	Soli, M62
99. give	kupa	kupa	-pa tambika	Kupa	-pa
100. swim	-yamba	Kusamba	-samba	Kusamba	Kusamba

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
1. I	Mebo	meβo	Mebo Ndimé	Íme Njime [copula]	Imé
2. You [s.]	Ulya	yeβo	Yebo meβo mweβo	Iwe Njiwe [copula]	Iwe Uwe
3. we	Swebo	sweβo	Swebo sweβo	Iswe Njiswe [copula]	Tu Iswe Uswe
4. Who?	Nguni?	Ngwani	Ngwani	Ndini Njini [copula]	-ani -ini? njeni
5. that [dem]	Ulya	Ulya	Ulya	-na	-na
6. all	Bonse	Toonse	Bense Bonse	-onse zoonse	Bonse
7. many	Banjibanji	Banji	Banji	-ngi banji	-ngi -ingi

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection. Where one or the other exists, pronominals and emphatic pronouns were only compared as cognates and counted against each other.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
8. other	Ulya	Chimwi	Ulya	zumwinya njozuna	Zumwi
9. one	Chomwe	Omwi	-omwi komwe	koomwe yenke	Mwe konke
10. two	shoβile	Bobile	-bile toβile	-bīli tobile bobebe	-bīlí tobele zovere
11. three	Shotatwe	Botatwe	-otatwe	totatu botatwe	-tatwé -otatwe
12. four	hiyone [shone]	Bone	-ne	-ne	-ne -one
13. five	hosanwe [shosanwe]	Bosanwe	-sanwe	Toosanwe	-sanwe
14. big	Chikando	Chipati	-pati	-nene chikando	Kando -kulu

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
15. small	Kashonto	Chinini	-nini	-nini	-nini
16. long	lamhu [lamfu]	Chilamfu	-lamfu	-le chire	-le -lye
17. short	Chihwahwa [chifwafwa]	Chifwifwi	-fwifwi	-fuhi kafwihi	-fohifohi kafuhi -fwihi -fwi
18. old	Chakalekale	Chipati	-chembele [prsn] mupati [prsn] mudala [prsn]	Nkale Chakalekale	Kulukulu chakale supere/ supala
19. new	Chipya	Chipya	-pya	-hya chimwinya chihya	-hya -hiya
20. good	Chibotu	Chibotu	-botu chiβotu	Chilotu	-lotu hande nenza urote
21. ripe	Lya bizwa	Chibizidwe	-bizwa	-bizwa	-buzwile zwire

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe	Toka	Leya	Totela	Subiya
22. unripe	Ntali na bizwa	Chibisi	-bisi	Mbisi	Chibisi -visi
23. white	Shilatuba	Chituba	-tuba -tuβa	Chituba	Chituba Tuva
24. black	Shilahiva [chilasiya]	Chisiya	-siya	Chakusiha	Seha Siha
25. red	Shilasubila [chilasubila]	Chisalala	-salala	Subila	-subila -suβila -suvira
26. man	Musankwa	Mwalumi	Mwalume	Mukwame	mukwaame
27. woman	Mukaintu	Mwanakazi	Mwanakazi	Mwanakazi	Mwanakazi Mukutwakazi Mukulwakazi
28. person	Muntu	Muntu	Muntu	Muntu	Muntu

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
29. fish	Inswí	Nswi	Nswi	Nswi	Inswí
30. bird	Bazuni	Chiyuni	-yuni	Chizúní	Cizuní Chizuni
31. dog	Mubwa	Mubwa	Mubwa	mbwa	Umbwa
32. louse	Injina	Injina	Njina	Inda Ingina Injina [g/j check with Crane]	Injina
33. tree	Chisamu	Musamu	Musamu	Chisamu Chikuni	Chisamo chisamu
34. seed	Ninseke	Inseke	Inseke	Mbeyo Intanga	Imbutó Lutanga Inseke
35. leaf	Matuhu [matuvu]	Mani	Maani	Mani Ikoba	ikóþa ikova

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
36. root	Mizanda	Miyanda	Miyanda	Mihisi miisi muhisi	Muhisi
37. bark	Makwa	Makwa	Makwa	Ihande mahande makwa	Ihande Ikwato -kwati itako
38. skin	Lukanda	Chikanda	Chikanda	Litalo chikanda chikabi	idalo Ikavi
39. meat	Buzani	Nyama	Nyama	Nyama	Inyama
40. egg	Iyi	Mai	Iji / Mai	Ií Iyí	Iyi Lii / mai
41. horn	Meha	Meja	Meja	Manaka inaka Masengo	Manaka Luziya
42. tail	Mujila, mudzila [muchila]	Muchila	Muchila	Mucíla Muchila	Mucilá Muchira

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
43. feather	Mapepe	maβaβa boya Mapepe wing	Milimba maβaβa	Mapepe -fufa voza	Mafufa Munimba Loza Boza/voza
44. hair	Masusu	Masusu	Masusu	Lusúki Insuki	Lusukí
45. blood	Bulowa	Igazi	Malowa	Mali Maloha	Malaha
46. bone	Hihuwa [zifuwa]	Chifuwa	Mafuwa	Cifúhá Chifuha	Cifúha Chifwaha
47. head	Mutwi	Mutwe	Mutwe	Mutwi	Mutwi
48. heart	Mozo	Moyo	Moyo	impilu mozo	Inkulo Mkulo
49. liver	Muni	chiβiti	Chibiti chiβiti	Sibiti Chibiti	Chibiti Ini

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
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50. ear	Matwi	Matwi	Matwi	Kutwi	Kutwi
51. eye	Liso	Menso	Menso	Lyinso linso	Linso
52. nose	Inango	Mpemo	Impemo	Izúlu	Izúlu
53. mouth (outer mouth/ lips)	Mulomo	Mulomo	Mulomo	Lulómó	mulomo
54. tooth	Lino	Meno	Meno	Línó	Líno
55. tongue	Mulaka	Lulimi	Lulimi	Lulímí	Lulimí
56. nail/claw	Mala	Mala	Igala / Mala	Lizara Mazala	Izala

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe	Toka	Leya	Totela	Subiya
57. foot/ leg	Kuulu	Ikulu	Kulu Igulo / maulo	Litende Muhindi	Itende Kulo leg Kuulu
58. knee	Mangondo	Izwi	Izwi igondo/ magondo	Izwi limwele	Izwe izwi mwele ing'wele
59. hand/ arm	Itahi	Kuboko	Janza	Iyanza Kuboko	Iyanza hand Kubóko arm Kuvoko
60. belly	Ihu	Ida	Itumbu	Cinená Ivumo ibumo	Cinená Livumú Ivumo
61. neck	Ihingo	Insingo	Isingo Insingo	insingo	Insíngó
62. breast	Inkolo	Nkolo	Inkolo	Iswe lizwele	Mabele Ivere/ mavere Inkolo
63. sun	Izuba	Izuba	Izuba izuḽa	Iizuba kamwi	Kamwi Izuva izuḽa

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
64. moon	Mweehi	Mweezi	Mweezi	Mwézi	Mwézi
65. star	Intongwehi	Nyenyenzi	Nyenyenzi	Lutungwezi Itungwezi	Ing'wezi Inkani
66. water	Mehi	Manzi	Manzi	Menzi	Menzi
67. rain	Ihula [ivula]	Imvula	Imvula	Mvula	Imvula
68. cloud	Makumbi	Miyoba	Miyoba	Ifu malo mazoba	Malu Ikope
69. smoke	Buhi	kufweḡa	Busi	Busi ḡusi	Busí Vusi ḡusi
70. fire	Mulilo	Mulilo	Mulilo	mulilo	Muliló Muliro

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
71. ashes	Itwe	Idota	Idota	Itwe mulola	Itwe mufuse
72. earth	Ihi	Insi	Muse	Ivu ikwe hanse	Evu Hanse Inkanda
73. sand	Ihu [ivu]	Senga Muse	Lubwe- lubwe Muse	Ibu Ivu iseke	Isekeseke Ivu
74. stone	Mabwe	Ibwe	Mabwe maßwe	Itjwe litwe ichwe itchwe	Ibwe Ivwe
75. path/ road	Inhila	Inzila	Mugwagwa Inzila	Nzila Inzira/inzila	Inzila Inzira
76. moun tain	Malundu	Dundu	Chilundu	Iilundu Irundu	Ilundu Irundu
77. cold	Impeyo	Tontola	Tontola	Tontola	Impeho -tontola

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
78. night	Mahiku	Masiku	Masiko Masiku	Masíku	Masíku
79. name	Ihina	Izina	Izina	Izína Ìzina	Izina
80. fat [n.]	Mahuta	Mafuta	Mafuta	mafuta	mafuta
81. milk	Mukupá	Masilili fresh Malili general	Malili Muzilili	Muzilili	Muzilili Muziriri
82. drink	Kunwa	Kunywa Kunuwa	Kunywa Kunwa	-nywa kunwa kunwa	Kunywa Kunuwa
83. eat	Kulya	Kulya	Kulya	-lya	-lya
84. bite	Kuluma	Kuluma	Kuluma	-suma	Kusuma

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
85. burn [itr.]	Kupíyà	Kupya	Kupya	-hia kuhya	-hyá kuhiya
86. burn [tr.]	Kutenta	Kutenta	Kutenta	Kuhisa	kuhisa
87. see	Kubona	kuβona	Kubona kuβona	-bóná kuvona	Kuβona Kuvona
88. hear	Kutelela	Kumvwa	Kumvwa hear	-súwa	-zuwá
89. know	Kuziba	Kuziba	kusiβa kuziβa	-íziba kwiziba	-Íizibá kwiziva
90. sleep	Kulala	Kulala	Kulala	Kulala	Kulala
91. die	Kuhwa [kufwa]	Kufwa	Kufwa	Kufwa	Kufwa

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
92. kill	Kuyiha [kujiha]	Kujiya	Kujaya	-jaya	-hayá kwihya
93. fly	Kuluka	Kùluka	Kuluka	-húlúká kuuluka kufufa	-uluka
94. go	Kuunka	Kwinka	Kwinka Kwenda	-enda	Kuya Kuenda Kuyenda
95. come	Kwihoka [kuzyoka]	Kozá	Kuza Kozá	Kwiza ukeeza kukeza	-iiza kwiza
96. stand	Kuhima	Kwima	Kwima	Kuzima Kuzimana	-ziima kuzima
97. sit	Kukala	Kukala	Kukala	-íkála kwikala	-ikalá
98. say	Kwambaula	Kwambola	Kwamba Kwambola	-amba	Kuamba

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Lundwe, M632	Toka, M652	Leya, M651	Totela, K41	Subiya, K42
99. give	Kupe	Kupa	Kupa	kuha	Kuha
100. swim	Kudubwa	Kudwaya	Kudwaya	Kusamba	Kusamba Kudunka

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
1. I	Eme	Íme	Ime
2. You [s.]	Ewe	Iwe	Igwe
3. we	Eswe	Iswe	Mwensé
4. Who?	Eni (s.); bani (pl) Ndini	Njeeni Njeni	Nini
5. that [dem.]	-na zywina	-na china	Chilya
6. all	-onshe bonshe	-onse tuense/twense	βoonsé
7. many	bangi	-ngi	βangi

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection. Where one or the other exists, pronominals and emphatic pronouns were only compared as cognates and counted against each other.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
8. other	Bamwi	zimwi bamwi	aβaβamwinya
9. one	-nke yenke	Enke chonke	Chonke
10. two	-bile bobile	-bili zobe zobe zobile	βoβile
11. three	Botatwe	zotatu zotatwe	βotatwe
12. four	Bone	-ne zene zone	βone
13. five	Bamanianja	Mana inyanza Iyanza	βosanwe
14. big	-nene	-kando	Chinene

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
15. small	-nini -chenya	-nini	Chinini
16. long	-re -nde	-le	βule chile
17. short	Nufwihi	-fuhi kafwihi chifwihi	Kafwifwi
18. old	Chikulukulu	Chakale Chikulukulu	Chakalé
19. new	-ya chiyá	-hya	Chiya
20. good	-rota; bulota nenja chilotu	Chinahande -lotu chilotu	Chilotu
21. ripe	-mbizu	Buzwa Kubuzwa	-bizwa

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
22. unripe	Mbishi	-bisi chihatikubuzwe	Chibisi
23. white	-tuba	Chisweho Chituba	kutuβa
24. black	-siha	-siha	Kusiya
25. red	-subila	Chisubila	kusuβila
26. man	mukwame	Mukwame	Mukwame
27. woman	Mukentu Mukazi Mukaintu	Mwanakazi	Mwanakazi
28. person	Muntu	Múntu	Muntu

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
29. fish	Enswi Nswi	Inswi	Inswi
30. bird	Chizyuni Chizjyuni	Cizuni	Chijuni
31. dog	Ombwa Umbwa	umbwa	Umbwa
32. louse	Engina Ngina	Inda Injina	Ingina
33. tree	Chikuni	Chisamu Cikuni	Chishamu
34. seed	Mbuto Ìntangá	Imbúto toze luheke	imßuto
35. leaf	Evuma Divona	Ikoba ikoßa	Liyani / mani

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
36. root	Mwisi Misi	Mihisi Muhisi	Misi
37. bark	Ehande Mahande	Ihande chikapi ikuḽati ikumba	Mahande
38. skin	Chikabi	Idalo	chikaḽi
39. meat	Nyama	Inyama	Inyama
40. egg	Ei Diyi; mai	Íi Iyi	Iji / maji
41. horn	Innaka Manaka	Linaka Inaka/manaka	Manaka
42. tail	Muchila	Muchila	Muchila

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
43. feather	Roja boszhya/bozhya	Loza/boza βoza	βooya
44. hair	Ushuki Nsuki	Lusúki Insuki	Inshuki
45. blood	Maroha Maloha	Malaha	Malowa
46. bone	Chifuha	Cifuha Sapo (?)	Chifuha /zifuha
47. head	Mutwi	Mutwi	Mutwi
48. heart	Mojo Mozho	Mózo ikulo inkulo	Mojo
49. liver	Eshenga (di)senga	Chibiti chiβiti	Isenga

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
50. ear	Kutwi	Kútwi	Litwi / matwi
51. eye	Linsho Dinsho	Línso	Linsho
52. nose	Ejuru Lizhulu	Izúlu	Chulu
53. mouth	Mulomo	Mulómo	Mulomo
54. tooth	Elino Lino/meno	Líno	Lino/meno
55. tongue	Lulimi	Lulími	Lulimi
56. nail/ claw	Ejala duzhala/ mazhala	Linala Izala	Mala

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
57. foot/leg	Entende Matende	Itende	Litende
58. knee	Ezu Dizwi	Izwi	Lizwi/mazwi
59. hand/arm	Eauja Kuboko	Kuboko Iyanza	kuβoko
60. belly	Bumo Divumo	Cinena Ivumo	Livumo
61. neck	Ensingo insingo	Insíngo mokosi	Insingo
62. breast	Manshwe	Maswe ibele	Lishwe
63. sun	Ejuba Dizhuba	Kamwi izuβa	Lijuba

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
64. moon	Mwenzi Mwezi	Mwézi	Mwezi
65. star	Lutungwezi Zitungwezi	Itungwe Intungwe	Itungwezi
66. water	Menji Menzi	Ménzi	Menzi
67. rain	Mvula Umvula	Imvúla (invula)	(n)umvula
68. cloud	Ejoba Mazhoba	Izoba	Makumbi
69. smoke	Boosi; bosì Busi	Buloto musi	βusi
70. fire	Mulilo Muliló	Mulíló	Mulilo

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
71. ashes	Etwe Makala	Itwe mufuse	Makala
72. earth	Evu Hanshi	ivu	Ivu
73. sand	Evu Esheke Disheke	Iséke	Ivwetete
74. stone	Echwe Evuwe Lichwe	Ibwe iḽwe	Iwé
75. path/road	Enjira Enjila Njila	Inzila	Inzila
76. mountain	-lundu	Ilindu Ilungu	Ilundu
77. cold	Empeho -tontora tontola	-ntontola impeho	Kutontola

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
78. night	Masiku	Masíku	Masiku
79. name	Enzina Dizina	Izína	Izina
80. fat [n.]	Mafuta	mafuta	Mafuta
81. milk	Muzilili	Muzili Muzilili	maβisi
82. drink	-nwa kunuwa kunwa	kunwa	Kunwa
83. eat	-lya	-lya	Kulya
84. bite	-shuma	-sumá	Kushuma

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
85. burn [itr.]	Kuhya	kuhya	Kuya
86. burn [tr.]	Kuhisa	kuhisa	Kuya
87. see	-bona	Kubona kuβona	kuβona
88. hear	-shuwa	-zúwa	Kushugwa
89. know	-jiba zyiba kwizhiba	-íziba kuziwa kwisiβa	Kwiziba
90. sleep	-rora kulala	Kulala	Kulala
91. die	-fwa	-fwa	Kufwa

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
92. kill	-ya kwihaya	-Íháya kwihaya	Kwiyaga
93. fly	Kuuluka	-úlúka kuuluka kufufa	Kuguluka
94. go	-yenda kuenda	-enda kuyenda	Kuja
95. come	-eja	Kueza Kukeza	Kwiza
96. stand	-jimana kushimana	Kuzima Kuzimana	Kuzimana
97. sit	-kara -kala kukala	-ikála kwika kwikala	Kwikala
98. say	-wamba kuamba	-amba kuamba	Kugamba

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

CORE VOCABULARY TABLES FOR BOTATWE LANGUAGES

English	Fwe, K402	Mbalangwe, K401/M60	Shanjo, K36
99. give	-ha kuha	-ha -tambika	Kuwa
100. swim	-shamba kushamba	Kusamba -nduka	Kushamba

Entries in [brackets] denote local spelling while preceding entries without brackets represent pronunciation of the same word during data collection.

APPENDIX THREE CORE COGNATE RATE DISTRIBUTIONS

Figure 3.1

Cognition Rate Distribution of Proto-Botatwe: Soli to Proto-Eastern Botatwe to Proto-Western Botatwe

NB: numbers in *italics* denote Soli cognation rates, which are skewed from extensive historical contact with Sabi languages to the east

Core Cognation Range: 55-71%

Median: 64%

62
62
62 66
62 63 64 66 67
59 62 63 64 65 66 67 68
55 58 59 61 62 63 64 65 66 67 68 70
53 54 55 – 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71

Figure 3.2

Cognition Rate Distribution of Proto-Eastern Botatwe: Lundwe to Proto-Falls to Proto-Kafue

Core Cognation Range: 70-77%

Median: 73-74%

73
70 72 73 74 75
70 – 72 73 74 75 76 77 -- -- -- -- 82

Figure 3.3

**Cognition Rate Distribution of Proto-Kafue:
Tonga to Ila to Lenje to Sala**

Core Cognition Range: 78-81%

Median: 79-80%

NB: The 84 score is between Tonga and Ila, who have historically been in great contact.

78 81
78 79 – 81 – – 84

Figure 3.4

**Cognition Rate Distribution of Proto-Western Botatwe:
Proto-Machili to Proto-Zambezi Hook**

Core Cognition Range: 76-81%

Median: 79-80%

81
81
76 – 78 79 – 81

Figure 3.5

**Cognition Rate Distribution of Proto-Machili:
Subiya to Totela to Mbalangwe**

Core Cognition Range: 84-85%

Median: 85-85%

84
84 85

APPENDIX FOUR

SOUND CORRESPONDENCES

Part I: Botatwe Sound Correspondence Tables¹

Eastern Botatwe

Proto Bantu	Soli	Lenje	Sala	Ila	Tonga	Toka	Leya	Lundw e
*b	b/β	b/β	b	b	b	b	b/β	b
*b/ <u>i</u>	sh	sh		ʒ	z			
*b/ <u>y</u>	f	f	v	v	v/h	v	v	v/h
*d	l	l	l	l	l	l	l	l
*d/ <u>i</u>	sh	sh	ʒ	ʒ/z	z/h	z	z	h
*d/ <u>y</u>	f	s		v	z			h
*g ²	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
*g/ <u>i</u>	sh	sh		ʒ	z	z	z	h
*g/ <u>y</u>	f	f/v	v	v	v/h		v	h
*j	Ø/s	Ø/s/z/y	Ø/z/y	Ø/z	Ø/z/y	Ø/z/y	Ø/z/y	Ø/z
*p	p	p/w/Ø	p/Ø	p/w/Ø	p/w/Ø	p/Ø	p/Ø	p/Ø
*p/ <u>i</u>	sh	sh	sh	sh	s/sh	s	s	h
*p/ <u>y</u>	f	f		f	f/h		f	h
*t	t	t	t	t	t	t	t	t
*t/ <u>i</u>	sh	sh	s/sh	sh	s	s	s	h
*t/ <u>y</u>		s		f	s			
*k	k	k	k	k	k/g	k	k/g	k
*k/ <u>i</u>	sh	sh	sh	sh	s	s	s	h
*k/ <u>y</u>	f	f	f	f	f/h	f	f	h
*k/ <u>i</u> and *k/ <u>e</u> ³	ch	ch	ch	ch	ch	ch	ch	ch
*c	s	s	s	s	s	s	s	s
*c/ <u>i</u>	sh	s	s/sh	sh	s/sh	s	s	h
*m	m	m	m	m	m	m	m	m

Table continued next page.

¹ This table was generated from the following sources: my fieldwork; Baumbach, “Langauges of the Eastern Caprivi”; Bostoen, “Comparative Approach to Historical Change in Shango and Fwe”; Guthrie, *Comparative Bantu*.

² Proto-Bantu *g may sometime be realized as a glide.

³ Bostoen notes that *-cùkí “hair” and *-júkí “bee” (as opposed to *-júkí “honey”) are exceptions to the process of velar palatalization. This dissertation argues that the application of *-júkí to “bee” is a borrowed innovation. See root 626. It may be that *-cùkí is similarly borrowed into western Botatwe, as it was not attested in the 100 wordlists I collected in eastern Botatwe languages. Though see “insuki n.8 a single hair of the head; hair matted in strands, as by dried milk” in Fowler, *Dictionary of Ila Usage*, 227.

Proto Bantu	Soli	Lenje	Sala	Ila	Tonga	Toka	Leya	Lundwe
*n	n	n	n	n	n	n	n	n
*ny ⁴	ny	ny	ny	ny	ny	ny	ny	ny
*mb	mb	mb	mb	mb	mb	mb	mb	mb
*nd	nd	nd	nd	nd	nd	nd	nd	nd
*ng	ng	ng	ng	ng	ng	ng	ng	ng
*mp	mp	mp	mp	mp	mp	mp	mp	mp
*nt	nt/nth	nt	nt	nt	nt	nt	nt	nt
*nk	nk	nk	nk	nk	nk	nk	nk	nk
*nj	nsh	nsh		nɓ	nz	nz	nz	h
*nc	ns/Øs	ns/Øs	ns	ns	ns/Øs	ns	ns	Øs

Western Botatwe correspondences continued next page.

⁴ Bostoen notes that “only the root –nyó ‘to drink’ has divergent reflexes among BB [Bantu Botatwe] languages. While [ɲ] is maintained in the western cluster and in Tonga, the rest of the BB languages attests [n].” Bostoen, “Comparative Approach,” 5.

Western Botatwe

Proto Bantu	Totela	Subiya	Mbalangwe	Fwe	Shanjo
*b	b	b/v	b	b	b/β
*b/ i	z	z		z	z
*b/ u	v	v	v	v	v
*d	l/r	l/r	l	r/l	l
*d/ i	z	z	z	z	z
*d/ u	z	z	z	z	z
*g	Ø	Ø	Ø	Ø	g
*g/ i	z	z	z	z	z
*g/ u	v	v	v	v	v
*j	Ø/z	Ø/z	Ø/z	Ø/ʒ	Ø/dʒ/z/y
*p	h	h	h	h/Ø	h/Ø/w/y
*p/ i	s	s	s	s	s
*p/ u	f	f	f	f	f
*t	t	t	t	t	t
*t/ i	s	s	s	s	s
*t/ u	s	s		s	s
*k	k	k	k	k	k
*k/ i	s	s	s	s	s
*k/ u	f	f	f	f	f
*k/ i and *k/ e	ch	ch	ch	ch	ch
*c	s	s	s	sh	sh
*m	m	m	m	m	m
*n	n	n	n	n	n
*ny ⁵	ny	ny	ny	ny	ny
*mb	mb	mb	mb	mb	mβ/mb
*nd	nd	nd	nd	nd	nd
*ng	ng	ng	ng	ng	ng
*mp	mp	mp	mp	mp	mp
*nt	nt	nt	nt	nt	nt
*nk	nk	nk	nk	nk	nk
*nj	nz	nz	nz	ndʒ	nz/ndʒ
*nc	ns	ns	ns	nsh	nsh

⁵ Bostoen notes that “only the root –nyó ‘to drink’ has divergent reflexes among BB [Bantu Botatwe] languages. While [ɲ] is maintained in the western cluster and in Tonga, the rest of the BB languages attests [n].” Bostoen, “Comparative Approach,” 5.

Part II: Proposed Phonological Innovations

2.1 Pre Proto-Botatwe Innovations

1. PB *d > l
2. PB *c > sh
3. *k/_i and *k/_e > ch (palatalization); contingent on *c > sh?⁶

2.2 Proto-Botatwe

Koen Bostoen notes that there are no Proto-Botatwe phonological innovations. This is undoubtedly a result of the tremendous contact and language drift that is discussed throughout this dissertation.⁷ Ehret suggests that tracing multiple shifts resulting from spirantization may be one way to confirm subgroups (for Botatwe, more attention to the spirantization in Soli, Lenje, and Sala might uncover more clear shifts in Botatwe with respect to *t/_y and *d/_y as shifting to /f/ vs. /s/ or /f/ vs. /z/, respectively).⁸ The following innovation is common across the Botatwe field but need further attention to confirm their place as Proto-Botatwe:

1. PB *g > Ø Conflicting: Shanjo attestation of /g/ in *-gamb- “to say”- borrowed from Western Savanna languages?⁹

2.3 Proto-Kafue

1. PB *c/_i > sh Conflicting: Soli borrows from Kafue languages? Reflexes of /s/ suggest an ongoing sound change?

2.4 Proto-Western Botatwe

1. *p > h

⁶ Bostoen notes that this shift is also in M40 and M50 languages. “Comparative Approach,” 10.

⁷ Bostoen, “Comparative Approach,” 10.

⁸ Ehret, “Subclassifying,” 54.

⁹ For more on the phoneme /g/ in languages spoken to the west and southwest of Shanjo, see Erdmann Baumbach, “Languages of the Eastern Caprivi,” in *Namibian Languages: Reports and Papers*, ed. Wilfrid Haacke and Edward Elderkin (Köln: Rüdiger Köppe, 1997): 307-451; Derek Gowlett, “Aspects of Yeyi in Diachronic Phonology,” in *Namibian Languages: Reports and Papers*, ed. Wilfrid Haacke and Edward Elderkin (Köln: Rüdiger Köppe, 1997): 235-63; Wilhelm Möhlig, “A Dialectometrical Analysis of the Main Kavango Languages: Kwangali, Gciriku, and Mbukushu” in *Namibian Languages: Reports and Papers*, ed. Wilfrid Haacke and Edward Elderkin (Köln: Rüdiger Köppe, 1997): 211-33.

2.5 Proto-Zambezi Hook

1. PB *c > sh
2. PB *nc > nsh
3. PB *nj > ndʒ

Part II: Morphological Evidence of Borrowing

1. It may be that a shift of the final vowel -u (and -o?) to -we on nouns indicates borrowing from Kusi languages. Some eastern Bantu languages use the roam formative -e to form deverbatives. Tracing this change more carefully in Kusi languages may go a long way to improving our knowledge of periods of contact between Kusi and Botatwe languages and provide more data about the relationship of outlying Kusi languages absorbed in eastern Botatwe communities to the greater Kusi group. I am not sure whether this shift is evidence of borrowing from Kusi languages into Proto-Eastern Botatwe, or Proto-Kafue. See, for example: -otatwe “three”; -sanwe “five”; nungwe “porcupine”.¹⁰

¹⁰ See also Baumbach, “Languages of Eastern Caprivi,” 311.

APPENDIX FIVE

LEXICAL RECONSTRUCTIONS AND HISTORICAL DISTRIBUTIONS

All Botatwe attestations are organized within an outline classification of the Botatwe family. Roots are numbered first by the chapter in which they are discussed and then according to the order in which they appear to facilitate referencing from the appendix back to the text. For example, the discussion of root 502 can be found in Chapter 5 as the second root mentioned.

All data collected by author unless otherwise noted. Sources of other attestations are noted in abbreviated form in (parentheses) with full citations in the bibliography at the end of this Appendix. Dialectical differences and local orthography [local orth.] are noted for Tonga (see also comments in Core Vocabulary Tables, Appendix 2). Where another scholar has developed a reconstruction, an abbreviated citation is noted under the Protolanguage, Gloss, or Etymology, depending on the level of detail in the source of the root. In this case, attestations are listed only for Botatwe languages and, if the root is fairly local within the Bantu domain, other roots in the region of South Central Africa are provided. See the source of the reconstruction for additional attestations outside Botatwe. For citations information, see the linguistics section of the bibliography.

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APPENDIX FIVE, PART A
RECONSTRUCTIONS IN SUPPORT OF CHAPTER 4

401**Root:** *-lòngà**Gloss:** River**Protolanguage:** Proto-Savanna (Ehret 1999: 65)**Etymology:****Replaces:****Botatwe Distribution:**

Soli: *mulonga*- river, perennial creek; *kalonga*- small stream, tributary, freshet, annual stream

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *mulonga*- river, including seasonal rivers; *kalongalonga*- freshet, small stream, annual stream

Sala: *mulonga*- river; *kalonga*- annual stream that dries out in the rainy season (KD)

Tonga: *mulonga*- river, perennial creek

Ila: *mulonga*- river; *mulonga*- river, stream (Fowler, 457)

Proto-Falls

Toka:

Leya: *mulonga*- river

Proto-Western Botatwe

Proto-Machili

Totela: *mulonga*- river (Zambian Totela, Crane)

Subiya: *kalonga*- small stream, annual stream

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:**Other Bantu:****Other Non-Bantu:**

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004.

Notes: Many western Botatwe speakers replaced this inherited term with *-nuka.

402**Root:** *-dìbà**Gloss:** Pool, Pond**Protolanguage:** early Bantu (BLR3 1025, C.S. 603; Meeussen)**Etymology:**

Replaces:**Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *chishiba*-swamp; *liziba linene*- lake; *liziba*- pool (Torrend, 429); *lishiwa*- pool, pond, lake (Madan, 92, 144)

Sala: *chizhiba*- perennial creek where there is always water; *mubizhiba* or *mubishiba*- seasonally flooded place

Tonga: *chihiba* [local orth. *chiziba*]- floodplains; *kahiba* [local orth. *kaziba*]- seasonally flooded place; *izyiba pati*- lake (Torrend, 324); *izyiba*- pool (Torrend, 429)

Ila: *iziba*- pool, pond, lake (Fowler, 251; Torrend 429)

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *chiziβa* or *chiziva*- annual small stream; *iziba*- pool (Baumbach, 379); *ziziba*- floodplain (Namibian Totela, Crane); *-itiba*- to be flooded, to sink (Zambian Totela, Crane)

Subiya: *izibá*- pool (Baumbach, 318); *chiliba*- waterhole, well (later borrowing; Pfouts, 177)

Mbalangwe: *chiliba*- waterhole, well (later borrowing; Pfouts, 177)

Proto-Zambezi Hook

Fwe: *chiziβa*- swamp; *chiziva*- annual small stream; *kaziba*- pool (Baumbach, 404); *chiziba*- waterhold (Pfouts, 177)

Shanjo:**Other Savanna Bantu:****Other Bantu:****Other Non-Bantu:**

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004.

Notes:**403****Root:** *-tj̀t̀ù**Gloss:** Forest

Protolanguage: Proto-Bantu (BLR3 2948, 2949; Ehret 1998: 299; Guthrie, C.S. 1765; Meeussen; Nurse and Hinnebusch, 621)

Etymology:**Replaces:**

Botatwe Distribution:Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *mushitu* or *musitu*- thick undergrowth, bushes, reeds, etc. as in a river (Madan, 101, 138)Sala:Tonga:Ila:

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe: *mushitu*- forest

Proto-Zambezi Hook

Fwe: *mushitu*- forest, bushShanjo:**Other Savanna Bantu:****Other Bantu:****Other Non-Bantu:****Checked:** BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004**Notes:****404****Root:** *-càkà > *-sàkà**Gloss:** Forest, Secondary Forest, wild area given over to hunting rather than cultivation**Protolanguage:** early Bantu (Ehret 1998: 299; see also Meeuseen *-càkà)**Etymology:** from early Bantu *-càk- ‘to hunt by chasing or driving animals’ or *-cakat- from early Bantu ‘to seek’ (Ehret 1998: 299, 312); in Proto-Kafue languages attest a semantic innovation to ‘thicket,’ perhaps in contrast to the more open savanna woodlands into which these languages were spreading; the source of this semantic innovation may be Kaskazi languages (*jçaka as ‘thicket’ or ‘brush’ in Nurse and Hinnebusch, 623, 632) or a matter of convergence.**Replaces:****Botatwe Distribution:**Soli: *masakasaka* thicket; *chisaka*- thick bush; *masaka*- bush, thicket

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *chisaka* thicket; *kasaka* thicket (Torrend, 571); *cisakasa* thicket, dense part of the forest (Kag., 118); *kusaka* to hunt, of animals, birds, fish (Madan, 110); *lusaka* forest with thick trees, densely wooded (Madan, 95)

Sala: *chisakasaka* thicket

Tonga: *chisaka* bush, wilderness, savanna (?); *chisaka* forest (Torrend, 220)

Ila: *kasaka* forest (Torrend, 220); *kasaka* dense forest country (Fowler, 283); *lusaka* dense bush (Fowler, 377)

Proto-Falls

Toka: *masaka* forest

Leya: *masaka* forest, bush, wild place; *musaka* wilderness

Proto-Western Botatwe

Proto-Machili

Totela: *isaka* forest (Zambian Totela, Crane)

Subiya:

Mbalangwe: *chikaka* thicket (reduplication of second syllable)

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

405

Root: *-bùyú

Gloss: Baobab tree (*Adansonia digitata*)

Protolanguage: Common Eastern Savanna (Proto-Eastern Savanna?). Reconstructed as *-bùjú in BLR3 354; Ehret 1999: 104, Guthrie C.S. 214; Meeussen)

Etymology: The application of this older Bantu root to the baobab is a semantic innovation; the older root may have referred to mahogany (Ehret 1999:104)

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *mubuzu* baobab

Proto-Kafue

Lenje: *mußuyu* baobab tree (Madan, 103); *múbúyu* baobab (Kag., 79); *ibushu* baobab (Kovanda); *libuyu* baobab fruit (Kovanda)

Sala: *mabuyu* baobab

Tonga: *ibbuyu* baobab tree (Hopgood, 239); *mubuyu* baobab tree (Collins, 168); *mubuyu* baobab (Torr.); *ibbuzu* baobab tree (Hopgood, 239)

Ila: *mabuzu* baobab; *ibuzu* baobab (Fowler, 813)

Proto-Falls

Toka: *mubuyu* baobab

Leya: *mubuyu* baobab

Proto-Western Botatwe

Proto-Machili

Totela: *ibúzu* baobab (Baumbach, 378)

Subiya: *ibbózu* (Baumbach, 313, 317)

Mbalangwe: *mubúyu* baobab (Baumbach, 347)

Proto-Zambezi Hook

Fwe: *ebúzhú* baobab (Baumbach, 402)

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

406

Root: *-gùdù (BLR3 1486-1489; C.S. 882; Nurse and Hinnebusch, 640)

Gloss: Anthill, Termite Mound

Protolanguage: Proto-Savanna or Proto-Eastern Savanna?

Etymology: Scholars at Tervuren list this root as a derivative of *-gùdù, ‘sky, top’ (BLR3 1486).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *chuulu* anthill of the white flying ant or termite (Torrent, 23); *cuulu* antheap, anthill of the destructive termite called white ant (Kovanda); *cuulu* anthill (Kag., 78); *chulu* anthill (Madan, 80)

Sala:

Tonga: *juulu* [local orth. *chuulu*]- termite hill; *chuulu* anthill of the white ant or termite (Torrend, 23); *cuulu* anthill (Hopgood, 238); *cuulu* termites, an antheap, a thousand (Collins, 156); *chuulu* ant heap (Fell, 21); *churu* anthill (Torr.)

Ila: *chulu* anthill; *luulu* termite hill (Torrend, 23); *chulu* ant heap, termite hill (Fowler, 144)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *chiulu* termite hill; *cihule* ant heap (Baumbach, 374)

Subiya: *chiulu* termite hill

Mbalangwe: *chiul*- termite hill; *ciwulu* anthill (Baumbach, 347)

Proto-Zambezi Hook

Fwe: *chihulu*, *zihulu* anthill (Baumbach, 408)

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

407

Root: *-tòngò

Gloss: Deserted Village Site

Protolanguage: Proto-Eastern Savanna?

Etymology:

Replaces:

Botatwe Distribution:

Soli: *matongo* uninhabited place, deserted place that had been inhabited but was exhausted

Proto-Eastern Botatwe

Lundwe: *matongo* deserted village site

Proto-Kafue

Lenje: *matongo* deserted village site

Sala: *litongo* place where the forest grows back after people have cut it

Tonga: *matongo* abandoned village; *sikatongo* leader by virtue of ritual firstcomer status

Ila: *itongo* an old, deserted village (Fowler, 246)

Proto-Falls

Toka:

Leya: *itongo* deserted village site

Proto-Western Botatwe

Proto-Machili

Totela: *kwitongo* deserted village; *itoongo* uninhabited place where people moved out (Namibian Totela, Crane);

Subiya: *itoongo* deserted place, ruins of an old village

Mbalangwe: *matongo* deserted village

Proto-Zambezi Hook

Fwe: *itongo* deserted village; uninhabited place where people don't live

Shanjo: *litongo* place that is a former village

Other Savanna Bantu: Shona –*dòngò*, *matongo* abandoned village site (Hannan, 134); *ri/ma-dongo* site or ruin of deserted kraal (Biehler, 242); Venda *dongo*, *matongo* ruin of a hut, dilapidated and about to fall down, deserted kraal site, ruins of a village, place where people lie

buried (Van Warmelo, 31); Zulu *amathongo* ancestor spirits (Van Warmelo, 31); Lozi *litongo* sandy, infertile land, *katongo* land left by ancestors (O'Sullivan, 162); *katongo* land left by ancestors (Jalla, 107)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

408

Root: *-jògù

Gloss: Elephant (*Loxodonta africana*)

Protolanguage: Proto-Bantu (BLR3 1607; Ehret 1999:76; Guthrie, p.s. 261; C.S. 951; Meeussen; Nurse and Hinnebusch, 641)

Etymology:

Replaces:

Botatwe Distribution:

Soli: *njofu* elephant

Proto-Eastern Botatwe

Lundwe: *muzohu* elephant

Proto-Kafue

Lenje: *nsofu* elephant

Sala: *nzovu* elephant

Tonga: *musoho* or *muzovu* elephant

Ila: *muzovu* elephant

Proto-Falls

Toka:

Leya: *inzovu* elephant

Proto-Western Botatwe

Proto-Machili

Totela: *unzóvu* elephant; *unzobu* elephant (Crane)

Subiya: *unzovú* elephant

Mbalangwe: *unzóvu* elephant

Proto-Zambezi Hook

Fwe: *inzovu* elephant; *onjovú* elephant (Baumbach, 402)

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

409

Root: *-gùbú**Gloss:** Hippopotamus (*Hippopotamus amphibius*)**Protolanguage:** early Bantu (BLR3 1532, 1533, and 1480; C.S. 875, C.S. 908; Meeussen; Nurse and Hinnebusch, 640)**Etymology:****Replaces:****Botatwe Distribution:**Soli: *mfuβu* hippopotamus

Proto-Eastern Botatwe

Lundwe: *chihubwe* hippopotamus

Proto-Kafue

Lenje: *infubu*; *mvubu* hippopotamus (Torrend, 274); *fuβu* hippopotamus (Madan, 82); *mfubu* hippopotamus (Kag. 72)Sala: *chihubwe* hippopotamusTonga: *chihubwe*; *civubwe* hippopotamus (Plateau Tonga, Torrend, 274); *imvuvu* hippopotamus (Valley Tonga, Torrend 274); *imvuvu* hippopotamus (Fell, 21); *civubwe* hippopotamus (Collins, 156); *civubwe* hippopotamus (Hopgood, 238); *imvuvu* hippopotamus (Hopgood, 240)Ila: *chivubwe* hippopotamus; *civubwe* hippopotamus (Torrend, 274 and Fowler, 136); *civubu-vubu* a mythical animal thought to inhabit rivers (Fowler, 136)

Proto-Falls

Toka:Leya: *imvuvu* hippopotamus

Proto-Western Botatwe

Proto-Machili

Totela: *umvuvu* hippopotamus; *mvúvu* hippopotamus (Baumbach, 378); *u/imvubu* hippopotamus (Crane)Subiya: *unvuvu* hippopotamus; *umvuvú* hippopotamus (Baumbach, 317)Mbalangwe: *umvuvu* hippopotamus; *umúvu* hippopotamus (Baumbach, 350)

Proto-Zambezi Hook

Fwe: *invu* hippopotamus; *mvúú* hippopotamus (Baumbach, 401, 402)Shanjo:**Other Savanna Bantu:****Other Bantu:****Other Non-Bantu:****Checked:** BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004**Notes:**

410

Root: *-játi

Gloss: Buffalo (*Syncerus caffer*)

Protolanguage: early Bantu (BLR3 1569, Guthrie, C.S. 1947; Meeussen; Nurse and Hinnebusch, 643)

Etymology:

Replaces:

Botatwe Distribution:

Soli: *njati* buffalo

Proto-Eastern Botatwe

Lundwe: *munyati* buffalo

Proto-Kafue

Lenje: *inyati* buffalo; *nyáti* buffalo (Kag. 72)

Sala: *munyati* buffalo

Tonga: *munytati* buffalo; *inyati* buffalo (Hopgood, 240)

Ila: *munyati* buffalo

Proto-Falls

Toka:

Leya: *nyati* buffalo

Proto-Western Botatwe

Proto-Machili

Totela: *unyati* buffalo; *nyáti* buffalo (Baumbach, 379); *u/inyati* buffalo

(Crane)

Subiya: *unyati* buffalo; *unyáti* buffalo (Baumbach, 318)

Mbalangwe: *unyati* buffalo; *unyáti* buffalo (Baumbach, 352)

Proto-Zambezi Hook

Fwe: *unyati* buffalo; *onyati* buffalo (Baumbach, 399)

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

411

Root: *-gùè

Gloss: Leopard (*Panthera pardus*)

Protolanguage: early Bantu (as *-gòj in BLR3 7154, Guthrie, C.S. 834, C.S. 862; Nurse and Hinnebusch, 639; Vansina 1990: 276-7). Borrowed into Botatwe languages from Western Savanna / Njila (see Vansina 2004: 278).

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *fungwe* a species of wild cat (cognate?; Hopgood, 239)

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *ungwe* cheetah; *ngwe* leopard (Baumbach, 383); *ungwe* cheetah (Zambian Totela, Crane); *ungwe* leopard (Namibian Totela, Crane)

Subiya: *ongwe* or *ungwe* leopard

Mbalangwe: *ing'au ungwe* leopard; *ungwe* cheetah; *ungwe* leopard (Baumbach, 354)

Proto-Zambezi Hook

Fwe: *ungwe* leopard

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

412

Root: *-káká

Gloss: Pangolin or Scaly Anteater (*Manis temminckii*)

Protolanguage: Proto-Bantu (BLR3; Guthrie, C.S. 991; Vansina 1990: 277)

Etymology:

Replaces:

Botatwe Distribution:

Soli: *nkaka* aardvark

Proto-Eastern Botatwe

Lundwe: *inkakatwaambi* pangolin; *inkaka*- porcupine

Proto-Kafue

Lenje: *inkaka* pangolin

Sala:

Tonga: *ingagatwambwa* [local orth. *Inkakawambwa*] pangolin; *inkaka* pangolin (Torrend, 407); *inkakatwaambwa* pangolin (Torrend, 407); *inkakatwaambwa* scaly anteater (Torr.)

Ila: *inkakatwaambwa* pangolin; *inkaka* pangolin (Fowler, 217)

Proto-Falls

Toka:

Leya: *inkaka* pangolin

Proto-Western Botatwe

Totela: *inkaka* pangolin

Subiya: *inkaka* pangolin

Mbalangwe: *inkaka* pangolin

Fwe: *inkaka* pangolin

Shanjo: *nunkaka* pangolin

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

413

Root: *-pàdá (BLR3 2355; Meeussen; Nurse and Hinnebusch, 637)

Gloss: Impala (*Aepyceros melampus melampus*)

Protolanguage: Proto-Savanna? Replaced by *katimba* in eastern Botatwe languages. The western Botatwe language attestations here are likely recent borrowings as western Botatwe *p is typically realized as /h/. The root *-pàdá may have been lost in Proto-Botatwe and reborrowed in the western Botatwe languages.

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kapala* impala

Subiya:

Mbalangwe: *kapala* impala

Proto-Zambezi Hook

Fwe: *kapala* impala

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

414

Root: *-cèkú or *-cèpú

Gloss: Eland (*Taurotragus oryx*)

Protolanguage: Proto-Savanna (as *-cèpú in BLR3; Guthrie C.S. 316; Meeussen; reconstructed as *-sèCú in Ehret 1999:93, where C = *p, *t, or *k; the Botatwe attestations would suggest C = *k or *p).

Etymology:

Replaces:

Botatwe Distribution:

Soli: *nsefu* eland

Proto-Eastern Botatwe

Lundwe: *musehu* eland

Proto-Kafue

Lenje: *nsefu* eland; *nsefu* eland (Madan, 186)

Sala:

Tonga: *musehu* [local orth. *musefu*] eland; *musefu* eland (Hopgood, 245); *insefu* eland (Torrend, 180)

Ila: *munsefu* eland, blesbok; *musefu* eland (Fowler, 477)

Proto-Falls

Toka:

Leya: *musefu* eland

Proto-Western Botatwe

Proto-Machili

Totela: *unsefu* eland

Subiya: *unsefu* eland; *usefu* Cape Eland (Baumbach, 313)

Mbalangwe: *unsefu* eland; *unsefu* Cape Eland (Baumbach, 357)

Proto-Zambezi Hook

Fwe: *unsefu* eland; *unshesu* eland eland (Baumbach, 398)

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

415

Root: *-gùlùbè

Gloss: Bushpig (*Potamochoerus porcus*)

Protolanguage: Proto-Savanna (Ehret 1998:299; Ehret 1999:66; see also *gùdùbè in BLR3 1494; Guthrie C.S. 888; Meeussen; Nurse and Hinnebusch, 640)

Etymology:

Replaces:

Botatwe Distribution:

Soli: *inguluḽe* bushpig

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *ingulube* bushpig; *nguluḽe* pig (Madan, 105); (*i*)*ngulube* pig (Kovanda); *ingulube* bushpig (Kag., 71)

Sala:

Tonga: *ngulube* bushpig (Torr., Torrend, 83); *ingulube* pig (Hopgood, 240)

Ila: *ingulube* a pig, a domestic pig (Fowler, 215); *ngulube* bushpig (Torrend, 83); *chuulube* bushpig (Fowler, 145)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *ingulube* bushpig (Zambian Totela, Crane)

Subiya:

Mbalangwe: *chiguluḽe* warthog; *cigudube* pig (Baumbach, 351; is the g an influence from Yeyi?)

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

416

Root: *-kǎ́ (BLR3; Guthrie, C.S. 1075; Meeussen; Nurse and Hinnebusch, 643)

Gloss: Duiker (*Cephalophus*; probably *C. monticola*, Blue Duiker)

Protolanguage: Proto-Eastern Savanna, possibly Proto-Savanna?

Etymology: Na- possessive prefix + ka + kǎ́ for “perfect, little kǎ́”.

Replaces:

Botatwe Distribution:

Soli: *kasha* duiker

Proto-Eastern Botatwe

Lundwe: *nakaha* duiker

Proto-Kafue

Lenje: *nakasha* oribi; *nsha* duiker (Madan, 106); *(n)sha* duiker (Madan, 125); *nákasha* duiker (Kag. 72); *nakasya* duiker (Torrend, 173)

Sala: *nakasha* duiker, impala

Tonga: *insya* and *nakasya* duiker (Torrend, 173); *nakasya* duiker (Hopgood, 245); *insya* duiker (Torr.)

Ila: *nakasha* duiker; *nakasya* duiker (Fowler, 515);

Proto-Falls

Toka:

Leya: *insya* or *inshya* duiker

Proto-Western Botatwe

Proto-Machili

Totela: *unsa* dikdik, duiker; *únsá* duiker (Baumbach, 381)

Subiya: *unsa* reedbuck

Mbalangwe: *únsa* duiker (Baumbach, 354)

Proto-Zambezi Hook

Fwe: *unsa* dikdik, reedbuck; *onsa* duiker (Baumbach, 407)

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes: Fowler notes *nakasya* as translating literally as ‘the refuser’ because the duiker refuses to give up his meat, he is hard to kill based on *kukasya* as ‘to forbid, to prevent, to obstruct’ (Fowler, 287, 515); probably this word did not derive from the verb –*kasya* but rather the diminutive –*ka* was added to the root and the development of the literal translation of ‘the refuser’ was developed later as a result of the use of the diminutive prefix.

417

Root: *-njá

Gloss: Lechwe (*Kobus leche*)

Protolanguage: Proto-Botatwe with spread to Bembe and Yeyi; the *na/nya-* prefix indicating ‘mother of’ or ‘female’ in Proto-Kafue and, perhaps reconstructable to Proto-Eastern Botatwe, may reflect both the fact that men hunt this animal by reproducing the sound of the mother to lure the animals to them and that the skins are distributed to wives and lovers.

Etymology: The Lamba attestation may describe the kind of vegetation where one might find lechwe.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *nyanja* sitatunga

Proto-Kafue

Lenje: *nanja* or *naanja* red lechwe; *nanja* lechwe, kob (Kovanda); *nanja* waterbuck? (Kag., 72)

Sala: *nyanja* impala

Tonga: *nanja* sitatunga; *nanja* lechwe (Plateau Tonga, Torrend, 330); *nyanja* lechwe (Valley Tonga, Torrend, 330); *nanja* lechwe (Hopgood, 245)

Ila: *nanjawaterbuck*; *nanja* lechwe (Fowler, 522)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *inja* lechwe

Mbalangwe: *unja* red lechwe

Proto-Zambezi Hook

Fwe: *inja* red lechwe

Shanjo:

Other Savanna Bantu: Bemba- *inja* lechwe (Guth., 29); Lamba *umunyanja* salt grass (Doke, 73); Yeyi *ungya* lechwe (Lukusa, 138)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

418

Root: *ntu(Cu), *ntupu?

Gloss: Spotted Hyena (*Crocuta crocuta*)

Protolanguage: Multiple borrowing from Kusi by eastern and western Botatwe speech communities, perhaps at the Proto-Eastern or Proto-Western Botatwe level and certainly by the Proto-Kafue era in the each with the final vowel shift from /u/ to /we/ in Kafue languages

Etymology: replaces likely Proto-Savanna root *-mbúj (Ehret 1998:299; Guthrie C.S. 2011); *-pítj replaces Proto-Savanna root in Mashariki (Ehret 1998:42, 299; Guthrie C.S. 1537, C.S. 1562), *-pítj is also found in some Southwest Bantu, possibly via early Kusi contact?; *mbùngú is either a Proto-Western Savanna innovation or a Western Savanna areal (Guthrie C.S. 206).

Replaces:

Botatwe Distribution:Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *suntwe* hyene; *suntwe* spotted hyena (Kovanda); *suntwe* hyena (Madan, 115); *súntwe* hyena (Kag., 71)

Sala: *suntwe* hyena

Tonga: *suntwe* hyena; *suntwe* hyena (Hopgood, 248); *suntwe* hyena (Collins, 176); *suntwe* hyena (Fell, 14)

Ila:

Proto-Falls

Toka:Leya: *suntwe* hyena

Proto-Western Botatwe

Totela: *untu* hyena; *suntwe* hyena (Zambian Totela, Crane); *untuu* (Namibian Totela, Crane)

Subiya: *untuhu* hyena

Mbalangwe: *untuu* hyena

Fwe: *untuhu* hyena

Shanjo:

Other Savanna Bantu: Lamba *suntwe* hyena (Doke, 82)

Other Bantu:**Other Non-Bantu:**

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes: Lamba borrows heavily from Lenje.

419

Root: *-lavu

Gloss: Lion (*Panthera leo*)

Protolanguage: Independent borrowings into eastern and western Botatwe speech communities, probably during the Proto-Eastern Botatwe or Proto-Kafue periods in the east and more recently in the west with the C1 value of /d/. However, the C1 /d/ > /l/ could be a result of the influence of the stop of the nasal; later replaced in Proto-Kafue by *-shumbwa and in other eastern Botatwe by *kalamo.

Etymology:**Replaces:****Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *mulavu* lion (Valley Tonga, Torrend, 338); *mulavu* lion (Fell, 14); *mulavu* lion (Hopgood, 244); *mulavwu* lion (Collins, 169); *imúlávu* lion (Carter 1974)

Ila:

Proto-Falls

Toka:

Leya: *mulavu* lion

Proto-Western Botatwe

Proto-Machili

Totela: *undavu* lion; *undabu* lion (Namibia Totela, Crane); *undabu* lion (Zambian Totela, Crane)

Subiya: *undàvú* lion

Mbalangwe: *undavu* lion

Proto-Zambezi Hook

Fwe: *undavu* lion

Shanjo:

Other Savanna Bantu: Yeyi *undavu* lion (Lukusa, 138)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

420

Root: *-gili

Gloss: Warthog (*Phacochoerus aethiopicus*)

Protolanguage: Common Eastern Savanna; Proto-Eastern Savanna or borrowed into eastern and western Botatwe languages from a Kusi language; Ehret reconstructs the root to Proto-Mashariki but it probably deserves further attention. In BLR3 as *-gìdì, number 1377; Ehret 1998: 300; C.S. 814; Meeussen; Nurse and Hinnebusch, 669).

Etymology:

Replaces:

Botatwe Distribution:

Soli: *njili* warthog

Proto-Eastern Botatwe

Lundwe: *injili* warthog

Proto-Kafue

Lenje: *mwinjili* warthog; *mwinjili* wild boar (Madan, 104); *mwinjili* warthog (Kag., 72)

Sala: *munjili* warthog

Tonga: *munjili* bushpig; *munjili* warthog (Torrend, 625); *munjili*-warthog (Hopgood, 244)

Ila: *munjili* bushpig; *munjili* warthog (Torrend, 625); *munjile* warthog (Fowler, 466)

Proto-Falls

Toka:

Leya: *mwingile* warthog

Proto-Western Botatwe

Proto-Machili

Totela: *unjili* warthog, bushpig; *unjili* bushpig (Baumbach, 383); *ingili* warthog (Zambian Totela, Crane)

Subiya: *unjiri* warthog, bushpig; *unjili* bushpig (Baumbach, 313)

Mbalangwe: *unjili* warthog; *ngili* bushpig (Baumbach, 347)

Proto-Zambezi Hook

Fwe: *unjili* warthog; *ngili* bushpig (Baumbach, 398)

Shanjo: *unjili* bushpig

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes: Is the *ng attested in some western Botatwe languages is a result of the later influence of Lozi?

421

Root: *-bijj

Gloss: Zebra (*Equus burchelli*)

Protolanguage: Ehret suggest this is a Kusi term (Ehret 1998:301; Meeussen). If so, the root was borrowed into Proto-Eastern Botatwe, Proto-Western Botatwe, Lamba, and Bisa (via Botatwe languages?) as well as Southwest Bantu as mbii (independent borrowing from Kusi?)! It may be that this is an older Savanna form because Botatwe attestations follow the expected sound correspondences for /j/.

Etymology:

Replaces:

Botatwe Distribution:

Soli: *imbishi* zebra

Proto-Eastern Botatwe

Lundwe: *chibize* zebra

Proto-Kafue

Lenje: *chibise* zebra; *chimbishi* or *mbishi* zebra (Madan, 77); *cibise* zebra (Kag., 72)

Sala: *chibize* zebra

Tonga: *chibize* zebra; *imbizi* zebra (Valley Tonga) and *chibizi* zebra (Plateau Tonga; Torrend, 649); *imbizi* zebra (Hopgood, 239); *ucibize* zebra (Collins, 154); *imbizi* zebra (Fell, 21)

Ila: *chibize* zebra; *chibizi* zebra (Torrend, 649)

Proto-Falls

Toka:

Leya: *imbizi* zebra

Proto-Western Botatwe

Proto-Machili

Totela: *umbizi* zebra; *imbizi* or *umbizi* zebra (Zambian and Namibian

Totela, respectively, Crane)

Subiya: *imbizi* zebra

Mbalangwe: *umbizi* zebra

Proto-Zmabezi Hook

Fwe: *imbizi* zebra

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

421

Root: *-jìkà

Gloss: grassland, floodplain

Protolanguage: Common Eastern Savanna; reconstructed as Proto-Mashariki by Ehret, in which case it would have to have been borrowed into Sabi, Soli, Proto-Eastern Botatwe, and Southwest Bantu. (BLR3; Ehret 1998:299; see also Meeussen; as ‘grassland’ in Nurse and Hinnebusch, 644)

Etymology:

Replaces:

Botatwe Distribution:

Soli: *chinyika* floodplain, valley, plains, grassland; *manyika* open grassland with few or no trees that can be along a river but need not be; *kanyika* small annual stream with grasses that only has water during the rainy season

Proto-Eastern Botatwe

Lundwe: *nyika* land

Proto-Kafue

Lenje: *chinyika* clearing; *nyika* plains, floodplain; *nyika* plains (Torrend, 421); *nyika* temporary bog (Torrend, 68); *cinyika* temporary bog (Kovanda); *nyika* open country with few trees, lowland (Kovanda);

Sala:

Tonga: *chibanda nyika* plains; *nyiga* [local orth. *nyika*] land; *inyika* territory, country, land (Collins, 160); *inyika* country (Fell, 23)

Ila: *inyika* a vlel, a large open plain (Fowler, 234); *nyika* wilderness (Torrend, 639, from Smith and Dale)

Proto-Falls

Toka: *nyika* land

Leya: *nyika* land

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *nyika* wilderness, nothing much grows there; flat savanna, flat open place

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

422

Root: *-bándá

Gloss: flat grassy place

Protolanguage: Proto-Mashariki innovates the new meaning using the Proto-Bantu word for valley (Ehret 1998: 299; see also Guthrie, C.S. 52; as ‘open area, large’ in Nurse and Hinnebusch, 646)

Etymology: From *-band- “to press down”

Replaces:

Botatwe Distribution:

Soli: *chibande* place with grasses and water, swamp

Proto-Eastern Botatwe

Lundwe: *chibanda* grassland

Proto-Kafue

Lenje: *chibanda* place where nothing grows, desert, pasture

Sala: *chibanda* clearing; *shibanda* open grassland, savanna, plains, floodplain

Tonga: *chibanda nyiga* plains; *shibanda* small stand of trees alone in the grassland, desert; *chibanda* plain (Torrend, 421);

Ila: *ibanda* a vlei, plain (Fowler, 181); *ibanda* plain (Torrend, 421)

Proto-Falls

Toka:

Leya: *kabanda* clearing

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba *ibanda* a hunt to decide witchcraft guilt (Guthrie, 5)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes: Lenje *ibanza* bare plain (Torrend, 422); *chibansa* bare plain (Kovanda); *cibanza-banza* a bare patch in the veldt where water collects (Fowler, 96)

423

Root: *-kondj

Gloss: Hartebeest (*Alcelaphus lichtensteini*)

Protolanguage: Proto-Kaskazi (Ehret 1998: 235) borrowed into Proto-Eastern Botatwe and followed expected sound changes for spirantization of /nd/ cluster before /j/. Also in western Sabi via independent borrowing from Kaskazi or eastern Botatwe languages.

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *noonse* red lechwe, impala

Proto-Kafue

Lenje: *koonse* impala; *konshe* hartebeest (Madan, 87, 125); *konse* hartebeest (Kovanda)

Sala:

Tonga: *konze* duiker (Hopgood, 242)

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bisa *inkonze* hartebeest (Mad., 89); Bemba *inkónshi* hartebeest (Guth., 133); Lamba *ing'konsi* or *konsi* hartebeest (Doke, 76)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

424

Root: *-sansa

Gloss: Grassland Forest, perhaps unsuitable for cultivation because too dry

Protolanguage: Proto-Eastern Botatwe

Etymology:

Replaces:

Botatwe Distribution:

Soli: *musansa* small stand of trees alone, grassland with trees

Proto-Eastern Botatwe

Lundwe: *musanza* bush without water, uninhabitable

Proto-Kafue

Lenje: *musansa* forest (Torrend, 220) *musansa* wild forest land, forest, jungle, bush (Madan, 101, 134, 138)

Sala: *musanza* forest, virgin forest

Tonga: *musansa* forest (Torr., Torrend, 220)

Ila: *musanza* The Forest (Fowler, 476); *musanza* forest (Torrend, 220)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes: False Cognates related to a different word in Ila: *Bemba insansa mpyá* uncultivated land, *isánsá* coarse grass (Guth., 83); *Lozi musansa* bush found in the grasslands, a kind of shrub growing in the plain (Jalla, 269; borrowed form?)

425

Root: *-sokwe

Gloss: grassy bush or grassland with some scattered trees, probably not for cultivation

Protolanguage: Proto-Eastern Botatwe

Etymology: Locative mu added to sokwe, baboon for ‘in the place of the baboon’; i/chi noun class also added to sokwe. See *-còkó, “monkey” (BLR3 648; p.s. 119).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *mwisokwe* bush

Proto-Kafue

Lenje: *chisokwe* grass jungle, long high rank grass (Madan, 78); *sokwe* baboon (Madan, 114); *sokwe* baboon (Kovanda)

Sala:

Tonga: *chisogwe* [local orth. *shisokwe*] forest, grassland with trees; *isyokwe* or *isokwe* wild place, wilderness (Torrend, 639); *isokwe* the bush, desert, mostly a hunting ground (Torrend, 152); *isokwe* forest, veldt, bush (Hopgood, 240); *sokwe* baboon (Hopgood, 247); *isyokwe* bush (Carter); *sókwe* baboon (Carter); *isokwe* grass (Fell, 17); *sokwe* the bush, unclaimed land or general area (Matthews, 180)

Ila: *isokwe* wild place, wilderness, the bush, desert (Torrend, 639, 82, 152); *isokwe* open country, veldt, uncultivated lands as opposed to the village fields (Fowler, 242)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

426

Root: *-nkoli (tone?)

Gloss: Warthog (*Phacochoerus aethiopicus*)

Protolanguage: Common Eastern Botatwe; recent Areal form?

Etymology: This word could be derived from two older, possibly polysemic roots. Both share the reconstructed form *-kód-, with the first glossing as ‘to be strong, to be hard’ and the second as ‘to take, to touch’ with a masculine prestem element.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *syankoli* warthog (Hopgood, 248)

Ila: *shankoli* warthog; *syaankoli* warthog (Torrend, 419); *syaankoli* or *syankoli* warthog (Fowler, 675)

Proto-Falls

Toka:

Leya: *sinkoli* warthog

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes: see roots 000 and 000

427

Root: *-pengu

Gloss: Sable Antelope (*Hippotragus niger*)

Protolanguage: Proto-Eastern Botatwe

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *lweengu* kudu, sable antelope; *lwengu* sable antelope (Torrend, 481)

Proto-Kafue

Lenje: *lweengu* sable antelope; *lwengu* sable antelope (Kovanda); *luengo* sable (Madan, 93, 125)

Sala:

Tonga: *lweengu* sable antelope; *lwengu* sable antelope (Valley Tonga, Torrend, 481)

Ila: *lweengu* sable antelope; *lweenga* sable antelope (Fowler, 385)

Proto-Falls

Toka:

Leya: *lwengu* sable antelope

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba *lwengu* sable antelope (Doke, 136)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

428

Root: *-nyumbu

Gloss: Wildebeest (*Connochaetes taurinus*)

Protolanguage: relict Mashariki (Ehret 1998: 235); spread into Proto-Eastern Botatwe or, perhaps, Proto-Kafue probably from a Kusi source (final CV to /Cwe/) with an independent borrowing into Totela and Sabi languages

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *munyumbwe* wildebeest; *kahumbwe* hartebeest

Proto-Kafue

Lenje: *nyumbwe* wildebeest (Madan, 108); *nyumbu* wildebeest (Madan, 125); *munyumbwe* wildebeest (Torrend, 369)

Sala: *munyumbwe* hartebeest

Tonga: *munyumbwe* hartebeest; *munyumbwe* wildebeest (Collins, 169); *munyumbwe* wildebeest (Torrend, 369)

Ila: *munyumbwe* Gnu; Blue Wildebeest (Fowler, 471); *munyumbwe* wildebeest (Torrend, 369)

Proto-Falls

Toka:

Leya: *munyumbwe* wildebeest

Proto-Western Botatwe

Proto-Machili

Totela: *unyumbu* wildebeest and gemsbok

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba *innumbu* wildebeest (Guth., 160); Bisa *inyumbu* wildebeest (Mad., 18); Lamba *inyumbu* wildebeest (Doke, 175)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

429

Root: *-mpe

Gloss: Wild Dog (*Lycaon pictus*)

Protolanguage: Borrowed into Proto-Kafue and Soli by absorbed Kusi communities; were early Kusi communities responsible for the weakening of the final vowel, as is common in other Kusi borrowings?

Etymology: From Kusi *-pumpi (Ehret 1998: 301; Fourshey 157-8)

Replaces:

Botatwe Distribution:

Soli: *umpe* wild dog

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *umpe* wild dog

Sala: *umpe* wild dog

Tonga: *umpe* wild dog

Ila: *umpe* wild dog (Fowler, 739)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

430

Root: *-sjumba > *shumbwa in Proto-Kafue

Gloss: Lion (*Panthera leo*)

Protolanguage: Borrowed into Proto-Kafue via Kusi; later borrowings into Totela and Subiya from Lozi or Thimbukushu because the semantic domain and shift from /s/ to /h/ are the same; Southwest Bantu attestations as *-ndumba as independent borrowing from Mashariki, perhaps via Southeast Bantu? Lundwe attestation borrowed because /sh/ should go to /h/.

Etymology: From the Proto-Mashariki root for lion, *-sjumba (Ehret 1998:300; Nurse and Hinnebusch, 642-3)

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *shumbwa* lion

Proto-Kafue

Lenje:

Sala: *shumbwa* lion

Tonga: *shuumbwa* lion; *syuumbwa* lion (Torrend, 338); *syuumbwa* lion (Carter); *syuumbwa* lion (Collins, 176); *syuumbwa* lion (Hopgood, 248)

Ila: *shumbwa* lion; *syuumbwa* lion (Fowler, 687, Torrend 338)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *ihumbwa* leopard

Subiya: *ihumbwa* cheetah

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lozi *limumbwa* leopard (O'Sullivan, 168; Jalla, 166); *mundumba* man-eating or very old lion (O'Sullivan, 69); Shona *shumba* lion (Hannan, 845); Rumanyo *ndumba*

male lion (Möhlig, 370); Lwena *ndimba* lion (White); Thimbukushu *dihumwa* cheetah (Munganda, 132)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

431

Root: *-jóbé > *-zobe in Proto-Kafue

Gloss: Sitatunga

Protolanguage: Proto-Kafue borrow from Kaskazi speakers' term for sitatunga, *-jóbé (Ehret 1998: 300); Alveolar nasal in Tonga and Ila so *j goes to nz rather than y? Had this shift already occurred in the Kaskazi language from which Kafue borrowed the root?

Etymology: Considering the attestation for kùjoba in Luganda (see below), the underlying verb may mean something like “to be splashed”

Replaces: older Bantu -búlǐ (-bùǐ) in zones A, B, and C in BLR3 370; C.S. 226 1/2; Ehret 1998: 300)

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *shichiyobe* waterbuck

Sala:

Tonga: *sicinzobe* sitatunga (Torrend, 509);

Ila: *shizhizobe* red lechwe; *sicinzobe* sitatunga (Torrend, 509); *sicinzobe* sitatunga (Fowler, 613)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Luganda: *enjobe* marsh antelope, sitatunga, *Limnotragus spekei*; *kùjoba* (itr.) to get wet, muddy, spotted with liquid (Schoenbrun, pers. comm.); Lusoga *éndhobé* marsh antelope, deer, water-buck (Schoenbrun, pers. comm.)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

432

Root: *-mbololo

Gloss: Kudu (*Tragelaphus strepsiceros*)

Protolanguage: Common Kafue, innovation spread to Soli via Lenje

Etymology:

Replaces:

Botatwe Distribution:

Soli: *shambololo* kudu

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *shambololo* kudu; *shámólólo* impala, gazelle (Kag., 72);
shombololo koodoo antelope (Madan, 113, 125)

Sala:

Tonga: *hambololo* kudu

Ila: *shambololo* kudu; hartebeeste

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes: Lozi (K21, Kusi): *kabololo* successful hunt (O'Sullivan)

433

Root: *-bàbàlá

Gloss: Bushbuck (*Tragelaphus scriptus*)

Protolanguage: Common Eastern Savanna (Proto-Eastern Savanna?) or Mashariki borrowed into Proto-Kafue via Kusi speakers (*-bàbàdá in BLR3 13; C.S. 8; Ehret 1998:300; see also

Meeussen; Nurse and Hinnebusch, 636) with shape of an early mid-Zambezi areal?. Spread to Soli via Lenje and to eastern Sabi languages of Bisa and Lamba via Lenje and/or Soli in the middle to late second millennium CE, possibly as a result of contacts stemming from supplying ivory for the Indian Ocean?; independent borrowing from Kusi languages in Subiya and Fwe who attest /v/ for C2 /b/; also spread to Lunda via independent contacts with Kusi speakers as the rest of Western Savanna languages attest *ngulungu* for bushbuck.

Etymology:

Replaces:

Botatwe Distribution:

Soli: *chiβaβala* bushbuck

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *chiβaβala* bushbuck (Madan, 79, 125)

Sala:

Tonga: *imbabala* bushbuck (Torrend, 83); *imbabala* bushbuck (Torr.)

Ila: *shichibabala* bushbuck (Fowler, 612);

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *imbavala* bushbuck

Mbalangwe:

Proto-Zambezi Hook

Fwe: *mbavala* grysbok

Shanjo:

Other Savanna Bantu: Bisa *ichiβaβala* bushbuck (Mad., 89); Lamba *ciβaβala* bushbuck (Doke, 24; Doke lists four other words for bushbuck before this root); Nyanja-Cewa *mbawala* bushbuck (Paas, 53); Lozi *limbalala* black lechwe or bushbuck (O'Sullivan, 10); Lunda *mbaala* bushbuck (White, 43)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

434

Root: *-fwi

Gloss: Reedbuck (*Redunca arundinum*)

Protolanguage: Proto-Kafue spread to western Sabi languages; a Thimbukushu attestation may suggest an older origin, or a non-Kafue source for which we have no other evidence.

Etymology: This root probably derives from the inherited Proto-Savanna root for “arrow,” *-gúí, with a class 10 prefix. The name for the reedbuck may allude to what it was that hunters sought when they decided to hunt in the style named *kufwima*, a style that was probably originally based in archery. The feminine possessive prefix before the noun class prefix might indicate an ancient history for the practice of giving wives and lovers the skins of reedbuck.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *nalufwi* reedbuck; *naluvwi* reedbuck (Madan, 104, 125); *nalufwi* kudu (Kag., 72); *nalufwi*- reedbuck (Torrend, 459)

Sala: *naluvwi* dikdik

Tonga: *naluhwi* [local orth. *naluvwi*] bushbuck; *naluvwi*- reedbuck (Torrend, 459)

Ila: *naluvwi* a grass used for thatching, reedbuck (Fowler, 517); *naluvwi* reedbuck (Torrend, 459)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba *imfwí* reedbuck (Guth., 146); Lamba *nyinalufwi* female reedbuck (Doke, 129); Thimbukushu (K333, Luyanan/Southwest Bantu): *ruvi*, *maruvi*: reedbuck (Manganda, 135)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

435

Root: *-lama

Gloss: Cheetah (*Acinonyx jubatus*)

Protolanguage: Common Kafue, borrowed into Soli

Etymology:

Replaces:

Botatwe Distribution:Soli: *malama* cheetah

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *malama* cheetah (Torrend, 100); *malama* cheetah, jaguar

(Kovanda)

Sala: *malama* hyenaTonga: *malama* cheetah (Torrend, 100); *malama* cheetah (Hopgood, 243)Ila: *malama* cheetah (Fowler, 398); *malama* cheetah (Torrend, 100)

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe:

Proto-Zambezi Hook

Fwe:Shanjo:**Other Savanna Bantu:****Other Bantu:****Other Non-Bantu:****Checked:** BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004**Notes:**

436

Root: *-nyembwa**Gloss:** Bushpig (*Potamochoerus porcus*), Wild Boar, River Hog**Protolanguage:** Common Kafue**Etymology:** From nye- possessive prefix + mbwa “dog,” perhaps suggesting the method of hunting bushpigs with dogs.**Replaces:****Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *munyembwa* bushpig; *munyembwa* wild boar without reference to sex (Kovanda); *munembwa* bushpig (Kag., 71); *munyembwa* bushpig (Torrend, 83)Sala: *munyembwa* bushpigTonga: *munyembwa* wild boar (Hopgood, 245)

Ila: *munyembwa* wild boar (Fowler, 471)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba *munyembwa* male hog, river hog boar (Doke, 19, 79)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

437

Root: *-temwa

Gloss: Forest, perhaps teak (or, less likely *mopane*) Forest

Protolanguage: Common Western Botatwe

Etymology: semantic innovation of ‘forest, bush’ from the verb *-tém- ‘to cut vegetation’ (BLR3 2832; C.S. 1703; Nurse and Hinnebusch, 609) Ehret argues that Proto-Mashariki speakers borrowed this word from Eastern Sahelian (Ehret 1998:302). It has also been described as a Proto-Eastern Bantu root by Ehret (2000: 153), though this work seems to have been written earlier than his 1998 and 1999 publications, despite the 2000 date (it is cited in the 1998 volume with an expected 1994/1995 publication date). The root has a wide distribution (zones A B E F G J K L M N P and S) and further research will probably not only reveal an old age for the root but also an ancient history tied to the spread of iron technology as the root is the source of many words for iron cutting tools, including axe and hoe. Regardless of its origins, Botatwe speakers use verb root with passive verb extension and locative prefix; *mutemwa* is “the place that is cut,” a place that is a source of wood for building and firewood.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *matemwa* cutting/clearing in a forest for a new field (Kovanda)

Sala:

Tonga:

Ila:
 Proto-Falls
Toka:
Leya:
 Proto-Western Botatwe
 Proto-Machili
Totela: *omutemwa* forest, thick forest (Zambian Totela, Crane); *mutemwa*
 bush (Namibian Totela, Crane)
Subiya:
Mbalangwe:
 Proto-Zambezi Hook
Fwe: *mutemwa* bush
Shanjo: *mutemwa* forest

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

438

Root: *-bala

Gloss: Grassland

Protolanguage: Proto-Western Botatwe

Etymology: From Kusi *-bala ‘grassland, steppe’ (Ehret 1998: 299); shifts to *-lala through reduplication. Initially the root probably derives from the Proto-Bantu *-bád- ‘to shine’ with the deverbative form *-báda ‘open space’ where, presumably, sunlight shines. The later Kusi and western Botatwe meaning ‘grassland’ was a kind of open space where light shines, a place to herd and hunt cattle and buffalo herds, as attested in the region’s archaeological record.

Replaces:

Botatwe Distribution:

Soli:
 Proto-Eastern Botatwe
Lundwe:
 Proto-Kafue
Lenje:
Sala:
Tonga:
Ila:
 Proto-Falls
Toka:
Leya:
 Proto-Western Botatwe
 Proto-Machili

Totela: *ibala* uninhabitable place (Namibian Totela, Crane)

Subiya: *iβala* plains, a place of grasses and some small shrubs; *kuβala* clearing, a small plain

Mbalangwe: *kaβala* clearing; *iβala* grasslands, plain

Proto-Zambezi Hook

Fwe: *ebala* clearing; *ibala* valley; *ibala lye liyana* grassland

Shanjo: *kaβala* a place of grass with no trees; grassland

Other Savanna Bantu: Bemba *ibala* garden (Guth., 4); Lozi *kabala* small plain surrounded by forest (Jalla, 90); *libala* plain (O'Sullivan, 215); Tswana *lebala* plain, an area of flat open country (Hartshorne, 311, 603); Tsonga *rivala* plain (Swiss, 66); Lunda *chibaala* burned off plain or grassland (White, 10)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

439

Root: *-kanda

Gloss: Wild, grassland without trees, perhaps associated with water in Machili languages; an unfarmable place?

Protolanguage: Common Western Botatwe

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *inkanda* desert

Ila:

Proto-Falls

Toka:

Leya: *kankanda* place where the ground is just hard like rock and not able to be cultivated

Proto-Western Botatwe

Proto-Machili

Totela: *ikanda* grassland; *inkanda* savanna, floodplain, pasture, grassland (Zambian Totela, Crane; should be *ikanda*?); *inkanda* desert; *inkanda* desert (Namibia Totela, Crane)

Subiya: *lukaanda* cleared forest; *mikanda* grasslands; *ikanda* place with no trees, valley; *ikanda lyo munda* floodplain; *nkanda* wild; *inkanda* wilderness, territory; *munkanda* a place deep in the bush or forest where there will be many animals

Mbalangwe: *makanda* floodplain, seasonally flooded place

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lozi *makanda* small clearing in the forest lakes (Jalla, 2006)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

000.

Root: *-kanyani

Gloss: Wild Dog (*Lycaon pictus*)

Protolanguage: Zambezi Floodplain Areal with western Botatwe, possibly at Proto-Western Botatwe time depth?

Etymology: From -kánya “become firm, tight” (Luvale) with agentive as a description of pack hunting? (Schoenbrun, pers. comm.)

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya: *makanyani* wild dog

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe: *liyakanyani* wild dog

Proto-Zambezi Hook

Fwe: *makanyani* wild dog

Shanjo:

Other Savanna Bantu: Lozi *liyakanyani* wild dog (O’Sullivan, 83); Mwenyi-Luyana (*e*)*liakányání* lycaon (Yukawa, 20); Mbundu *okanyani* species of large hyena (West, 84)

Other Bantu:**Other Non-Bantu:**

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:**441**

Root: *-mbwensi

Gloss: Giraffe (*Giraffa camelopardalis*)

Protolanguage: Common Western Botatwe; borrowed from western Botatwe languages into Southwest Bantu at an early date? Or borrowed from Southwest Bantu languages into Proto-Western Botatwe? This borrowing may be complicated by secondary borrowing from Botatwe languages into Nkoya, Yeyi, and Thimbukushu, which border Botatwe languages. Indeed, loans to Yeyi and Thimbukushu could have occurred in the Caprivi Strip in the last few hundred years with a source as Fwe. Reconstructed as *-bace for some languages of the R zone (BLR3, 9530).

Etymology: Mbwa “dog” + ensi “earth, ground, country”

Replaces:**Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:Sala:Tonga:Ila:

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *umbwensi* giraffe; umbwensi- giraffe (Namibian Totela, Crane)

Subiya: *umbwensi* giraffe

Mbalangwe: *umbwensi* giraffe

Proto-Zambezi Hook

Fwe: *mbwenshi* giraffe (Baumbach, 407)

Shanjo:

Other Savanna Bantu: Nkoya (L62, Luyana/Southwest Bantu): *mbwashi* giraffe (Yukawa, 232); Yeyi (R41, Luyana/Southwest Bantu): *unvweshi* giraffe; Thimbukushu (K333, Luyana/Southwest Bantu): *mbashe* giraffe (Munganda, 133); Rumanyo (K332, Luyana/Southwest Bantu): *mbahe* giraffe (Möhlig, 344); Herero (R31, Luyana/Southwest Bantu): *ombahe* giraffe (Gestwicki, 32); Kwangali (K33, Luyana/Southwest Bantu): *mbahe* giraffe (Kloppers, 164)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

442

Root: *-nono

Gloss: Wild Cat (*Felis libyca*)

Protolanguage: Kalahari Sands Areal with Southwest Bantu, western Botatwe, and, later, Lozi

Etymology: Ideophone?

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya: *sinono* wild cat (recent borrowing from Lozi?)

Proto-Western Botatwe

Proto-Machili

Totela: *chinono* wild cat

Subiya: *chinono* wild cat

Mbalangwe:

Proto-Zambezi Hook

Fwe: *chinono* wild cat; *chinau* wild cat (Baumbach, 399)

Shanjo:

Other Savanna Bantu: Lozi *sinono* wild cat (O'Sullivan, 41); Mwenyi-Luyana *sinono* wild cat (Yukawa, 20); Kwangali *sinono* wild cat (Kloppers, 164); Rumanyo *shinôno* wild cat (Möhlig, 455); Thimbukushu *thinono* wild cat (Munganda, 136)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

443

Root: *-kala

Gloss: Porcupine (*Hystrix africaeaustralis*)

Protolanguage: Common Western Botatwe

Etymology:

Replaces: Proto-Savanna *-nùngu

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *unkala* aardvark

Subiya: *chakala* porcupine

Mbalangwe: *ichakala* porcupine

Proto-Zambezi Hook

Fwe: *ichakala* porcupine

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

444

Root: *-nùngu

Gloss: Porcupine (*Hystrix africaeaustralis*)

Protolanguage: Proto-Savanna (Ehret 1999: 67; see also Meeussen; Nurse and Hinnebusch, 643)

Etymology:

Replaces:

Botatwe Distribution:

Soli: *nùngí* porcupine

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *shichinungu* porcupine; basimunungu- porcupines (Torrend, 430);

nungu- porcupine (Madan, 107); *shíchínúngu* porcupine (Kag., 72)

Sala:

Tonga: *nungu* porcupine; *inungu* porcupine (Plateau Tonga, Torrend, 430); *inungu* porcupine, a bead (Collins, 160); *inungu* porcupine (Torr.)

Ila: *caminungwe* porcupine (Fowler, 86); *chaminungwe* porcupine (Torrend, 430)

Proto-Falls

Toka:

Leya: *inungu* porcupine

Proto-Western Botatwe

Proto-Machili

Totela: *inungu* porcupine; *inung'u* porcupine (Namibian Totela, Crane); *chaminung'we* porcupine (Zambian Totela, Crane; from Ila?)

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

445

Root: *-kape

Gloss: Honey Badger (*Mellivora capensis*)

Protolanguage: Common Western Botatwe; this root could be Proto-Western Botatwe borrowed into Lozi with some reborrowing into Botatwe languages where the noun class is attested as si- (unless this is the maculine prestem element *ci- that has been applied as an elaboration on the application of the term to good honey hunters?). Alternatively, it could be a more recent areal.

Etymology:

Replaces: Proto-Botatwe *-bule

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:
 Proto-Western Botatwe
 Proto-Machili
 Totela: *chikape* honey badger
 Subiya:
 Mbalangwe: *sikape* honey badger
 Proto-Zambezi Hook
 Fwe: *sikape* honey badger
 Shanjo: *chikape* honey badger
Other Savanna Bantu: Lozi *sikape* honey badger (Jalla, 397; O'Sullivan, 141)
Other Bantu:
Other Non-Bantu:
Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004
Notes:

446

Root: *-bule (tone?)
Gloss: Honey Badger (*Mellivora capensis*)
Protolanguage: at least Proto-Botatwe and probably older in older the form *-budi (tone?)
Etymology:
Replaces:
Botatwe Distribution:
 Soli: *kambole* (cognate?) honey badger
 Proto-Eastern Botatwe
 Lundwe: *chibule* honey badger
 Proto-Kafue
 Lenje: *chibuule* honey badger; *kambole* honey badger (Kovanda); *kambole* (cognate?) honey badger (Torrend, 279); *chibule* an animal that eats honey (Madan, 79)
 Sala:
 Tonga: *bule* honey badger; *bule*, *chibule*, *babule* honey badger (Hopgood 237); *cibule* honey badger (Plateau Tonga, Torrend, 279); *bule* honey badger (Valley Tonga, Torrend, 279)
 Ila: *cibule* honey badger, Ratel (Fowler, 98); *cibule* honey badger (Torrend, 279)
 Proto-Falls
 Toka:
 Leya: *bule* honey badger
 Proto-Western Botatwe
 Totela:
 Subiya: *umbule* honey badger
 Mbalangwe:
 Fwe:
 Shanjo:

Other Savanna Bantu: Bemba *cibuli* honey ratel, honey badger (Guth., 13, 146); Lamba *kambole* (cognate?) ratel (Doke, 128); Shona *mbure* honey badger (Hannan); Kwangali *mburu* honey badger (vowel assimilation?; Kloppers, 164); Lunda *chibudi* honey badger; *kamboli* (cognate?) honey badger (White, 12, 43)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

447

Root: *-galamu

Gloss: Lion (*Panthera leo*)

Protolanguage: Kusi (Fourshey 123-5); spread to some eastern Botatwe via Sabi

Etymology:

Replaces:

Botatwe Distribution:

Soli: *kalamo* lion

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *inkalamu* lion; *munkalamu-* lion, a large lion (Madan, 101, 139); *nkalamu-* lion (Kag., 71); *nkalamu* lion (Torrend, 338)

Sala:

Tonga: *inkalamo* lion (Hopgood, 240)

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Falls

Fwe:

Shanjo:

Other Savanna Bantu: Bemba *inkalamo* lion (Hoch, 157); *inkálámo* lion (Guth., 138); Bisa *inkalamu* lion (Madan, 113); Nsenga *nkalamu* lion (Madan, 81); Lamba *ing'kalamu* lion (Doke, 95)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:**448****Root:** *-pongo**Gloss:** Bushpig (*Potamochoerus porcus*)**Protolanguage:** Areal in the Zambezi Valley, enters Falls languages after the divergence of Proto-Falls**Etymology:** From a word for he-goat, also applied to bushbuck in Sabaki languages of the Swahili coast (on he-goat, see Ehret 1998:310; on bushbuck, see Nurse and Hinnebusch, 638)**Replaces:****Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:Sala:Tonga: *chipongo* warthog; *shichipongo* bushpig (Torrend, 419); *sicipongo* bushpig (Collins, 174)Ila:

Proto-Falls

Toka: *chipongo* bushpigLeya: *chipongo* bushpig

Proto-Western Botatwe

Proto-Machili

Totela: *echipongo* bushpig (Zambian Totela, Crane)Subiya:Mbalangwe:

Proto-Zambezi Hook

Fwe:Shanjo:**Other Savanna Bantu:** Cewa-Nyanja *liphang* warthog (Paas, 375)**Other Bantu:****Other Non-Bantu:****Checked:** BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004**Notes:****449****Root:** *-pogue/a**Gloss:** Ostrich (*Struthio camelus*)**Protolanguage:** Borrowed into Botatwe languages from Kusi languages in many independent periods of contact. The nasal stabilizes the value of C1 as /p/. Proto-Kafue form (-mpo or

-mpowani) from early Shona, probably along with early ostrich eggshell trade beads; from Kusi *-pogue/a which shifted to *-pou in Proto-Shona-Sala and *-pue in Southeast Bantu (Ehret 1998:301). The Proto-Kafue form is from the Proto-Shona-Sala reconstruction *-pou. Proto-Machili borrowed from early Kusi communities so that *-pogue goes to *-pobu due to influence of *p in early Kusi communities; from Kusi *-pogue/a; later shifted to *-pou in Proto-Shona-Sala and *-pue in Southeast Bantu (Ehret 1998:301). The form *mpye represents an areal via Lozi and Southeast Bantu; also spread into Southwest Bantu.

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *impowani* ostrich (Torrend, 401); *impowani* ostrich (Kovanda)

Sala:

Tonga: *impowani* ostrich; *powa* ostrich (Valley Tonga, Torrend, 401); *impo* ostrich (Valley Tonga, Torrend, 401); *impowani* ostrich (Plateau Tonga, Torrend, 401); *impowani* ostrich (Collins, 159); *impo* ostrich (Valley Tonga, Fell, 22); *impye* ostrich (Plateau Tonga, Torrend, 401)

Ila: *impowani* ostrich (Fowler, 205); *impowani* ostrich (Torrend, 401)

Proto-Falls

Toka:

Leya: *impye* ostrich

Proto-Western Botatwe

Proto-Machili

Totela: *impobu-* ostrich (Namibian Totela, Crane); *impye* ostrich; *mpye* ostrich (Baumbach, 376)

Subiya: *impovu-* ostrich

Mbalangwe: *impye* ostrich; *mpye* ostrich (Baumbach, 348)

Proto-Zambezi Hook

Fwe: *impye* ostrich

Shanjo:

Other Savanna Bantu: Rumnayo *mpò* ostrich (Möhlig, 387); Kwangali *mpo* ostrich (Kloppers, 164); Lamba *impye* ostrich (noted as a borrowing, Doke, 111); Lozi *limpye* ostrich (O'Sullivan, 200); Thimbukushu *mwe* ostrich (Wynne, 368; Munganda, 134); Mwenyi-Luyana *(o)mpyé* ostrich (Yukawa, 24)

Other Bantu: Mbundu *ombo* ostrich (Mission, 97); Herero *ombo* ostrich (Gestwicki, 52)

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

450

Root: *-kwalata

Gloss: Large Antelope (probably *Hippotragus* spp.)

Protolanguage: Zambezi Floodplain Areal between Luyana and Western Botatwe languages, borrowed later into Lozi

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe: *unkwalata ya sußila*- roan antelope; *unkwalata ya siha*- sable

antelope

Proto-Zambezi Hook

Fwe: *nkwalata* sable antelope

Shanjo:

Other Savanna Bantu: Lozi *likwalala* impala, sable, rooibok (O'Sullivan, 10); Mwenyi-Luyana *(o)kwálátá* antelope (Yukawa, 21)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

451

Root: *-tutunga

Gloss: Sitatunga (*Tragelaphus spekei*)

Protolanguage: Common Western Botatwe form borrowed from the same sources as the Mwenyi attestation; lack of borrowing into Lozi suggests an earlier areal form; borrowed into English.

Etymology:

Replaces: earlier Bantu root *-bùlj found in Western Savanna, Kongo, Bobangi (zones a, B, C as *-bùdj in BLR3 370; C.S. 226 1/3; Ehret 1998: 300)

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe: *chitutunga* waterbuck, sitatunga

Proto-Zambezi Hook

Fwe: *chitutunga* sitatunga

Shanjo: *chitutunga* sitatunga

Other Savanna Bantu: Thimbukushu *thitátunga* sitatunga (Wynne, 490); Mwenyi-Luyana *sítútúngá* sitatunga (Yukawa, 21); Nkoya *shituntunga* sitatunga (Yukawa, 23)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Scheonbrun, Vansina 1990, Vansina 2004

Notes:

APPENDIX FIVE, PART B
RECONSTRUCTIONS IN SUPPORT OF CHAPTER 5

501

Root: *-dób- (or *-lób-)

Gloss: to angle, to fish with hook and line

Protolanguage: Proto-Bantu. Reconstructions of this root may be examined in a number of sources (BLR3 1088; C.S. 638; Ehret reconstructs *-lób- in 1998: 312; Meeussen, 23); Vansina 1990: 288). It is the source of *-dóbò, ‘fish hook’ (BLR3 1093; C.S. 640; Ehret reconstructs *-lóbò in 1998: 312; Meeussen, 23 and 40; Nurse and Hinnebusch 598-9 and 633; Vansina 1990: 288).

Etymology:

Replaces:

Botatwe Distribution:

Soli: *kulobola* to fish with hook and line; *kalobo* hook; *indobo* hook

Proto-Eastern Botatwe

Lundwe: *kulobola* to fish with hook and line; *kaloha* hook

Proto-Kafue

Lenje: *kuloba* to fish with hook and line; *kuloba* to fish, to fish with a line (Kagaya, 75); *indobiyo* hook (Kagaya, 75); *ndóobo* or *indobo* fish hook (Kagaya, 75) *-loβa* to fish with hook and line, angle (Madan, 93 and 134); *ndobo* hook (Madan, 104)

Sala: *kuloba* to fish with a hook and line; *ndobyio* hook

Tonga: *kuloba* to fish with a hook and line; *kalobo* hook; *-lobola* to fish with a hook and line (Torrend, 211); *-lobola* unhook (Hopgood, 243); *-loba* hook fish, catch fish (Hopgood, 243); *kalobo* a fishing hook (Collins, 162); *-loba* to catch fish with a hook (Collins, 165); *kalobyio* fish hook (Plateau and Valley Tonga; Torrend, 212); *kalobo* fish hook (Plateau and Valley Tonga; Torrend, 212)

Ila: *kulobola* to fish; *kuloba* to fish with a hook and line; *-lobola* to fish with a hook and line (Torrend, 211); *kalobo* hook; *kuloba* to fish with hooks (Fowler, 355); *kulobola* to catch fish (Fowler, 355); *kalobo* fish hook (Torrend, 212)

Proto-Falls

Toka: *kulobola* to fish; to fish with hook and line; *mulobozi* fisherman

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe: *kalaba* fishhook (result of retrogressive assimilation? [a common feature of stabilizer vowels on absolute pronouns in this language..]; Baumbach, 410)

Shanjo:

Other Savanna Bantu:

Other Bantu:**Other Non-Bantu:**

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes the following common form: *-loba* to fish with hook (Torrend, 211)

502

Root: *-dùb-

Gloss: To Fish with a Basket

Protolanguage: Inherited, ancient Bantu

Etymology: This is an early Bantu root for fishing by dipping in a basket, reconstructed as *-dùb- (BLR3 1158; C.S. 731; Meeussen, 31 and 40; Vansina 1990: 288) or *-lùb- (Ehret 1998: 313), itself a semantic shift from the older meaning of the same root, “to dip” (C.S. 732).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *-sebula* to collect as floating fish or cream on the top (Kovanda)

Sala:

Tonga: *kuzuba* to fish; *-zuba* to fish with a basket or a net (Collins, 181); *-zuba* to fish with a trap or net (Plateau and Valley Tonga, Torrend, 211)

Ila:

Proto-Falls

Toka: *kuzuba* to fish with a net or trap; *muzubi* a fisherman; *muzubo* a trolling basket

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Kisukuma (F21, Great Lakes Bantu, Kaskazi): *kuzuba* to fish (Schoenbrun, FN, 7); Mashi (D/J53, Great Lakes Bantu, Kaskazi): *óokuduba* to fish with nets (Schoenbrun, FN, 3); Kutembo (D/J531, Great Lakes Bantu, Kaskazi): *kúfúbá* to fish with a net (Schoenbrun, FN, 3); Lungu (M14, Kaskazi): *kukuvuwa* to fish with a net (Kagaya, 82); Lozi (K21, Kusi): *suba/liuba* fish dam (O’Sullivan, 107); Rumanyo (K332, Luyana/Southwest Bantu): *mudúva* fish trap, *-húga* fish with a fishing basket (Möhlig, 338); Rukwangali (K33,

Luyana/Southwest Bantu): *-huga* to fish with a basket (Kloppers, 89); Lunda (L52, Western Savanna Bantu): *-vuwa* a kind of fish trap (White, 76)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Ila: *kuzuba* to hide, to be hidden (Fowler, 785)

503

Root: *-gònò

Gloss: Fishtrap (conical?), Creel

Protolanguage: wide Kaskazi, Botatwe, and loan in Luba-Kasai (Ehret 1998: 313; see also BLR3 854, where the distribution is noted in zones E, F, G, J, L, M, S; Meeussen, 22 and 40; Nurse and Hinnebusch, 619)

Etymology: Uncertain.

Replaces:

Botatwe Distribution:

Soli: *moonoo* fishtrap, generic, used in a weir against the flow of the water when the fish up upstream to lay their eggs after the first rains

Proto-Eastern Botatwe

Lundwe: *moonoo* trap used with a fish fence; *moonoo wa lubo* fishbasket that can be dragged behind to catch fish (trolling)

Proto-Kafue

Lenje: *moonoo* fishtrap; *moonoo*, *myoonoo* fishing trap (Kagaya, 76); *moonoo* fishing basket (Kovanda); *mono*, *miono* fish trap of basketwork (Madan, 98); *moonoo* fish basket (Torrend, 212)

Sala: *moonoo* fishtrap, conical

Tonga: *moonoo* fish trap, fish basket to scoop up fish in trolling; *moonoo* fish trap (Hopgood, 244); *moonoo* basket-like fishing utensil; basket net (Collins, 168)

Ila: *moonoo* fish trap; *moonoo* fish trap (Fowler, 431); *moonoo* fish basket (Torrend, 212)

Proto-Falls

Toka: *moonoo* conical trap used in fish fence

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *moonoo* fish trap

Mbalangwe: *moonoo* conical fish trap set into a fish fence; *myono* fish traps (Baumbach, 348; listed as singular *muwono* for mu+ono Baumbach, 358)

Proto-Zambezi Hook

Fwe: *moonoo*, *miono* conical fish trap in a fish fence

Shanjo:

Other Savanna Bantu: Among many attestations: Bisa (M51, Sabi): *mono* fish trap (Madan, 132); Lamba (M54, Sabi): *umono* fishtrap (Doke, 64); Bemba (M42, Sabi): *mono* fish trap (Hoch, 138); Luban (L31a, Eastern Savanna Bantu): *móóná* fish trap (Yukawa, 29); Kiha (D/J 66, Great Lakes Bantu, Kaskazi): *umugono* fishweir (Schonebrun, FN, 2); Ikinyarwanda (D/J 61, Great Lakes Bantu, Kaskazi): *umugono* basket trap (Schoenbrun, FN, 2); Cewa-Nyanja (N31, Kusi): *mono* basket for catching fish (Paas, 33); Tumbuka (N21, Kusi): *mono/miono* creel (for trapping fish) (Turner, 97)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

504

Root: *-kúngá

Gloss: Eel (Protopteridae sp.)

Protolanguage: Proto-Savanna? Tervuren scholars notes a distribution of D, E, G, L, N, P, R, S zones (BLR3 2059; C.S. 1228; Meeussen, 39 and 27).

Etymology: Uncertain.

Replaces:

Botatwe Distribution:

Soli: *mukunga* eel

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *lúkunga* eel (Kagaya, 75)

Sala:

Tonga: *mukunga* eel (Torrend, archival notes)

Ila:

Proto-Falls

Toka:

Leya: *mukunga* eel

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: In addition to attestations in C.S. 1228: Lamba (M54, Sabi): *umukunga* eel (Doke, 54); Cewa-Nyanja (N31, Kusi): *mkunga* eel (Paas, 127); Shona (S10, Kusi): *mukunga* eel (Hannan, 806); Tsonga (S53, Southeast Bantu): *hunga* eel (Cuénod, 30); Nkoya (L62, Luyana/Southwest Bantu): *mkûnga* kind of fish (Yukawa, 25); Luvale (K14, Western Savanna

Bantu): *mukunga* pike (White, 8); Lunda (L52, Western Savanna Bantu): *mu/anyi-kúnga* tiger fish (White, 36); Ovimbundu (R11, Western Savanna Bantu): *ohunga* eel (WCAM)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

505

Root: *mpende

Gloss: Bream (catfish?)

Protolanguage: Common Savanna

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *impende* bream; *impende* a kind of fish (Kagaya, 75)

Sala: *mpende* bream

Tonga: *impende* bream; *impende* a kind of fish (Torrend, archival notes)

Ila: *impende* a kind of fish (Fowler, 203)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *mpende* a kind of fish (Hoch, 61; White Fathers, 435)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Uncertain (/p/ > /b/?): Shona (S10, Kusi): *chibende* red-breasted bream (Hannan, 776);

Mwenyi (K352, Luyana/Southwest Bantu): *liwénde* kind of fish (Yukawa, 24); Lunda (L52, Western Savanna Bantu): *chi/yi-bendi* reddish colored catfish (White, 11)

506

Root: *-gòngá or *-jòngá

Gloss: spear

Protolanguage: Proto-Bantu

Etymology: Origin unknown (BLR3 1448 [*-jòngá as another form]; C.S. 857 [*-yongá as another form C.S. 2130]; reconstructed as *-gòngá in Ehret 1999:83; *-gongá in Meeussen, 23 and 51; Vansina says this root is Proto-Western Bantu in Vansina 1986:438-9 but revises this position in Vansina 1990: 283 to recognize the Proto-Bantu ancestry of the root). It may be that this root led to an early derivative glossing as ‘wooden arrow’ and/or ‘point of a tool.’ Botatwe attestations support an inherited form as *- jòngá, rather than *- gòngá. Most Botatwe language speakers replaced this root with a Kaskazi attestation of *-túmò. The meaning of this root was later narrowed in languages of the eastern Botatwe region. See also root 813.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *ijonga* long-bladed spear (Plateau Tonga and We, Torrend, 525); *kayonga* thin, short-shanked spear (Plateau Tonga, Torrend, 525); *muyonga* long-bladed spear (Plateau Tonga, Torrend, 525)

Ila: *iyonga* long-bladed spear (Torrend 525); *iyonga* elephant spear (Fowler, 250)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Among many attestations, consider Bisa (M51, Sabi): *isonga* point; sharp of a weapon, etc. (Madan, 119); Bemba (M42 Sabi): *nsongo* the point or extremity of any instrument as spear, arrow, knife, pen, etc. (White Fathers, 556); Luba (L34, Luban): *nsóngo* la pointe, extérieure [accents in this word??] à l’extrémité (d’une flèche) (Vandermeiren, 650); KiHa (D/J66, Kaskazi): *injuunga* large spear with long shaft (Schoenbrun, FN, 104); Ikifuliirú/Mashi (D/J53 & D/J63, Kaskazi): *éecisòonga* wooden arrow without an iron point (Schoenbrun, FN, 99); KiSwahili (G41, Kaskazi): *-gonga* to beat, to strike (Tuki, 54); Lozi (K21, Kusi): *ndongwa* short spear (O’Sullivan, 277); Thimbukushu (K333, Luyana/Southwest Bantu):

dyonga spear for stabbing, throwing (Wynne, 507); Rumanyo (K332, Luyana/Southwest Bantu): *lighónga* spear (Möhlrig, 427); Kwangali (K33, Luyana/Southwest Bantu): *egonga* spear (Kloppers, 139); Ndonga (R22, Luyana/Southwest Bantu): *eonga* spear (Pfouts, 147); Kwanyama (R21, Luyana/Southwest Bantu): *eonga* spear (Pfouts, 147); Lunda (L52, Western Savanna Bantu): *i/ma-yonga* spear (White, 78); Ovimbundu (R11, Western Savanna Bantu): *okonga* a short spear (WCAM, 86).

Other Bantu: see C.S. 857

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes: Lenje: (*i*)*nsonga* point, as of a knife (Kovanda). The Lenje attestation is certainly a borrowing from Sabi languages to the east.

507

Root: *-tá

Gloss: bow

Protolanguage: early Bantu

Etymology: This root developed out of the Proto-Bantu form *-tá, ‘to throw,’ which described the action taken by the device on the missile. A wider semantic domain has been derived from this verb, according to the linguists at MRAC, who reconstruct ‘to throw away, throw, lose, put, trap, play a game, do, gather’ as meanings for *-tá. This wider range of meanings highlights again the connection between archery and trapping through the shared technology of springs. It also hints at connections between hunting and play or enjoyment and this semantic malleability of the original root *-tá is seen in the range of meanings for *kata* in Ila (see below). In other languages, the root has produced the term for ‘war’, a connection between the technology of predation on animals and people. (also reconstructed as *-táà BLR3 2708; C.S. 1631; Ehret 1998: 312; Meeussen 20 and 35; Nurse and Hinnebusch 607, 648; Vansina 1990: 282). Finally, it seems equally ancient within Botatwe languages to apply the root *-tá to ‘arrow,’ often with the diminutive noun class prefix -ka, notionally referring to the ‘little tool for throwing.’

Replaces:

Botatwe Distribution:

Soli: *buta* bow

Proto-Eastern Botatwe

Lundwe: *buta* bow

Proto-Kafue

Lenje: *buta* bow; *búúta/mááta* bow (Kagaya, 73); *shibuta* archer (Kovanda); *βuta* bow (Madan, 122)

Sala: *buta* bow

Tonga: *buta* bow; *buta* bow (Hopgood, 237); *buta* bow (Collins, 153);

kata arrow (in the Valley and on the Plateau but also *kanta* in the Valley, Torrend, 30); *kata* arrow (Collins, 162)

Ila: *buta* bow; *buta* a bow (Fowler, 64); *kata* a small crack; a kind of children’s game; a child’s bow; an arrow (Fowler, 287); *kata* arrow (Torrend, 30)

Proto-Falls

Toka:
Leya: *buta* arrow
 Proto-Western Botatwe
 Proto-Machili
Totela: *βuta* bow; *buta* bow (Crane, Namibian Totela); *obuta* bow (Crane, Zambian Totela)
Subiya: *buta* bow; *buuta* arrows (Pfouts, 172)
Mbalangwe: *buta* bow (Pfouts, 172)
 Proto-Zambezi Hook
Fwe: *βuta* bow; *buta* bow (Baumbach 410); *buuta* bow (Pfouts, 172)
Shanjo: *βuta* bow

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes:

508

Root: *-gújí

Gloss: arrow

Protolanguage: Proto-Savanna

Etymology: Of unknown origin but Guthrie suggests that it may be related to *-gújm- ‘to hunt’ such that the noun *-gújí derived the verb (BLR3 1523; C.S. 903y; Ehret 1998: 307; ibid 1999: 66; Nurse and Hinnebusch, 622). This conclusion is unsure because, as Guthrie himself notes, *-m specifically is not known to be a word building device. However, verbs developed out of nouns usually proceed through a process in which a nominal stem ending in a vowel is augmented in the derived verbal stem with a final consonant + -a (Schadeberg 2003: 84). In this case, -ma was added to *-gújí.

Replaces: The root replaced Proto-Bantu *-bànjí ‘midrib of palm, arrow’ (C.S. 545, 546, 547; Ehret 1998: 312-3; Vansina 1990: 287;). This root is later replaced in western Botatwe languages by *-so.

Botatwe Distribution:

Soli: *mufwi* arrow, generic
 Proto-Eastern Botatwe
Lundwe: *muhwi* arrow
 Proto-Kafue
Lenje: *mufwi* arrow, generic; *mufwi* or *munfwi* arrow (Madan, 99); *mufwi* arrow (Kovanda); *múfwi*/*mífwi* arrow (Kagaya, 73)
Sala: *muvwi*- arrow, arrowhead
Tonga: *muhwi* or *muvwi* (dialectal difference between Plateau and Valley Tonga)- arrow, generic; *muvwi* arrow (Fell, 16)
Ila: *muvwi* arrow, generic; *muvwi* an arrow (Fowler, 492)

Proto-Falls
 Toka:
 Leya:
 Proto-Western Botatwe
 Proto-Machili
 Totela:
 Subiya: *muvwi* arrow (Baumbach, 314)
 Mbalangwe:
 Proto-Zambezi Hook
 Fwe:
 Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend provides the root *mufwi* or *mumvwi* as attestations for ‘poisoned arrow of the Ba-Ila and Bene-Mukuni [Lenje] in the Plateau, Ila and Mukuni areas (Torrend, 30). These attestations are not listed above because Torrend does not specify which attestation belongs to which language so it not useful for phonological analysis. Torrend frequently conflates all the attestations of the Botatwe languages into one or a few entries labeled as ‘Common’ without paying attention to slight phonological differences; these or other ambiguous entries are not included in the individual language attestations listed for each root.

509

Root: *-gomba

Gloss: a kind of arrow (barbed?)

Protolanguage: relict Savanna and Mashariki according to Ehret but, with the Botatwe attestations, this root may be tentatively reconstructed to Proto-Eastern Savanna Bantu. This root was reconstructed by Bourquin and Coupey as *-gumba ‘arrowhead’ (Meeussen, 26 and 33). Ehret noted that the distinctive feature of this arrowhead was probably its barbs (Ehret 1998: 313). Noun class prefix 9/10 influences C1 /g/ to /nk/?

Etymology: Uncertain. Could this root share a source root that has not yet been reconstructed with the root *-gòb- ‘to bend, to crook’, a Proto-Mashariki innovation based on its distribution and itself the source of another word for barb.

Replaces:

Botatwe Distribution:

Soli:
 Proto-Eastern Botatwe
 Lundwe:
 Proto-Kafue
 Lenje:
 Sala:

Tonga: (*inkomba* barb; *koomba* barbed arrow (in Valley Tonga, Torrend, 30); *kaumba* barbed arrow (in Plateau and Valley Tonga, Torrend 30); *isumo lya sinkombo* spear with one long barb (Plateau Tonga, Torrend 525)

Ila: *kaumba*, *mumba*- like a fishing spear (barbed); *isuma lya nkombo* spear with one barb; (*inkomba*, *shinkombo* barb (Fowler, 219); *isumo lya nkombo* spear with one long barb (Torrend, 525); *inkombo* the bow or stern of a canoe, a kind of spear with one long barb (Fowler, 219)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Among many attestations: Nyasa (N31, Kusi): *kombela* arrow (Paas, 25); Gciriku (K332, Luyana/Southwest Bantu): *ngumba* an arrow with a metal head, wood shaft, used for birds and fish, mostly with one large barb (Pfouts, 99); Rumanyo (K332, Luyana/Southwest Bantu): *ngumba* fishing arrow (Möhlig, 178) and *nyombo* fishing arrow (Möhlig, 190); Lunda (L52, Western Savanna Bantu): *mu/nyi-ngamba* a kind of arrow (cognate? V1 shift a result of regressive assimilation? White, 48); Ovimbundu (R11, Western Savanna Bantu): *unyombo* arrowhead (WCAM, 149)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes: As with many roots, the limitation of Botatwe attestations to the Tonga and Ila languages is likely a result of the better documentation of these two languages, rather than any intensive areal innovation between the two speech communities or some inherent conservative character of two.

510

Root: *-lémbé [tone?]

Gloss: poison from a creeper, probably *Apocynaceae strophanthus* (species *nicholsonii*?), common to the *mopane* woodlands of south central Africa and frequently used as an arrow poison

Protolanguage: Proto-Savanna? Or, Proto-Eastern Savanna with attestations with a final -i (mostly Western Savanna Bantu languages) serving as an independent (but related) derivation?

Etymology: This root is probably derived from an ancient root (Proto-Bantu?) *-dém- variously glossed as 'to tire, to lame' and 'to be crippled' (for derivatives, see BLR3 914-918 and C.S. 531-534). This source root, *-dém-, was used for at least one other innovation in hunting

vocabulary, *-lém̃ba, ‘birdlime’. The shared derivational relationship between these two roots is not surprising as they serve the similar function of incapacitating prey. It seems likely, based on distribution that Kaskazi, speakers applied the common (though somewhat ambiguous when one is reconstruction the direction of derivation) deverbative suffix -a to create a noun for ‘birdlime’ from the shared older root, *-dém̃-, that was used to develop a word for ‘hunting poison’. The Kaskazi word for ‘birdlime,’ *-lém̃ba, was later borrowed into Sabi, Botatwe, and even some western Savanna languages that had come to inhabit lands previously settled by Kaskazi speakers.

Replaces: This root supplements a series of older terms. It probably replaces Proto-Sangha-Kwa *-dùdù ‘bitterness’ (BLR3 1162, 1166, 1168; Ehret 1999:88). This older term was replaced in Proto-Mashariki by *-súngù ‘bitterness’ (BLR3 741 as *-cúngú; C.S. 421 and 432; Ehret 1999:88), the latter of which took on the meaning ‘poison’ in Proto-Kaskazi (BLR3 741; Ehret 1999:100).

Botatwe Distribution:

Soli: *βulembe* a milky sap, a poison for hunting; *mulembe* a good hunter or sniper

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *bulembe* hunting poison; *bulembe* arrow poison (Torrend, 30); *bulembe* a kind of poison (used for a poisoned arrow) (Kagaya, 73); *bulembe* arrow poison (Kovanda); *lem̃ba* gum of the *mutaba* tree (Kovanda); *bulemba* a harm, a hurt (Kovanda)

Sala: *bulembe* arrow poison

Tonga: *kalembe* arrow with a short head (Plateau and Valley Tonga, Torrend, 30)

Ila: *bulembe bwa musamu/buta* hunting poison; *bulembe* arrow poison (Torrend, 30); *bulembe* arrow poison made from a creeper (Fowler, 52); *mulembe* arrow with a short head (Torrend, 30, also cited from this source in Fowler, 453); *mulembe* a kind of climber, *Strophanthus kombe*. The seeds give an arrow poison (Fowler, 453)

Proto-Falls

Toka: *bulembwe* poison used when hunting

Leya: *βulembe* hunting poison

Proto-Western Botatwe

Proto-Machili

Totela: *obulembe* arrow poison (Crane, *Zambian Totela*); *bulembe* arrow point with poison (Crane, *Namibian Totela*)

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe: *βulembe* hunting poison, especially used by Bushmen, arrow poison

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *bulembe* poison extracted from a creeper called *mulembe* and used for poisoning arrows (White Fathers, 48); *úbulémbé* poison for arrows (Guthrie 46); *úmulémbé* elephant’s trunk (Guthrie 46, see also White Fathers, 460); Bisa (M51, Sabi): *ulembe* poison for arrows (Madan, 119); Nsenga (N41, Sabi): *chilembe* venom, animal poison (Madan, 12); Lamba (M54, Sabi): *uβulembe* arrow poison (Doke, 119); Luba (L34,

Eastern Savanna Bantu): *bulémbe* poison collé sur le fer (d'une flèche) (Vandermeiren, 651); Nyasa (N31, Kusi): *ulembe* poisoned arrow (Paas, 25); Tumbuka (N21, Kusi): *ulembi* arrow poison (Turner, 175); Lozi (K21, Kusi): *bulembe* poison on arrows (O'Sullivan); *bulembe* deadly poison put on arrows (Jalla, 30); Lunda (L52, Western Savanna Bantu): *ulembi* arrow poison, poison of a snake, often now for poison in general; *mu/nyi-lembi* plant of *Strophanthus* group from which arrow poison is obtained; *chi/yi-lembi* a kind of trap; *i/ma-lembi* leaves placed on head of victim of spirit possession at exorcism ceremony (White, 39); Ovimbundu (R11, Western Savanna Bantu): *ulembue* an arrow from Ganguellas; *ulemba* sycamore (WCAM, 146)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes: Glosses in Ila and Tonga using the cl. 3 or cl. 12 noun prefixes to develop words of 'poisoned arrow' are either more recent areal forms developed after the divergence of Proto-Kafue in the early centuries of the second millennium CE or they are evidence of inherited forms of a Proto-Kafue root developed at the turn of the first millennium CE. As with many roots, the limitation of Botatwe attestations to the Tonga and Ila languages is likely a result of the better documentation of these two languages, rather than any intensive areal innovation between the two speech communities or some inherent conservative character of two. Glosses in Soli for 'good hunter' and Bemba for 'elephant's trunk' suggest the use of this poison during the ivory trade in the eastern region of the Botatwe area, nearer to Ingombe Ilede and the Portuguese trading stations of the middle Zambezi.

511

Root: *-gúim-

Gloss: to hunt, with dogs and, perhaps, originally with bow and arrow. As Botatwe peoples came to consider archery as the most common form of hunting in the savanna, so too was this root used to refer to the action verb 'to hunt' in its generic form, hence the near universal distribution, despite the fact that we usually expect older words to have a relict distribution (for another cultural vocabulary verb with near universal distribution in Botatwe, consider the root *-teg-, 'to trap').

Protolanguage: Proto-Eastern Savanna or Areal between Proto-Botatwe and Proto-Maskariki

Etymology: Guthrie suggests that this root is related to the root for arrow, *-gúí (C.S. 903 and 904) This conclusion is unsure because, as Guthrie himself notes, *-m specifically is not known to be a word building device. However, verbs developed out of nouns usually proceed through a process in which a nominal stem ending in a vowel is augmented in the derived verbal stem with a final consonant + -a (Schadeberg 2003: 84). In this case, -ma was added to *-gúí.

Replaces: replaces *-bind-, attestations for which still appear as a western Botatwe verb "to hunt for honey" and in Totela as "to hunt, search (for many objects)" and in eastern Botatwe languages as a term for "hunter" (though these attestations could also be recent borrowings).

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *muvwimi* hunter

Proto-Kafue

Lenje: *kufwima* to hunt, including seasonal burning of the bush and subsequent communal hunt to cull game; *-fwima* to hunt (Hopgood noting that this is a ‘Mukuni’ word, 239); *-fuima* to hunt (Madan, 81); *mufuimi* hunter (Madan, 99); *-fwima* to hunt when fire is set to the veld (Kovanda); *mufwimi* hunter (Kovanda); *kúfwima* to hunt (Kagaya, 73)

Sala: *kuvwima* to hunt (attributed to Lenje speakers but showing appropriate sound shifts to be an inherited word)

Tonga: *kuvwima* to hunt with spears, bows and arrows, and/or dogs but especially to hunt alone, not communally; to hunt (generic term); *-vwima* to hunt (Collins, 179); *-vwima* to hunt (Fell, 9); *-vwima* to hunt (Carter 1974); *-vwima* to hunt (Hopgood, 249); *-vwima* to hunt (generic term, Valley Tonga, Torrend, 284); *kuvwima buci* to go seeking honey (Valley Tonga, Torrend, 279)

Ila: *kuvwima* to hunt (Fowler, 758); *muvwimi* hunter (Fowler, 492)

Proto-Falls

Toka: *kuvwima* to hunt; *muvwimi* hunter

Leya: *kuvwima* to hunt with a gun or dogs

Proto-Western Botatwe

Proto-Machili

Totela: *kuvwima* to hunt (generic term); *-vwimá* to hunt (Baumbach 375 and 381); *kuvwima* to look or search for (tone?); *-bwima* to hunt and *mubwimi* hunter (Crane, Namibian Totela); *-bwima* to hunt and *mubwimi* hunter (Crane, Zambian Totela)

Subiya: *kuvwima* to hunt (generic term); *muvwimi* hunter; *-vwima* to hunt (Baumbach, 320); *muvwimi* a person who collects honey

Mbalangwe: *kuvwima* to hunt, to go looking for something in a group or along; *muvwimi* hunter; *-vwima* to hunt (Baumbach 354)

Proto-Zambezi Hook

Fwe:

Shanjo: *kuvwima* to hunt; *muvwimi* hunter; *kuvwima buch*i to collect honey

Other Savanna Bantu: In addition to attestations in C.S. 904, consider: Lunyole (E/J35, Kaskazi): *oxugijma* to hunt (Schoenbrun, FN, 6); Lusaamya (E/J34, Kaskazi): *ooyijma* to hunt and *omuyijmi* hunter (Schoenbrun, FN, 6); Lumasaaβa (E/J31, Kaskazi): *xuuyima* to hunt and *umuyiyfi* hunter (Schoenbrun, FN, 6); GiKuria (E/J43, Kaskazi): *kugwema* to hunt and *umugwimi* hunter (Schoenbrun, FN, 6); KiKwaya (E/J251, Kaskazi) *okufwiima* to hunt (Schoenbrun, FN, 7); KiSukuma (F21, Kaskazi): *kuhwima* to hunt (Schoenbrun, FN, 7); Shona (S10, Kusi): *-vshima* to hunt (Hannan, 721) and *kuvima* to hunt (Biehler, 125); Venda (S21, Kusi): *-zwima* to hunt (Van Warmelo, 487); Nkoya (L62, Western Savanna Bantu): *kuvwima* to set a trap (Yukawa, 24); Jita: *okufwiima* to hunt (Shoenbrun, pers. comm.); Regi (? Can’t read handwriting): *okufwima* to hunt (Shoenbrun, pers. comm.); Zu (Zulu? Can’t read handwriting) *kubyema* to hunt (Shoenbrun, pers. comm.); Nata (? Can’t read handwriting): *okubhwema* to hunt (Shoenbrun, pers. comm.); Shashi (D/J53, Great Lakes): *okubhwema* to hunt; Ngoreme (? Can’t read handwriting): *okobwena* to hunt (Shoenbrun, pers. comm.); Kuria (E/J43, Great Lakes): *-gwema*, *-gema*, *-goema* to hunt (Shoenbrun, pers. comm.)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: In Lundwe we would expect /v/ to shift to /h/ (consider Lundwe attestations of the root *-gúí) but the conservation of /v/ is probably a result of either the influence of neighboring Kafue languages or regressive assimilation in the context of /m/ and the Botatwe shift of the original vowel cluster *-úí to /wi/ (/w/ as a voiced labial-velar approximate). That is to say, the Lundwe correspondence of /h/ to /*f/ may not hold in this environment. The source of Crane's Totela attestations with /b/ is both uncertain and surprising. Based the Nkoya attestation of *-gúí (e.g. muvi) we would expect the attestation of this root to follow a similar pattern (e.g. kuvima); the attestation above and the lack of attestations in other Western Savanna languages suggests that the Nkoya speakers borrowed this term from Botatwe speakers. Torrend notes *-vwima* as the "Common" Bantu Botatwe word for 'to hunt when fire is set to the veld'; he often attributes the Tonga form to all Botatwe languages (Torrend, 284).

512

Root: *-téǵ

Gloss: to set a trap

Protolanguage: Proto Bantu (BLR3 2825; C.S. 1698; Ehret 1998: 312; Nurse and Hinnebusch, 608; Vansina 1990: 287).

Etymology:

Replaces:

Botatwe Distribution:

Soli: *kuteya* to trap

Proto-Eastern Botatwe

Lundwe: *kuteya* to trap

Proto-Kafue

Lenje: *kuteya* to trap; *-teya* to get ready, put ready, prepare, arrange, set (a trap), snare (game, etc.) (Madan, 116); *kúteya* *koose* to set a trap (Kagaya, 73)

Sala: *kuteya* to trap

Tonga: *kuteya* to trap; *-tea* to set a snare (Hopgood, 248)

Ila: *kuteya* to trap; *kuteya* to set traps open and cocked; to open the hand; *kuteya* *cicinca-* to shade the eyes with the hand [bad manners]; *kuteya* *matwi* to pay heed, give attention (Fowler, 709)

Proto-Falls

Toka: *kuteya* to trap

Leya: *kuteya* to trap, get a trap ready

Proto-Western Botatwe

Proto-Machili

Totela: *kuteya* to trap; *-téya* to set a trap (Baumbach, 377); *-teya-* to trap (Crane, *Zambian Totela*)

Subiya: *kuteya* to trap; *-téya* to set a trap (Baumbach, 316)

Mbalangwe: *kuteya* to trap; *-téya* to set a trap (Baumbach, 351)

Proto-Zambezi Hook

Fwe: *kuteya* to trap; *-téá* to set a trap (Baumbach, 402)

Shanjo: *kuteya* to trap

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes that *-teya* is a Common Bantu Botatwe root meaning ‘to trap’ (Torrend, 588). According to Jan Vansina, this root has a homophone: **-tég* (C.S. 1697) ‘to sell,’ an innovation of the southwest forest near the Copperbelt that spread upstream of the Malebo Pool (Vansina 1990: 295-6).

513

Root: **-pèto*

Gloss: a spring noose snare trap (using a stick or branch as the spring)

Protolanguage: Savanna Bantu?

Etymology: The ancient Bantu root **-pet-* ‘to bow, to bend’ is the source for a series of derivatives, including **-pètò* ‘circle, bow’ in the J/L/M zones (BLR3 2482, C.S. 1495). The development of a term for a bent wood spring noose trap seems to have been old within Savanna Bantu, from its distribution and the unique phonological forms in branches of Savanna Bantu.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *mupeto* trap, noose and spring (Madan, 101)

Sala:

Tonga:

Ila: *mweto* winter; a sapling used as the spring in a bird-trap (Fowler, 509)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *omubeto* string trap tied to a stick (borrowed; Crane, Zambian

Totela)

Subiya: *muheito* spring noose snare to catch the animal around its neck

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *mupeto* 1) a hoop 2) a branch driven into the ground and bent so as to form a spring or snare (White Fathers, 482); KiKwaya (E/J251,

Kaskazi): *omuyeeto* spring noose trap (DLS, FN, 7); Lungu (M14, Kaskazi): *úmúpéto* flexible tree used for a trap for birds (Kagaya, 80); Lozi (K21, Kusi): *mubeto* large animal trap (O'Sullivan, 308); *mubeto* large snare for catching animals (Jalla, 236); Nkoya (L62, Luyana/Southwest Bantu): *mupeto* a kind of trap (Yukawa, 24); Ovimbundu (R11, Western Savanna): *upeto* a noose, snare (WCAM, 150)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes: The Lenje attestation seems to be a more recent borrowing from Sabi speakers who retained the /p/; the Lenje inherited form would resemble the Ila and Subiya attestations with glides replacing the bilabial plosive. The Totela form reflects either an independent innovation in voicing the bilabial plosive under the influence of the /m/ or, more likely, it indicates and adoption of this shift from Lozi speakers. Most Savanna languages attest the root -pèt- in its early Bantu meaning and many also use the word to form a noun for ring or circle and, as in the Great Lakes languages of the Kaskazi branch of Mashariki, as an alternative or replacement for the early Bantu word *tà, bow (de Luna, 2003).

514

Root: *-dimbò

Gloss: birdlime

Protolanguage: Proto-Bantu?

Etymology: This root is derived from *-dimb-, 'to trap by birdlime; to stick to (something); to be firm,' using the deverbative stem *-o as the 'instrument of' the verb (see BLR3 976 [verb] and 985 [noun]; C.S. 575 and 578; Meeussen, 10 and 35; Schadeberg, 81; Nurse and Hinnebusch, 648).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *bulimbo* 1) beeswax used on a feeding ground of birds to trap them 2)

birdlime

Proto-Kafue

Lenje: *bulimbo* birdlime (Kovanda)

Sala:

Tonga:

Ila: *bulimbo* birdlime; *bulimbo* birdlime made from the sap of the *masole*

and *mataba* trees (Fowler, 53)

Proto-Falls

Toka: *bulimbwe* trap for birds

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo: *bulimbwe* birdlime

Other Savanna Bantu: Among many attestations, consider Bemba (M42, Sabi): *bulimbo* birdlime, sticky substance used for catching birds (White Fathers, 48) and *ubulimbo* birdlime (Guthrie, 47); Bisa (M51, Sabi): *uwulimbo* birdlime (Madan, 92); Luba (L31a, Eastern Savanna Bantu): *búdímbu* birdlime (Yukawa, 30); Luganda (E/J15, Great Lakes): *obulimbo* birdlime (Blackledge, 113); KiHa (D/J66, Kaskazi): *uβuliimbo* sap from a tree (for feathering on an arrow) (Schoenbrun, FN, 104); KiKwaya (E/J251, Great Lakes): *oβulimbo* beeswax (Schoenbrun, FN, 37); KiSwahili (G42, Kaskazi): *ulimbo* birdlime (Tuki, 64); Nyasa (N31, Kusi): *ulimbo* glue (Pass, 162); Shona (S10, Kusi): *urimbo* birdlime (Hannan, 772); GiTonga (S62, Kusi): *ulimbo* birdlime (Turner, 65); Lozi (K21, Kusi): *bulimbwe* birdlime (O'Sullivan, 26) and *bulimbwe* birdlime used to catch birds (Jalla, 31); Mwenyi (K352, Luyana/Southwest Bantu): *ouúlimbwé* birdlime (Yukawa, 25); Lunda (L52, Western Savanna Bantu): *u/ma-dimbwa* sticky patches, e.g. honey dried on the body ('d' probably attempts to transcribe voiced palatal stop typical of Lunda in this environment; White, 16)

Other Bantu:

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes that *bulimbo* is the common term for birdlime; we can estimate that he expected the term to be in use in Tonga, Ila and Lenje and, possibly, other languages.

515

Root: *-díbá

Gloss: falling (stone) trap

Protolanguage: Proto-Botatwe, inherited; replaced in Proto-Western Botatwe by the root *-kúnj.

Etymology: Ehret has reconstructed root, *-líbá, 'falling trap' as a root of general Savanna and Mashariki distribution. The attestations below and the distribution of the reconstruction, *-díbá as 'falling trap' in zones C, E, G, J, K, M, N, P, R, and S according to BLR3 suggests that this is, indeed, an old root, dating to the Proto-Savanna or, with attestations in the C zone, perhaps earlier. Although there are no relict attestations in Proto-Western Botatwe, this root is still likely to have been inherited into Proto-Botatwe due to its distribution and phonological forms in other Savanna Bantu languages. Western Botatwe languages are terribly documented so it is difficult to trace inherited, relict distributions in this branch of Botatwe (BLR3 955; C.S. 558; Ehret 1998: 313 as *-líbá; Nurse and Hinnebusch, 628).

Replaces:

Botatwe Distribution:

Soli: *chiliβa* stone fall trap for small animals

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *ciliba* or *liliba* a fall trap with a flat stone or similar device to catch rats, birds, etc. (Torrend, 589); *muliβa* a falling trap (Madan, 100)

Sala:

Tonga: *idiba* a fall trap of stone for birds and small animals; *idiba/maliba* a stone trap (Collins, 158); *diba* a firm or strong fall trap (Torrend, archival materials, 234); *idiba/maliba* a fall trap with a flat stone or similar device to catch rats, birds, etc. (Plateau and Valley Tonga, 589)

Ila: *iliba* a fall trap with a flat stone or similar device to catch rats, birds, etc. (Torrend, 589); *idiba* a trap, *Tukateye madiba*, *tuyaye bazuni* ‘Let us set traps to kill some birds’ (Fowler, 185); *cidiba* wooden fetters for the ankles of slaves (Fowler, 99)

Proto-Falls

Toka: *idiba* trap where heavy wood or stones fall onto birds

Leya: *idiba* log fall trap for lions and leopards, pitfall trap (?)

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe:

Proto-Zambezi Hook

Fwe:Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *liliba* a snare for birds (White Fathers, 334); *iliba* stone bird trap (Guthrie, 47); Lumasaaba (E/J31, Kaskazi): *buliba* rat trap of big stone (Schoenbrun, FN, 6); Ikinyarwanda (D/J61, Kaskazi): *ururiba* pit trap (Schoenbrun, FN, 2); Lunyoro/Lutooro (E/J11 and E/J12, Kaskazi): *ekiriba* trap for lions, etc. (Schoenbrun, FN, 4); Tembo (D/J531, Kaskazi): *káliba* baited trap (Schoenbrun, FN, 3); Runyankore/Rukiga (E/J13 and E/J14, Kaskazi): *oruriba* large pit trap (Schoenbrun, FN, 5); Shona (S10, Kusi): *dhibhu* whip snare (e.g. for buck) (cognate?; Hannan, 898); *dibu*, *dibura* trap (Biehler, 212); GiTonga (S62, Kusi): *diβa* stone trap (for rats etc.) (Turner, 22); Nkoya (L62, Luyana/Southwest Bantu): *shijiba* kind of trap (Yukawa, 24); Herero (R31, Luyana/ Southwest Bantu): *orutjiva* pit (Gestwicki, 55); Lunda (L52, Western Savanna Bantu): *chi/yi-diya* trap (White, 17)

Other Bantu:**Other Non-Bantu**:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

516

Root: *-júki

Gloss: Honey

Protolanguage: Ancient, probably Proto-Bantu; V1 shift widely attested as an influence of the cl. 14 prefix (BLR3 3350 and 6225; C.S. 2003; reconstructed by Ehret as *-úki and *-ókì, see 1998: 313; Nurse and Hinnebusch, 648).

Etymology:**Replaces:****Botatwe Distribution:**

Soli: *bwichi* honey (vowel harmony with /ki/?)

Proto-Eastern Botatwe

Lundwe: *βuchi* honey, black part of the honey

Proto-Kafue

Lenje: *buuchi* honey; *buuci* honey (Kovanda); *búuci* honey (Kagaya, 78);
βuchi honey (Madan, 121)

Sala: *buuchi* honey

Tonga: *buchi* honey; *buci* honey (Hopgood, 237); *buci* honey (Collins, 152)

Ila: *βuchi* honey; *buci* honey [thought to be from Lumbu] (Fowler, 46)

Proto-Falls

Toka: *βuchi* honey

Leya: *βuchi* honey

Proto-Western Botatwe

Proto-Machili

Totela: *βuchi* honey; *búci* honey (Baumbach, 381)

Subiya: *βuchi* honey; *vuchi* honey; *βuchi* black honey; *búci* honey
(Baumbach, 320)

Mbalangwe: *βuchi* honey; *búci* honey (Baumbach, 352)

Proto-Zambezi Hook

Fwe: *βuchi* honey; *bóci* honey (Baumbach, 406)

Shanjo: *βuchi* honey

Other Savanna Bantu: *See attestations in sources referenced above.*

Other Bantu: *See attestations in sources referenced above.*

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

517

Root: *-pàkò

Gloss: Natural Bee Hive, Bees' Nest

Protolanguage: This word was probably inherited into Proto-Botatwe, though the age of the root with this semantic field is uncertain.

Etymology: From an older word for 'tree hallow': *-pàkò (distribution in D E H J K L M N P and S zones, BLR3 2374; C.S. 1425).

Replaces:**Botatwe Distribution:**

Soli: *lupako* natural beehive, this word thought to be a Lenje term because they are keen honey hunters

Proto-Eastern Botatwe

Lundwe: *mupako* natural hive, generic word for hive

Proto-Kafue

Lenje: *lupako* generic word for beehive and refers to a natural hive because bees are not domesticated; *lupako* tree hallow (Kagaya, 81); *lupako* hole in a tree, cavity, cleft, hallow (Madan, 95); *lupako lwa mpuka* bees' nest (Kovanda, also in Torrend, 49—Kovanda's source?)

Sala: *mapako* hole in a tree for a natural hive

Tonga: *impago*, *impako* a natural hive, also a generic word for beehive; *impako ya nzuki* bees' nest (Plateau and Valley Tonga, Torrend, 49)

Ila: *impako* bee hive, generic; *impako* a hole or crevice in a tree (Fowler, 201); *impako ya nzuki* bees' nest (Torrend, 49)

Proto-Falls

Toka: *munpako* natural hive, generic word for beehive

Leya: *munpako* generic word for beehive, natural place of bees' home

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *impako* natural hive, also applied to honey barrel because this is the generic word for where a bee makes a hive

Mbalangwe: *impako* natural hive

Proto-Zambezi Hook

Fwe: *impako* natural hive, thought to be a Subiya word

Shanjo: *impako* natural hive, generic word for beehive

Other Savanna Bantu: Lamba (M54, Sabi): *ulupako lwansimu* beehive (Doke, 79); Nsenga (N41, Sabi): *lupako* beehive (Madan, 62); Lungu (M14, Kaskazi): *úlúpáko* beehive (Kagaya, 83); Thimbukushu (K333, Luyana/Southwest Bantu): *rupáko mudivúyu* best of bees in a baobab tree, *rupáko mudiwe* nest of bees in a rock (Wynne, 49)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

518

Root: *-pùká (cl. 11 sing., 6/10 pl.)

Gloss: Bee

Protolanguage: Common Botatwe; Possibly a Proto-Botatwe innovation borrowed into languages bordering the Botatwe languages, especially in the west. C1 /p/ retained, especially in nasal context of noun class prefix. The source of the Lozi root is probably Luyana/Mwenyi. This root is reconstructed as “insect, bee, ant, caterpillar” and distributed fairly broadly in the Bantu languages. Botatwe speakers who used the word to talk about ‘bees’ clearly understood the connections amongst these insects as sources of food as many ants and caterpillars are edible and

bees obviously produce honey (distribution noted as D, H, J, K, L, M, N, R, and S zones in BLR3 2629, 2628; C.S. 1596).

Etymology:

Replaces:

Botatwe Distribution:

Soli: *lupuka*, *mapuka* honey bee

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *lupuka* common bee (Torrend, 49); *lupuka*, *mpuka* bee (Kovanda)

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *impuka* honeybee; *mpuka* bee (Baumbach, 385)

Subiya: *impuka* bee that lives in a tree

Mbalangwe: *impuka* the bees that live in trees; *impuka* bee (Baumbach,

359)

Proto-Zambezi Hook

Fwe: *impuka* bee; *mpuka*, *zimpuka* bee (Baumbach, 409)

Shanjo: *impuka* bees that live in trees for honey

Other Savanna Bantu: Nkoya (L62, Luyana/Southwest Bantu): *lumpuka* bee (Yukawa, 27);

Rumanyo (K332, Luyana/Southwest Bantu): *mpúka* bee (Möhlig, 293); Lozi (K21, Kusi): *limuka* bee, generic (O'Sullivan, 22); Mwenyi (K352, Luyana/Southwest Bantu): *(o)múka* bee (Yukawa, 26); Thimbukushu (K333, Luyana/Southwest Bantu): *múka* bee, insect which swarms, stings and makes honey (Wynne, 49)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

519

Root: *buka(to)

Gloss: Beeswax

Protolanguage: Proto-Botatwe, borrowed into Lamba

Etymology: Uncertain.

Replaces:

Botatwe Distribution:

Soli: *βukato* beeswax

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *bukato* (Kovanda); *bukato wax* (bee) (Kagaya, 78)

Sala:

Tonga:

Ila: *buka* (Torrend, 49)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *buka* beeswax

Mbalangwe: *βuka* beeswax

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba (M54, Sabi): *uβukato* wax of cipasi insects (Doke, 173)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

520

Root: *-dùbà

Gloss: Bee Pollen, Beebread

Protolanguage: Proto-Botatwe

Etymology: This root means ‘flower’ in a number of Bantu languages (distribution of the gloss ‘flower’ recorded in zones D E G J K L M N P and S in BLR3 1158; C.S. 681; Meeussen).

Although the root may have been borrowed twice into Proto-Eastern and Proto-Western Botatwe, the distribution of the gloss ‘pollen, beebread’ within Botatwe languages suggests an older semantic innovation as none of the dictionaries I checked attested either of those meanings for this root.

Replaces:

Botatwe Distribution:

Soli: *βuluβa* almost solid, yellowish part of the honey; bee pollen; also cotton

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala: *lupaluba* or *bumbaluba* bee pollen

Tonga: *busu bwa maluba* pollen, [lit. flour or powder of the pollen]
(Plateau and Valley Tonga, Torrend, 429)

Ila: *buluba* cluster of flowers, pollen, cotton cloth (Fowler, 54)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *induba* bee pollen, or honeycomb with larvae

Mbalangwe:

Proto-Zambezi Hook

Fwe: *induba* yellowish part of the honey (beebread)

Shanjo: *induba* yellow colored stuff in the honey (beebread)

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

521

Root: *(i)mbote

Gloss: Honey Beer

Protolanguage: Common Botatwe

Etymology: Perhaps this word derives from the Botatwe root for ‘good’, *-botu? (consider also the reconstruction for ‘good’ in the H zone as *-bote cl. 9, BLR3, 7321).

Replaces:

Botatwe Distribution:

Soli: *imbote* honey beer

Proto-Eastern Botatwe

Lundwe: *imbote* honey beer

Proto-Kafue

Lenje: *imbote* honey beer; *imbote* mead (Kovanda)

Sala: *imbote* honey beer

Tonga: *imbote* honey beer (Torrend, archival notes); today, it is thought that only the Lenje and Soli make honey beer

Ila: *imbote* honey beer; *imbote* honey beer (a very strong beer, not drunk by the Baila); *imbote ilabatenta umulilo* *Imbote* burns them with fire (Fowler, 197)

Proto-Falls

Toka: *imbote* honey beer

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *imbote* alternative word for honey beer (usual word is *malovu*, also attested in Mbalangwe)

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo: *imbote* honey beer

Other Savanna Bantu: Lamba (M54, Sabi): *imbote* beer from honey (Doke, 15); Lozi (K21, Kusi): *mbote* honey-beer (O'Sullivan, 141) *mbote* kind of beer made from beans and sugar or honey (Jalla, 224)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes that *imbote* is the "Common" word for mead (Torrend, 279)

APPENDIX FIVE, PART C
RECONSTRUCTIONS IN SUPPORT OF CHAPTER 6

601

Root: *-dùb- > *kuzuba

Gloss: To Fish with a Basket

Protolanguage: Inherited, ancient Bantu

Etymology: This is an early Bantu root for fishing by dipping in a basket, reconstructed as *-dùb- (BLR3 1158; C.S. 731; Meeussen, 31 and 40; Vansina 1990: 288) or *-lùb- (Ehret 1998: 313), itself a semantic shift from the older meaning of the same root, “to dip” (C.S. 732).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: -*subula* to collect as floating fish or cream on the top (Kovanda)

Sala:

Tonga: *kuzuba* to fish; -*zuba* to fish with a basket or a net (Collins, 181); -*zuba* to fish with a trap or net (Plateau and Valley Tonga, Torrend, 211)

Ila:

Proto-Falls

Toka: *kuzuba* to fish with a net or trap; *muzubi* a fisherman; *muzubo* a trolling basket

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Kisukuma (F21, Kaskazi): *kuzuba* to fish (Schoenbrun, FN, 7); Mashi (D/J53, Great Lakes Bantu, Kaskazi): *ókuduba* to fish with nets (Schoenbrun, FN, 3); Kutembo (D/J531, Great Lakes Bantu, Kaskazi): *kífúbá* to fish with a net (Schoenbrun, FN, 3); Lungu (M14, Kaskazi): *kukuvuwa* to fish with a net (Kagaya, 82); Lozi (K21, Kusi): *suba/liuba* fish dam (O’Sullivan, 107); Rumanyo (K332, Luyana/Southwest Bantu): *mudúva* fish trap, -*húga* fish with a fishing basket (Möhlrig, 338); Rukwangali (K33, Luyana/Southwest Bantu): -*huga* to fish with a basket (Kloppers, 89); Lunda (L52, Western Savanna Bantu): -*vuwa* a kind of fish trap (White, 76)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Ila: *kuzuba* to hide, to be hidden (Fowler, 785)

602

Root: *-jédiid- > *d̥jda [loss of first syllable, shift to closed vowel or was the vowel originally closed?] > *-séla

Gloss: to fish with a net and trap

Protolanguage: Semantic innovation in Proto-Eastern Botatwe or Proto-Kafue

Etymology: This word probably comes from a common Eastern Savanna root, reconstructions of which include *-jédiid ‘to float’ (BLR3 3275, attested in zones A, F, G, J, M and S; *-elel- in Proto-Sabaki, Nurse and Hinnebusch, 584) or a derivative of that root, *-jéd, attested thus far in zone P (BLR3, 3274).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *kuzela* to fish

Proto-Kafue

Lenje: *-sela* to catch fish (in an open flat basket, ntumba) (Madan, 111)

Sala: *kuzela* to fish with a net or trap; *muzezhi* fisherman

Tonga: *kuzela* to fish, to fish with a net or trap; *simuzela* or *muzeli*

fisherman; *-zela* to fish with a net or trap (Plateau Tonga, Torrend, 211); *-zela* to fish with a net (Collins, 181); *-zela* to catch fish with a net (Carter)

Ila: *kuzela* to fish with a net or trap; *muzehi* fisherman; *kuzela* to fish, by net or trap; to bring in (of cattle) (Fowler, 776); *-zela* to fish with a net or trap (Torrend, 211)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *-él-* to catch fish with baskets (Guthrie, 16); *-ele* sabi to fish with a basket (Hoch, 138); Lungu (M14, Kaskazi): *úkúswela* to fish with a line, *úlúswelo* hook (Kagaya, 82)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Gloss: Fish Poison

Protolanguage: Proto-Kafue, borrowed into Sabi, Soli, and Toka

Etymology:

Replaces:

Botatwe Distribution:

Soli: *βuuβa* fish poison of the mundale tree

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *βuuβa* fish poison and poison, generic term; *buuba* poison, generic term (Torrend, 212)

Sala: *buuba* fish poison

Tonga:

Ila: *buba* fish poison; the roots of a cultivated shrub, *Tephrosia vogelii* are pounded and throw in the river and after half an hour fish die (Fowler, 45)

Proto-Falls

Toka: *βuβa* fish poison used in August to November from the *muβa* tree

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bisa (M51, Sabi): *uβuβa* poison for fish (Madan, 119); Bemba (M42, Sabi): *buba* fish poison (Hoch, 138); *ubuuba* fish poison (Guthrie, 111); Lamba *uβuβa* poison plant (Doke, 119)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

605

Root: *-sabwe

Gloss: small fishing net, perhaps for use casting from a canoe instead of trolling shallow waters

Protolanguage: Proto-Eastern Botatwe borrowed from an outlying Mashariki language attesting *j as /s/ as the penultimate step in *j > ʒ > z > s with origins in the root *-jábù, a word for ‘net’ (distribution G E N and P zones in BLR3 3142; C.S. 1887; Meeussen, 46). Words with the final vowel shifting to /we/ are commonly borrowed from Kusi languages. Is this word related to

Ehret's reconstruction *-ábù, which he says was borrowed into Kaskazi from Central Sudanic with the meaning '(hunting) net' (Ehret 1998: 57)? See also byambi (BLR3 4023).

Etymology: *-jábù, a word for 'net' (distribution G E N and P zones in BLR3 3142; C.S. 1887; Meeussen, 46). Could this word be related to *-jàbuk, 'to cross a river' (distribution in zones D H J K L M R in BLR3 1553; C.S. 9136)?

Replaces:

Botatwe Distribution:

Soli: *kansaβwe* small net with a handle for getting a fish on the line or a fish floating at the top of the water because it was poisoned

Proto-Eastern Botatwe

Lundwe: *lusabwe* small holed net, such as for kapenta

Proto-Kafue

Lenje: *kansaβwe* small net, thought to be from the Lamba; *kasabwe* short fishing net (Torrend, 213)

Sala:

Tonga: *lusabwe* a net for hunting or fishing; *lusabwi* a short fishing net (Plateau Tonga, Torrend, 213); *lusabwe* a short fishing net (Plateau Tonga, Torrend, 213); *lusabwi* net (Collins, 166); *lusabwi* fishing net (Torrend, archival notes)

Ila: *lusabwi* short fishing net (Torrend, 213)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Uncertain: Shona (S10, Kusi): *uswaswi* net for fishing (Biehler, 153)

606

Root: *buyeelo

Gloss: Fish Fence, fish weir, even fish dam

Protolanguage: Proto-Kafue or Proto-Eastern Botatwe?

Etymology: Related to *buyali. Another source, which would have been borrowed (from Kusi speakers?) is *-jéd- 'to float' (zone P only in BLR3 3274; C.S. 1960) with a the deverbative suffix -o for the "tool/instrument of."

Replaces:**Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe: *bwiyeelo*, *buyeelo* fish fence

Proto-Kafue

Lenje:Sala:Tonga: *mbuyelo* fish fence; *buyeelo* fish fence (Plateau and Valley, Torrend, 205)Ila: *bweelo* fish fence; *bwelo* a place where the river is banked or fenced for catching fish; a fence of mats for catching fish (Fowler, 77); *bwela* a fishing party (Fowler, 77)

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe:

Proto-Zambezi Hook

Fwe:Shanjo:**Other Savanna Bantu**: Bemba (M42, Sabi): *imbélo* fish dam, opening in fish dam for trap (Guthrie, 6 and 129); Lozi (K21, Kusi): *mbelo* also *bwalelo* gap in a fish dam (O'Sullivan, 107)**Other Bantu:****Other Non-Bantu:****Checked**: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004**Notes**: Luban (L31, Eastern Savanna Bantu): *kwela lípáángú* to fence (Yukawa, 18); Cewa-Nyanja (N31, Kusi): *biy(o)a/mawiyo* fish enclosure put in a river (Paas, 148)**607****Root**: *buyali**Gloss**: Fish Fence**Protolanguage**: Batoka Areal**Etymology**: This root derives from *-jàd, 'to spread [tr]' (distribution in zones A B C E F H J K L M N R and S in BLR3 3147; C.S. 1890; Nurse and Hinnebusch, 615). Though BLR3 doesn't note a connection, there is probably a related form in *-jadid 'to build a fish weir' in the L and M zones (BLR3 9052).**Replaces:****Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *bwiwali* fish fence into which you put moonos; *buyali* fish fence

(Torrend, 205)

Sala: *buyali* fish fence

Tonga: *buyalo* fish fence (Plateau Tonga, Torrend, 205)

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lozi (K21, Kusi):

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Cewa-Nyanja (N31, Kusi): *biy(o)a/mawiyo* fish enclosure put in a river (Paas, 148)

608

Root: *-fumbo

Gloss: Fishing Basket

Protolanguage: Proto-Kafue and borrowed into eastern Sabi

Etymology: From *-ku□mba “to enclose, to encircle” (Meeussen 1980: 31)

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *mufumbo* fish trap

Sala: *livumbo* fish trap

Tonga:

Ila: *ihumbo* fish trap as in illustration; *ivumbo* fishing basket made of reeds (Torrend, 212); *ivumbo* a fish trap made from basket-work and used by women (Fowler, 248); *kavumbo* a women’s fishtrap “*kavumbo mwanasyamwinangu, baakulanga kuli bazela*” Fish trap, child of my wife, they seek thee to fish with (Fowler, 290)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba (M54, Sabi): *imfwambi* fish trap (Doke, 64); Bemba (M42, Sabi): *-fwambil-* to make a funnel of a fish trap, *imfwambi* funnel of the fish trap (Guthrie, 25)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

609

Root: *-pàdú

Gloss: skillful hunter; hunting skill or huntsmanship; elder; friend

Protolanguage: late Proto-Eastern Botatwe / early Proto-Kafue areal with southern Luban and Sabi language speakers

Etymology: Unknown. This root developed as an areal form between south Luban, Sabi, and Proto-Eastern Botatwe speakers around the turn of the first millennium. The root has a related verbal form, *-pàduk, ‘to hunt’, that is not found in Botatwe languages (BLR3 8982 and 8909). The final vowel /u/ signals that before it was a noun, *-pàdú was an adjective, perhaps initially derived from a verb. The quality of that adjective may be ‘skilled,’ ‘talented,’ and ‘successful.’ The Ila term *kuwaala* ‘to throw, to thrust’ and the Lenje word *kúwala* ‘to throw’ might be related to the older verb; however, they do not refer specifically to throwing or thrusting as hunting activities (Fowler, 760; Kagaya, 73). It may also be that *-pàdú developed by adding an extensive suffix to the verb *-pá to produce *-páada, to give again and again’ in a manner that extends over time and space and is repeated extensively or ‘to give at.’ In this scenario, the verb became an adjective for generosity, and, eventually a noun to talk about hunters capable of such generosity. But more attention to the tone is necessary. The root also derives a number of words in different noun classes: with the cl.1 prefix, the term glosses broadly as ‘hunter’ but in Botatwe languages, the term has come to be used to talk about skilled and respected hunters. Similarly, with a cl. 14 prefix augmented on the cl. 1 noun referring to a kind of person (a hunter, in this case), the root comes to refer to a noun of quality related to that kind of person; that is to say, huntsmanship or hunting skills. The derivation of this noun from the *-pàdú root, rather than another root glossing as ‘hunter’ further reinforces the notion that the hunters referred to with this word were skilled hunters. In cl. 7, the root refers to the celebration of the hunters, again suggestive that hunters labeled with this root were skilled. Could the underlying meaning of the

adjective from which all other words derive be an adjective that describes an attribute useful in hunting (swift, sure (of shot), etc.)? Finally, in more recent times, Botatwe speakers of the Plateau region came to use the term as a word for ‘elder’ and its meaning as ‘hunter’ became secondary. This semantic shift further underscores the respect garnered by those hunters who were called *-pàdú. Recent reborrowing of the root, especially in class 14, probably resulted from contact with Luba or Chikunda elephant hunters because it occurred in languages tied up in the hunting region along the Luangwa River elephant migratory path in the last two or three centuries. These attestations retain C1 with the value /p/.

Replaces:

Botatwe Distribution:

Soli: *chipalu* ceremony to celebrate the success of the hunter with beer, salutes, dance and music

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *mupalu lwa nyama* hunter; *ɓupalu* professional hunter or leader of a hunting group; *mwalu* friend, companion (Madan, 103)

Sala: *bupalu* skills of a hunter

Tonga: *mwaalu* professional hunter, very respectful term for this person, a hunter qualified as *mwaalu* if he was able to get an elephant, buffalo, lion, or other dangerous animal; *mwalu* hunter (Plateau Tonga, Torrend, 284); *mwalu* elder (properly ‘hunter’) (Plateau Tonga, 180); *mwaalu* elder, term of respect for an old man (Hopgood, 245); *caalu* unhonored elder (Plateau Tonga, 180); Tonga: *cipali* feast on meat of game (recent reborrowing with the agentive suffix, the feast is “that which gives out”; Plateau Tonga, Torrend, 203);

Ila: *mwalu* elder (properly ‘hunter’) (Torrend, 180); *mwaalu* an elder, a senior hunter (Fowler 499); *balu* elders (Fowler, 24)

Proto-Falls

Toka: *mwaalu* leader of a hunting group

Leya: *mwaalu* leader of a hunting group, professional hunter

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Sanga (L35, Luban of Eastern Savanna Bantu): *-pàlù* chasseur d’animaux, *-pàduk-* faire chasse (BLR archive); Bemba (M42, Sabi): *umúpalú* hunter, *ubúpalú* hunting craft (Guthrie 66) *-paluka* to hunt, esp. small game (White Fathers, 584) *mupalu* skillful hunter, *mupalu we sabi* a successful fisherman (White Fathers, 479); Lamba (M54, Sabi): *-paluka* to hunt successfully, *umupalu* hunter and huntsman (Doke, 81); Bisa (M51, Sabi): *mupalu wampendwa* Esoteric and elaborate rites were practiced by small bands of ant bear hunters, variously called *baimba muta*, *mupalu wampendwa*, and *mwimba nengo*. Small groups of from three to six men were led by one called *mupendwa*, who possessed and administered the

magics thought necessary to make the ant bear vulnerable and to pacify its spirit (Marks, 67); Nyanja (N31, Kusi): *mpaliro* barbleless arrow (this root appears to be *-pádù + applicative -il + deverbative suffix -o used to develop a word for the action, resultant, or instrument of the verb; the word follows inherited patterns but the meaning is skewed; Paas, 25); Lozi (K21, Kusi): *mwalu/mialu* perplexity, embarrassment, bewilderment (Jalla, 290, claims it is from -alula to divide, fig. to puzzle, perplex, embarrass [Jalla, 3]; *mwaluli* someone who perplexes, embarrasses [this is certainly from -alula, unlike previous entry; Jalla 290]); Luyana (K31, Luyana/Southwest Bantu): *mwauli* hunter, *uauli* huntsmanship, *mwauli* hunter from *kuáula* to hunt (Givón, 81, 6); Rukwangali *mupapali* seeker, searcher (related to Luyana terms above? Kloppers, 21); Ruwund (L53, Western Savanna): *cipar-* ability, gift, talent (inherited form or borrowed? Nash, 47)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes that the root *mwaalu* probably derived from -*waala* ‘to hurl’ (Torrend, 284). **Uncertain:** Lozi (K21, Kusi): *mwaa* courage, bravery, fearlessness (Jalla, 289); Lunda (L52, Western Savanna): *chi/yi-palu* labour contract, recruited labor (introduced word) (White, 55)

610

Root: *-weja or *-eja (tone?)

Gloss: to chase > to hunt with spears

Protolanguage: Independent borrowing from Mashariki languages into Proto-Eastern and Proto-Western Botatwe because C1 /w/ borrowed.

Etymology: This root could, perhaps, be related to the root, *-péjuk ‘to fall,’ which adds the -uk intransitive separative (reversive) extension to a yet to be reconstructed root (see BLR3 7874, zones L and S). I have not seen the attestations used by the linguists who developed this root, but if it is related, Botatwe speakers were probably connecting to the idea of ‘felling’ game. Botatwe attestations of ‘to fall’ follow a different form than the words below (consider the Ila words *kuwa* ‘to fall’ and *kuwisizya* ‘to cause to fall’ [Fowler, 760, 762]) so this root would have been borrowed into Proto-Botatwe from another source, with Proto-Botatwe speakers shifting the meaning to mean ‘to spear.’ Alternatively, a series of Mashariki attestations of the root *-gèdj ‘to try’ produce words with a similar phonological form, some Kusi attestations of which could have been a source for the Botatwe innovation (BLR3 1345-1346, C.S. 797; on Kaskazi as a source: Nurse and Hinnebusch, 588 and 663). The root *-gèdj has a particularly complicated phonological and etymological history, as noted by both Guthrie and linguists at MRAC. The English phrase ‘take a stab at it’ might be instructive here. In fact, attestations in Ila do show an overlap between the idea of trying or overcoming a difficulty and hunting in the semantic domain of this root. Although the underlying meaning of this root seems to be ‘to spear,’ it came to mean ‘to hunt by spearing’ in Proto-Eastern Botatwe. Another source, however, is the ancient Bantu root *-bing- ‘chase, chase away’ which took on the meaning ‘to hunt’ in many Bantu languages and in some Kaskazi languages, took on a shape that could be the source for Botatwe attestations (distribution is zones A B C D E F G H J L M N P and R in BLR3 312; C.S. 129;

Ehret 1998: 312; Nurse and Hinnebusch, 614; *-beng- in Vansina 1990: 287). Nurse and Hinnebusch have demonstrated how *-bìng- shifted to *-Wìng- in Proto-Sabaki with the meaning ‘to chase away’ and *-Wìnj- with the meaning ‘to hunt.’ The later root produced attestations such as –wèèja in Elwana (Nurse and Hinnebusch, 614). Ehret suggests a common occurrence of related words in Botatwe and the Kuti cluster of Kaskazi, opening the possibility of *-bìng- as source of *-weza in Botatwe. Proto-Eastern and Proto-Western Botatwe probably borrowed the root independently. See root 706.

Replaces: Used alongside *-gùim, replaces *-beng- (Vansina 1990: 287)

Botatwe Distribution:

Soli: *kuweza* to hunt (this was described as a Lenje word and, indeed, the phonology confirms that this form was borrowed, although not from Lenje, as the Lenje form should appear as *kuwesa*. The term was probably borrowed into Soli from Proto-Eastern Botatwe as its gloss and phonological form and meaning follow those attested in that branch)

Proto-Eastern Botatwe

Lundwe: *kuweza* to hunt alone with spears or bows and arrows; *kuweza kutenta* to hunt with fire; *kuweza ababwa* to hunt with dogs; *kuweza kuchila* communal hunt; *muwehi* or *muwezi* hunter

Proto-Kafue

Lenje: -wesa 1) to catch, to seize, hold, take in the hand 2) cut with an adze, shape, smooth point (this attestation is polysemic, not cognate, with *-wéja; Madan 119).

Sala: *kuweza* to hunt; *muwezhi* hunter

Tonga: -weza to hunt (generic term; Plateau Tonga, Torrend 284); *muwezi* hunter (Torrend, 284); -weza to hunt (Collins, 179); -weza to hunt (Hopgood, 249); *kukwezya* to imitate hunting or fighting with a spear (is this word borrowed? See attestations in Notes; Collins, 179)

Ila: *kuweza* to hunt alone; *kuweza kuchila* communal hunt through enclosing prey and stabbing; *muwehi* or *muwezi* hunter; -weza to hunt (generic term, Torrend, 284); *muwezi* hunter (Torrend, 284); *muwezi* hunter (Fowler, 493); *kuweza* to hunt, to track down. *Balifwile baakuweza bumi bwamwana* ‘They are dead, the ones who were trying to hunt down the child.’ *Kuweza lubono mung’anda* ‘To hunt for wealth at home,’ the practice whereby a wife prostitutes herself with her husband’s connivance (Fowler, 761); *kuwezela* (v.t. relational of -weza) to hunt on behalf of; to prostitute oneself with the connivance of one’s husband (Fowler, 761); *kuwezya* (verb tr. causative of -weza) to cause to help to hunt (Fowler, 761); *kuwezya-wezya* (redup. -wezya) to hunt a little; to deride, make light of. *Ndamutola mubwa wako nkawezye-wezye*, ‘I’m taking your dog to do a bit of hunting’; *Wamutuka mwinakwe, wamuwezya-wezya bulyo ati ‘Koya nkuuya! Intakuboni! Ndakuleda cinicini! Utabi ucano ncuuluba!’*, ‘He reviled his wife [and] derided her, saying ‘On your way! I never want to see you again! I’m finishing with you! Make sure you leave nothing behind!’ *Kuwezya-wezya nkuubauzya sintu katakacitwa* ‘Kuweza-weza means to make light of difficulties.’ (Fowler, 761); *buweza* burrow of the antbear or of the warthog (the killing of the antbear was considered a specialty form of hunting among some societies, such as the Bisa, of South Central Africa; Fowler, 70); *muwezele* a popular person (Fowler, 493; NB: this appears to be the relational of -weza but also in the subjunctive, with an approximate translation of ‘the one who may hunt for’)

Proto-Falls

Toka: *kuweza* to hunt (This word was described as a Tonga word, not a Toka word, although it follows the expected sound changes for Toka).

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kuweza* to spear something

Subiya: *kuweza* to throw the spear

Mbalangwe: *kuweza* to spear something

Proto-Zambezi Hook

Fwe:

Shanjo: *kuweja* to spear something

Other Savanna Bantu: Nyanja (N31, Kusi): *-wedza nsomba* to fish (Paas, 148; this form does not follow expected Nyanja patterns and was probably borrowed, perhaps from eastern Botatwe languages).

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: We might expect Lundwe to shift /z/ to /h/, but some words Lundwe retains /z/, suggesting a sound change that is still in process. The Nyanja attestation is recently borrowed and probably refers to fishing with a spear. For the following near homophones, it is possible that the vowel shift is a regressive assimilation of the final *-a. However, this is not a common shift in other verbs and what are we to make of the C1 cluster of -kw in these roots if they are cognate with the roots listed above? Some are probably cognate with another Botatwe verb 'to stab' that usually takes the form *kuyasa*. Consider: Bemba (M42, Sabi): *-kwabil-* to stalk (animal) (Guthrie, 43) *-kwas-* to stab (a person with knife, etc.) (Guthrie, 43); Shona (S10, Kusi): *kukwàsha* to look for anything, to hunt (Hannan 302) to hunt (Biehler, 125); Lozi (K21, Kusi): *kukwaza* to spear (Jalla, 253; O'Sullivan, 277), *mukwazo* short spear (Jalla, 253; O'Sullivan, 277). For more information on *-gèdj 'to try,' see C.S. 797 and 797a. Consider: Lungu (M14, Kaskazi): *ukuwezya* to close; to test, to try (Kagaya 83, 126); Shona (S10, Kusi): *-edza* to try (Hannan, 920).

611

Root: *-týmò

Gloss: spear, probably of iron and referring to the iron spearhead

Protolanguage: Proto-Bantu; independent reborrowing from Kaskazi by Proto-Eastern and Proto-Western Botatwe speech communities, possibly from two different sources, based on differences in the final vowel. Some eastern Botatwe languages attest possibly inherited forms. See root 707.

Etymology: This Proto-Eastern Savanna root derives from Proto Bantu *- tým- to stab, to sew (BLR3 3108, C.S. 1866; Nurse and Hinnebusch, 585) by adding the *o deverbative suffix denoting actions, results, and instruments (Ehret reconstructs the root as Proto-Eastern Savanna, see attestations below and Ehret 1999:83 while Vansina reconstructs it as Proto-Eastern Bantu, see Vansina 1990:283 and *ibid* 1986:438-9; see also BLR3 3109 and C.S. 1867, distributed in

zones D, E, G, J, L, M, N, and S). Another reconstruction, *-týmù, shows progressive vowel assimilation (see BLR3 3110 and C.S. 1868). Ehret suggests that the most common Botatwe shape, *-sumo, is a loanword from Mwika-Rungwe (on the loan source of this root, see Ehret 1999:83). Although the Soli attestation could be a recent borrowing from Sabi, the Plateau Tonga attestation *ihumo* follows sound patterns for a spirantized *t before u going to /f/ to /v/ to zero. Indeed, these two attestations suggest an inherited form of *-bümü or *-gümü. These two attestations together may serve as relict attestations of the inherited form while other attestations showing /s/ in the C1 position probably were, indeed, borrowed from Kaskazi languages by Proto-Eastern and Proto-Western Botatwe communities (we would expect Ila to attest /f/ rather than /s/, for example, based on its attestation of *bufu* for *-tù, “flour”). The different phonological shape of the Proto-Eastern and Proto-Western Botatwe attestations, specifically the /o/ to /u/ common in the west suggests two different Kaskazi sources for the borrowings or that western Botatwe speakers shifted the borrowed /o/ to /u/ through the process of progressive vowel assimilation, perhaps while still a coherent Proto-Western Botatwe speech community. Attestations in some Western Botatwe languages show the 19th and 20th century influence of Tswana and, more directly, Lozi, when they attest /l/ in the C1 position. The use of the diminutive class 12 noun prefix to denote arrowhead underscores the underlying meaning of this root as a signifier for the iron point of the tool.

Replaces: Proto-Bantu *-gòngá (Ehret 1999: 83)

Botatwe Distribution:

Soli: *lifumo* spear

Proto-Eastern Botatwe

Lundwe: *isumo* spear

Proto-Kafue

Lenje: *lisumo* spear; *lisumo* spear (Madan, 92); *lisumo/másumo* spear (Kagaya, 73); *lisumo* assegai (Kovanda); *kasumo*, *lisumo* javelin (Kovanda)

Sala: *lisumo* spear

Tonga: *ihumo* spear; *kasumo* arrowhead; *isumu* spear (Fell, 17); *isumo* spear (Hopgood, 240); *isumo* spear (Collins, 161)

Ila: *lisumo* spear; *kasumo* arrowpoint (metal point); *kasumo* a small spear (Fowler, 286); *isumo* 1) a spear 2) a pointed bullet (Fowler, 242)

Proto-Falls

Toka: *isumo* spear; *kasumo ka kadali* arrow

Leya: *isumo* spear; *kasumu* arrowhead; *isumu* leaf-shaped arrowhead

Proto-Western Botatwe

Proto-Machili

Totela: *isumu* spear; *kasumu* arrowhead; *isúmu* spear (Baumbach, 378); *akasumu* arrow and arrowhead (Crane, Zambian Totela); *isumu* spear and spearhead, spear point (Crane, Zambian Totela)

Subiya: *ilumo* spear (Pfouts, 177)

Mbalangwe: *isumu* spear; *isúmu* spear (Baumbach, 350); *ilumo* or *isumu* spear (Pfouts, 177)

Proto-Zambezi Hook

Fwe: *lisumo* spear; *kasumu* arrowhead; *esumu* spear (Pfouts, 177)

Shanjo: *isumu* spear

Other Savanna Bantu: Bemba (M42, Sabi): *ifúmo* spear (Guthrie, 21); *ifumo* 1) abdomen, belly 2) womb, pregnancy 3) spear (confusion of tone of two different roots blended as one in this entry?; White Fathers, 328); Bisa (M51, Sabi): *ifumo* heavy hunting spear (Madan, 127); Nsenga (N31, Sabi): *-fumo* spear, spearblade (Madan, 93); Lamba (M54, Sabi): *ifumo* spear (Doke, 149); Luba (L31a, Eastern Savanna Bantu): *difuma* (Yukawa, 27); Kiha (D/J66, Kaskazi): *ichumu* spear (Schoenbrun, FN, 104); Kitembo (D/J531, Kaskazi): *éfumo* spear (Schoenbrun, FN, 105); Olunande/Rukoonzo (D/J42, D/J41, Kaskazi): *erityumu* spear (Schoenbrun, FN, 106); Lungu (M14, Kaskazi): *ísumo* spear (for animals, fishes) (Kagaya, 80); Shona (S10, Kusi): *pfumo* spear (Hannan, 901); Lozi (K21, Kusi): *lilumo* spear (O’Sullivan, 276); Tsonga (S53, Kusi): *-fumu* stabbing spear (Swiss Mission, 88); Tswana (S31, Kusi): *lerumo* (Hartshorne, 421 and 626).

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend says *-sumo* is ‘Common’ for spear (Torrend, 525).

612

Root: *ingobyo

Gloss: Barb

Protolanguage: borrowed into eastern Botatwe languages at an uncertain date

Etymology: This word was probably borrowed from Mashariki speakers. The underlying source root, *-gòb- ‘to bend, to crook’, is probably a Proto-Mashariki innovation based on its distribution, with *ngobé ‘hook’ as a derivative (BLR3 6885; Schadeberg 2003: 81). The most likely source is a Kusi language because Kusi glosses of attestations of this root specifically refer to the barb with greater frequency than Kaskazi attestations, which usually gloss as a specific kind of arrow point, the distinction of which probably was the presence of barbs.

Replaces: Typically, Bantu languages refer to a barb using words for ‘nails/claws’ (*mala*), ‘ears’ (*matwi*), ‘teeth/fangs’ (*meno*), or ‘children’ (*bana*). Botatwe languages attest all of these metaphoric semantic extensions (see Notes).

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila: *ingobyo* barb

Proto-Falls

Toka:

Leya: *ingobyo* barb

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Kiha (D/J 66, Kaskazi): *ingoŋe* arrow where the point is 2-barbed (Schoenbrun, FN, 98); Runyankore/RuKiga (D/J 13 and 14, Kaskazi): *iroŋo* barb (Schoenbrun, FN, 101); KiKwaya (E/J 251, Kaskazi): *ngoŋe* an arrowhead with a large 2-earned point (Schoenbrun, FN, 103); Kirundi/Ikinyarwanda (D/J 61 and 62, Kaskazi): *ingobé* feathering (Schoenbrun, FN, 104); Shona (S10, Kusi): *ngove* barb of an arrow, etc. (Hannan 455); Lozi (K21, Kusi): *likobe* barb, generic term (O’Sullivan, 18)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: *Metaphoric Semantic Extensions for Barb*: Soli: *matwi* barbs; Lundwe: *matwi* barbs; Lenje: *maala* barbs; *maala / malamala* barb on an assegais (Kovanda); *butwi* large barbs (Kovanda); *matwi* barbs on arrows (Kovanda); Toka: *meno* barbs; Totela: *bana* barbs (Crane, Namibian Totela and confirmed in Zambia with prompt); Subiya: *mazala* barbs; Mbalangwe: *inala / manala* barb(s); Lamba (M54, Sabi): *ukutwi* barb of an arrow (Doke, 13); Luba (L34, Eastern Savanna): *lwàla / màla* les barbes, pointes de côté (d’une fleche) (Vandermeiren, 650); GiKuria (E/J 43, Kaskazi): *amatwi* barbs (Schoenbrun, FN, 102); Thimbukushu (K333, Luyana/Southwest Bantu): *ditwé* barbs on a spear (Wynne, 43); Lunda (L52, Western Savanna): *mwána* fig. barb on spear, arrow, or hook, tributary of a large river (White, 8). Other attestations for ‘barb’: Tonga: *(i)nkomba / shinkombo* barbs; Shanjo: *tushengela* barbs.

613

Root: *luti

Gloss: spearshaft

Protolanguage: Proto-Eastern Botatwe?

Etymology: This root derives from ancient Bantu word for tree, *-tí (BLR 2881, C.S. 1729; luti as ‘stick’ in Nurse and Hinnebusch, 621), and is the only Botatwe attestation of that root as the Proto-Botatwe word for tree is *musamo/u. The meaning as ‘spearshaft’ seems to have been borrowed from Kusi speakers who added a syllable to the root, perhaps originally a change of noun class.

Replaces:

Botatwe Distribution:

Soli: *luti* spearshaft

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *luti* spearshaft (Hopgood, 243)

Ila:

Proto-Falls

Toka: *luti* spear or arrowshaft

Leya: *luti* spearshaft, arrowshaft

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *úmutí* tree, pole, medicine (Guthrie, 105); Bisa (M51, Sabi): *akachiti* / *utiti* stick (Madan, 128); GiTonga (S62, Kusi): *-ruti* shaft of a spear (Turner, 253); Tswana (S31, Kusi); *moriti* shaft, anything that is long and narrow, including a spearshaft (Hartshorne, 395 and 621); Rukwangali (K33, Luyana / Southwest Bantu): *ruhatji* shaft (Kloppers, 135)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

614

Root: *-càkò

Gloss: shaft of a spear

Protolanguage: Areal between eastern Botatwe speakers and speakers of South Luban (Sanga), Cokwe, Lunda, eastern Sabi, and Thimbukushu (although, the Thimbukushu attestation is a skewed borrowing, perhaps occurring at a later date). The distribution of this root and the fact that it follows inherited phonological patterns for /*c/ attests to interactions at the Proto-EasternBotatwe or Proto-Kafue level during the first and/or second phases of the historical development of the emerging Luba polity at Sanga, in the centuries just before and after the turn of the first millennium CE, when the Luban population increased and Luban peoples sought copper and other prestige goods, including ivory, through long-distance trade networks along the northern hinterland of Sabi and Botatwe communities. The distribution in only a few western Savanna languages suggests the spread of the word through interactions between the Luba and Rund peoples and the military expansion of the Lunda Commonwealth from the sixteenth to the nineteenth centuries.

Etymology: This BLR3 reconstruction *-càkò (9631, distribution in zones K, L, and M), derives from *-càk- ‘to desire, to hunt, to chase.’ This root is one of a cluster of words that derives from the verb through the addition of various prefixes (musaka as the place where one hunts, for example) and suffixes, as is the case here. With the addition of the *-o* deverbative suffix, the noun is derived from the older hunting verb as the ‘instrument for hunting.’ The Thimbukushu

attestation suggests that the generic form of hunting in the region of its speakers was based on archery.

Replaces: This word is used in conjunction with a series of other words for the shaft of a spear or arrow, most of which derived from words for tree or wood.

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *lusako* spearshaft

Proto-Kafue

Lenje: *lusako* stick, shaft of spear, etc. (Madan, 95); *chisako* stick (Madan, 78); *kasako* small stick, arrow shaft, etc. (Madan, 85); *musako* a large stick, a (single) grain e.g. of maize (Madan, 101); *-sakila* to glue as a spearhead or hoe (Kovanda)

Sala: *kasako* spearshaft

Tonga: *lusago/lusako* spearshaft, arrowshaft; *kasako* stick of some length but without bulk (Torrend, n.d.: 246); *lusako* arrowshaft (Plateau and Valley Tonga, Torrend, 30)

Ila: *lusako* spearshaft, staff; *lusako* arrowshaft (Torrend, 30); *lusako* a spear-shaft (Fowler, 377)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *musako we fumo* the shaft of a spear (White Fathers, 486); *umusako* shaft of a spear (Guthrie, 81); Lamba (M54, Sabi): *umusako* shaft of a spear (Doke, 141); Sanga (L35, Luban): *-sákó* bois de lance (BLR archive, MRAC, Tervuren, Belgium); Thimbukushu (K333, Luyana/Southwest Bantu): *ghusháko* feathers attached to an arrow (Wynne, 29); Lunda (L52, Western Savanna Bantu): *mu/nyi-saki* shaft of spear (White, 59); Cokwe (K11, Western Savanna Bantu): *-sako* shaft (of a spear) (BLR archive)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

615

Root: *(i)mputi, cl. 9

Gloss: oxtail ferrule, later applied to metal ferrules in Ila

Protolanguage: Common eastern Botatwe

Etymology: This root is a semantic innovation, applying a word common among M zone languages to the east, **-puti*, ‘thigh, anus’ to a ferrule originally made from a cylinder of skin taken from the base of the tail of an ox (BLR3 5200). A (possibly related) alternative is that the root derives from the early Bantu word **-pút-* ‘to bend, fold, wrap up’ (BLR3 2696; C.S. 1626).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *imputi* oxtail ferrule

Proto-Kafue

Lenje:

Sala:

Tonga: *imputi ya sumo* a binding round a spear shaft, made of hide from an oxtail (Plateau Tonga, Torrend, 57)

Ila: *imputi* oxtail ferrule; *imputi* 1) a leather ring on a spearshaft, make from tail of an animal 2) an iron ring round the spear shaft which hold in the blade (Fowler, 206)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *imputi* anus (Guthrie, 77)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

616

Root: **(i)ntale* cl. 7

Gloss: ferrule of iron wire wrapped around spearshaft

Protolanguage: Proto-Eastern Botatwe (could be Lundwe-Ila areal)

Etymology: This word was developed from **-tádè* for iron ore, iron (cl. 14) wire (cl. 7) (BLR3 2726-2730; C.S. 1642, 1643, 1644), itself a semantic innovation from its original Proto-Bantu meaning of ‘stone.’ For a discussion of the history of this root, see Ehret 2001: 132-3.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *intale* metal wire wrapped like a coil as a ferrule

Proto-Kafue

Lenje:Sala:Tonga:Ila: *intale* wires as a ferrule; *intale* binding of iron (Torrend, 57); *intale* 1) thread 2) the iron binding on a spear shaft (Fowler, 228)

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe:

Proto-Zambezi Hook

Fwe:Shanjo:**Other Savanna Bantu:****Other Bantu:****Other Non-Bantu:****Checked:** Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004**Notes:****617****Root:** *-bèji**Gloss:** barbless point, for spear and/or arrow; literally, “the carver,” probably for cutting up the game carcass**Protolanguage:** Proto-Kafue, semantic innovation**Etymology:** From a the verb Proto-Savanna *-bàjj- ‘to carve’ or ‘to work wood’ (BLR3 8930; Ehret 2001: 153) e.g. *kubeza* ‘to carve or plane wood’ in Ila (Fowler, 33).**Replaces:****Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *lubesi* large arrowhead without barbs (Torrend, 30)Sala:Tonga:Ila: *ibezi* thin and short-shanked spear (Torrend, 525); *ibezi* a type of large spear (Fowler, 182); *kabezhi* a long-bladed, short-shanked spear, deriving its name from its

common function of cutting and carving (*kubeza*): it is used in hunting (Smith and Dale, vol. 1, 216)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba (M54, Sabi): *luβesi* spear-headed arrow (Doke, 9)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

618

Root: *(i)mpula (tone?)

Gloss: hunting spear

Protolanguage: Proto-Kafue

Etymology: There are a series of words to which this root could be related, pending the reconstruction of its tone: *-pùd- ‘dig’ (BLR3 3961, zones A, K, L, R); *-púd- ‘dig, hole’ (BLR3 4621, zones C and M); *-pùdò (3) ‘maliciousness’ (BLR3 3956, zones L and M); *-pùd- ‘to beg food’ (BLR3 4623, zones L and M). From the known distribution of this root, the Nkoya attestation is likely to be borrowed from Ila speakers living to the south of Nkoya communities.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *impula* a whole spear, including the metal shaft, for protection from snakes and for hunting and with a pointed end for digging

Sala:

Tonga: *isumu lya mpula* shorter bladed spear (Plateau and We Tonga, Torrend, 525)

Ila: *isumo lya mpula* shorter bladed spear (Torrend, 525); *impula-namaliinza* name of a spear, ‘the spear that silences’ (Fowler, 205); *impula-syongozoya* name of a spear, ‘the spear that prospers’ (Fowler, 205); *kapula* also called *impula namadiinza* (‘the

silencer’) this is a hunting spear, and is used for finishing off a wounded beast (a photo reveals that this is a barbleless, long point with a midrib and long tang; Smith and Dale, vol. 1, 215-216)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Nkoya (L62, Luyana/Southwest Bantu): *mpula* / *thimpula* spear (Yukawa, 24)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Homophones?: Lunda (L52, Western Savanna Bantu): *kalatu-mpululu* young person, about the age of puberty (White, 45); Bemba (M42, Sabi): *mpula mafunde* disobedient child, he who goes against teachings; *mpula mulilo* 1) fragments of a soccerer’s bones which, when burnt, snapped and were projected out of the fire. They are used as ‘medicine’ to cure madness 2) an intractable person; *mpula mu ng’oma* unruly disobedient child, one who does not hear the drum, i.e. does not listen to reproofs of counsels (White Fathers, 438).

619

Root: *-Nyele or, by reduplication, *-NyeNye

Gloss: whistle, developed as a decoy for attracting duiker by mimicking the call of a baby duiker for its mother

Protolanguage: eastern Batoka Areal

Etymology: The underlying development of this root was probably a process of onamonapeia, making it a very tentative reconstruction. However, the invention of the process of attracting animals that is part of the use of this tool is an important aspect of the technological history of hunting so an attempt has been made to collect and reconstruct the attestations below. The root seems to be related to words for ‘jingle.’

Replaces:

Botatwe Distribution:

Soli: *chinyenye* whistle of reeds or a small horn used to call small antelope when hunting
Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *cinyenye* whistle of horn or leaf used to decoy duikers (Torrend, 635); *ngwele* jingle (i.e. the noun referring to the sound, Kovanda)

Sala: *ching'weng'we* goat horn used in hunting to communicate with animals

Tonga: *nyele* whistle horn or leaf for duiker (Platuea Tonga, Torrend, 635); *nyele* whistle of horn for duiker (Valley Tonga, Torrend, 635); *inyde* leaves as a whistle (Gwembe, Valley Tonga, Torrend, 635)

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *cinyenye* 1) den, burrow 2) excavation in river bank caused by current 3) a decoy whistle for calling duikers (White Fathers, 117)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Lenje: *kameme* whistle made from the leaves of the *muto* tree; hunting whistle for impala or blue duiker to attract them to the hunter.

620

Root: *-támbò

Gloss: bowstring, also 'string' more generally

Protolanguage: Semantic innovation of Proto-Kafue

Etymology: This word is a semantic innovation of the Proto-Bantu term for 'snare' or 'trap', *-támbò, which may itself, have derived from *-támb- 'to walk, travel', the action necessary to engage a snare (BLR3 2765 and 2766; C.S. 1660 and 1661; Nurse and Hinnebusch, 607, 608; Vansina 1990: 287). Ehret argues that in Proto-Mashariki, this term came to be used exclusively for the string of the snare (Ehret 1999: 139), while Schoenbrun notes that the root, glossing as 'to trap', derives 'to offer sacrifice, invoke spirit' (Schoenbrun 1997: 66-7, 239-240). The same root derives 'make an offering' and 'recognize' in Proto-Sabaki (Nurse and Hinnebusch, 608). In Botatwe languages, its underlying meaning does seem to refer to 'string' but not exclusively the string of a trap. Ehret argues that Kusi and Kaonde speakers broadened the semantic domain their inherited from Proto-Mashariki, 'string of a snare' to refer more broadly to fiber string' (Ehret 1999:139). Proto-Eastern (and Proto-Western?) Botatwe speakers may have borrowed this broad 'fiber string' meaning from Kusi speakers and further broadened it to refer to 'string' more generally, as is clear from the modifying clauses in attestations in Notes, below. Yet the connection between the action of a bowstring and that of a snare is attested again and again in the

technical vocabulary of Botatwe hunting. Perhaps the root was inherited in the meaning ‘trap’ and reapplied to ‘bowstring.’

Replaces: used alongside attestations of *-gòyè.

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *katambo* generic for string;

Proto-Kafue

Lenje: *mutambo* bowstring; *kátámbo ká búta* bowstring (note the modifying clause necessary to specify string for the bow; Kagaya, 73);

Sala: *ntambo* bowstring made from the skin of *ntimba* (python) or dwarf impala

Tonga: *-tambo* string;

Ila:

Proto-Falls

Toka: *kantambo* bowstring

Leya: *Kantambo ka kàdali* string of a bow (again, the modifying clause)

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe: *intambo* rope (Pfouts, 176).

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: For meanings other than ‘bowstring’, see attestations in works listed above

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

621

Root: *-cila (7)

Gloss: communal hunt, originally a battue in which game was driven towards a long band of nets, where hunters waited to stab the animals

Protolanguage: Proto-Kafue

Etymology: This root derives from a root, *-kìdà, for ‘hammock, net’ that is attested in the J/L/M zones (BLR3 5807) and reconstructed by Jan Vansina as *-kjdà ‘hunting net’ and attested in the B/C/D/L zones (Vansina 1986: 438-442; ibid 1990: 287). Linguists at MRAC wonder whether Vansina’s reconstruction of this root has a non-Bantu origin (BLR3 6130). Proto-Kafue speakers borrowed this root from Lubans and used it in class 3 without appending a class prefix.

Replaces:

Botatwe Distribution:Soli:

Proto-Eastern Botatwe

Lundwe: *kuweza kuchila* hunting with nets

Proto-Kafue

Lenje: *kuchila* hunting with netsSala: *chila* you make a circle and enclose animals and spear them

Tonga: *kuchila* a kind of hunting with 2-3 days in the hills, it is communal hunting, often with fire and with spears, attended only by men; *utamba chila* the one who calls for chila hunt; *sikuntamba chila* the man who looks after the hunting camp; *cila* a general hunt when fire is set to the veld (is Torrend's use of the term 'general' meant to convey the sense of 'communal'?; Plateau Tonga, Torrend, 284); *chila* community organized large hunting expeditions (Machila, x)

Ila: *kuweza kuchila* communal hunt through enclosing prey and stabbing it; *muka mwinichila* the leader of the hunting group; *cila* a hunt, a game-drive, large hunting party, *Boonse baya kucila*, *baya kuweza* 'Everybody has gone to the game drive, they've gone hunting', *Tukoobe banyama kusila* 'Let us surround the game with the hunting-party', *Cila cilavwa liliye?* 'When will the drive take place?', *Sila syamweto nsyamasokwe; tulatenta masokwe ngutuweza. Sila syamainza nsyoomenzi, usyacilimo nsikuku* 'Winter hunting is in the bush; we burn the bush where we hunt. Summer hunting is in the rivers, spring hunting is for fowl.', *Tukaweze cila camasanga; tukatente* 'Let's have a game-drive in the long grass; let's burn it.' (Fowler, 109); *kucila* to embark; to pay the first part of a dowry; to wait on, give food to, *Amucile; amukanke kusomba maamba* 'Make a start on the dowry; begin by offering the hoes', *Waina sunu, wamucila mukasi; ulibulumene bulyo* 'He is fat these days, his wife feeds him well he is really stout', *Kucila kamwale* to feed a girl during initiation (Fowler, 109)

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe:

Proto-Zambezi Hook

Fwe:Shanjo:

Other Savanna Bantu: Among many attestations, consider: Bemba (M 42, Sabi): *icilá* hammock for traveling (Guthrie, 13); Lamba (M54, Sabi): *icila* hammock (Doke, 75); Shona (S10, Kusi): *charadza* hunting expedition, safari, camp site (cognate? A similar root for 'tail', *-kídà, goes to *muchira* in Shona; Is this an independent innovation from the root *-kídà for 'hammock, net'?; Hanan, 52, for *muchira* see 912)

Other Bantu:**Other Non-Bantu:**

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: See Derricourt, *Man on the Kafue*, 39; Smith and Dale, *Ila Speaking*, vol. 1, p. 155.

622

Root: *-pando

Gloss: tool (fire, fence, or net, for example) used in communal hunting or fishing to segregate and capture quarry

Protolanguage: Proto-Kafue

Etymology: This word probably comes from the transitive verb *-pànd- ‘to split’ attested in Botatwe languages as *kuanda* or *kwanda* (see Ila attestation in Notes) by adding the deverbative suffix *-o denoting an action, result, or instrument the class 11 noun prefix typical of nouns that are abstractions from verbs (see BLR3 2387-2389 and C.S. 1433, 1433a, 1434). The resulting noun is literally ‘the divider, the tool for dividing something.’

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *lwaando* a group hunt with fire and a prohibition (taboo) on sexual intercourse the night before; *lwando* the hunt when fire is set to the veld (Kovanda)

Sala:

Tonga: *lwaando* group, communal hunt with fire in the bush and a taboo on sexual intercourse before the hunt

Ila: *lwando* 1) a reed mat, placed across a stream to catch fish; 2) a ring of hunters, a line of fishermen in the water; *Alululame lwando*, *munyama mwaali munjimunji mukati* ‘Get the right right, there’s lots of game inside [the ring of hunters]; also *isasa* (Fowler, 384)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes that *lwando* is the ‘Common’ word for ‘a general hunt when fire is set to the veld’ (Torrend, 284) and ‘battue when fire is set to the grass’ (Torrend, 45).

623

Root: *ibalo, cl. 5

Gloss: circle of hunters in a communal battue hunt

Protolanguage: Proto-Kafue

Etymology: This root derives from *-bada a word for ‘ring’, describing the approximate shape made by the line of hunters encircling the game (BLR3 9139, distribution in zones E and R, see Notes, below, for additional distributions and related Botatwe vocabulary).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *ibbalo* hunting with fire (Kovanda)

Sala:

Tonga: *ibbalo* circle of hunters in a battue (Valley and Plateau Tonga,

Torrend 45, 284);

Ila: *ibalo* circle of hunters in a battue (Torrend, 284); *ibalo* ring of men hunting, *kuoba ibalo* to make a ring, *ng’obela ibalo lyakubika kwitundu lyangu* ‘Make a ring (of wattle) for me to weave into my basket’ (Fowler, 181);

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lunda (borrowed? /b/ should shift to β, often represented in early dictionaries as /w̃/; L52, Western Savanna Bantu): *chi/yi-baala* burned off plain or grassland (White, 10); Ovimbundu (reduplication?, does not follow Guthrie’s expected sound changes for /b/, borrowed but source uncertain; R11, Western Savanna Bantu): *ohalavala* row or line in hunt (WCAM, 78).

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes that *ibbalo* is ‘Common’ Bantu Botatwe for ‘a hunt without setting fire to the veld’ (Torrend, 284); *-oba banyama* to hunt in a battue (no language specified, Torrend, 284); Tonga: *kobelo* where hunters meet about 2-3 days before chila to talk about it; *coobelo* where the circle (of hunters in a battue) closes (Plateau Tonga, Torrend, 284); Ila: *kuoba* to bend, bring round; to guide; to surround (Fowler, 541), *kuobela* to surround, to help (Fowler, 541). In addition to the E and R zone distribution of ‘cirlce’ in BLR3, consider: Bemba (M42, Sabi): *im/bala-mwine* finger ring (Guthrie, 4); Lozi (K21, Kusi): *mwaalo* circle (O’Sullivan, 48); KiSwahili (G41, Kaskazi): *duara* circle (Tuki E-S, 124).

624

Root: *-kóle

Gloss: noose snare trap (with hole concealing noose and trigger, as is the case with *-peto?)

Protolanguage: Proto-Kafue (areal with western Sabi languages?)

Etymology: The source of this root is probably *-kód- ‘to take, to touch’ (BLR3 6999, distribution in zones C, G, J, M and N), from which is derived *-kódè, ‘captive, booty’ (BLR3 1881, distribution in zones B, G, H, L, M, and P and note the uncertainty about the tone and aperture of V2 [a? e? o?]; see also C.S. 1110). Attestations in Sabi languages do border Botatwe languages but seem to be either compounds or independent innovations from the same root. Lozi attests a related but independent innovation. Nkoya was most likely borrowed via Ila.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *cikolo* snare (Torrend, 518)

Sala:

Tonga: *ikole* snare (Hopgood, 239); *ikole* a small hole concealing a noose to catch every variety of game, even elands (Torrend, 589); *kakole* string, snare (Hopgood, 241)

Ila: *ikole* a small hole concealing a noose to catch every variety of game, even elands (Torrend, 589); *ikole* a rope to catch game, attached to the pole of a trap (Fowler, 188)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba (M54, Sabi): *icing'koloto* trap for monkeys, genets *ing'kola* trap for mice, moles (compound including *-kolo?; Doke, 165); Bemba (M42, Sabi): *mukolobwe* rope with a noose attached to a flexible branch and used as a snare for animals (White Fathers, 451); *úmukólobwe* stick and noose snare for animals (Guthrie, 35); Nkoya (L62, Luyana/ Southwest Bantu): *kakola* kind of trap (Yukawa, 24)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Lozi (K21, Kusi): *likole* thong or strap of leather used for fastening cattle yokes (Jalla, 116).

625

Root: borrowed in as *-ooje from *-gòdí□

Gloss: spring noose trap

Protolanguage: Proto-Kafue, perhaps borrowed from Kaskazi speakers? Note that the Tonga form is also attributed to Lenje by Torrend, which is common in his work.

Etymology: This word was developed as a semantic innovation by applying an inherited word for 'bark fiber string' to a tool manufactured of that material. Thus, the word probably originally referred specifically to the string or noose, which, as noted above, would have been made of bark fiber string. The root from which this semantic innovation was developed is one of a cluster of roots for 'string' or 'bark fiber string'. The cluster of roots, with differing C2 and V2 sounds, is particularly difficult to untangle (pun intended) in this region as it appears that not only was one form inherited into Proto-Botatwe, but others were borrowed into the Botatwe from Kaskazi or Kusi sources at the turn of the first millennium and again in more recent centuries. Furthermore, there is some confusion amongst linguists about the phonological content of the C2 position. Ehret claims that early Bantu peoples, probably Proto-Bantu speakers, used the root *-góyì to talk about '(bark?) fiber' and *-gòdí for an unspecified definition, glossed as 'string' in by Tervuren scholars (see BLR3 1417, 1459, 1456; C.S. 839, 861, 860; Ehret 1999:106). Ehret claims that, probably as part of an early areal (although this is not explicitly stated) Proto-Mashariki and Proto-Botatwe innovated a new meaning for the older word, *-góyì (also in the form *-góyè), to refer to '(fiber) string,' thus displacing *-gòdí (Ehret 1999:106). Later, perhaps in interactions with Kaskazi speakers (see the RuKoonzo attestation below) or perhaps as a parallel semantic innovation, Proto-Kafue speakers came to use this root to refer to a spring noose trap, probably by originally referring to the (bark string?) noose.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *kuteya tose* spring noose trap; *kooze* a string on a trap (this seems to be a Tonga attestation attributed to Lenje because of the /z/ in the C2 position; Torrend, 589); *kooze* noose trap to catch by the foot (this seems to be a Tonga attestation attributed to Lenje

because of the /z/ in the C2 position; Torrend, 385); *kosi* or *koshi* snare, gin, trap (Madan, 87); *kooshe* noose trap to catch food (Kovanda); *koose* trap (generic) (Kagaya, 73)

Sala: *kooze* spring noose trap

Tonga:

Ila: *kuteya toze* spring noose trap; *kooze* bowstring; *kooze* string on a trap (Torrend, 589); *kooze* noose trap to catch by the foot (Torrend, 385); *kooze* 1) a small piece of bark-string 2) a line, string 3) a noose-trap (Fowler, 305); *tooze* a noose of bark-string set as a strap (Fowler, 721)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Rukoonzo (D/J41, Kaskazi): *omugyli* noose trap (Schoenbrun, FN, 4)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: These words are probably borrowed from a different synonym for ‘string,’ evident from the change in C2 (see etymology above for a description of the cluster of synonyms and near cognates for ‘string’): Tonga: *kooye* noose trap to catch by the foot (Torrend, 385); Ila: *kooye* string on a trap (Torrend, 589).

626

Root: *(i)nsuki from *-júki

Gloss: Bee

Protolanguage: Common eastern Botatwe

Etymology: This is a semantic innovation by changing the noun class of the ancient, probably Proto-Bantu root for ‘honey’: *-júki (*-jǫ̀ki in BLR3 3350 and 6225; C.S. 2003; reconstructed by Ehret as *-úki and *-óki, in 1998: 313; Nurse and Hinnebusch, 644). The application of the root as the word for ‘bee’ could be an inheritance. The distribution of *pùká, however, suggests that it was the Proto-Botatwe word for ‘bee’ and that *-júki was either selectively conserved in Proto-Eastern Botatwe or that this speech community later borrowed the use of *-júki as the underlying root for ‘bee’ from either Kaskazi, Kusi or Luban speakers. Neither Sabi speakers to the east, who use a variant of –simu, nor Bantu speakers to the west, who use *-pùká, could have served as the source for this borrowing.

Replaces: *-pùká

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *inzuki* bee

Proto-Kafue

Lenje: *insuki* bee; *(n)suki* or *suchi* honey bee (Madan, 107); *lúsuki/nsíuku* bee (Kagaya, 78)Sala: *inzuki* beeTonga: *inzugi*, *insuki* tree bees; *insukia* bee (Collins, 161); *inzuki* bee(s) (Fell, 22); *inzuki* bee (Torrend, archival notes); *inzuki* bee, common (Plateau and Valley Tonga, Torrend, 49)Ila: *inzuki* bee, generic and tree or ground bee; *inzuki* the honey-bee, *Apis mellifera* (Fowler, 235); *inzuki* bee, common (Torrend, 49)

Proto-Falls

Toka: *inzuki* beeLeya: *inzoki* bee; *inzoki* bee (Torrend, 49)

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe:

Proto-Zambezi Hook

Fwe:Shanjo:**Other Savanna Bantu:** *See attestations in sources referenced above.***Other Bantu:** *See attestations in sources referenced above.***Other Non-Bantu:****Checked:** Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004**Notes:****627****Root:** *bu(n)zuka (tone?)**Gloss:** Beeswax**Protolanguage:** Proto-Eastern Botatwe**Etymology:** Derived from *inzuki*, ‘bee,’ using the cl. 14 prefix and sometimes retaining the cl. 9 nasal /n/. Ila attestations in Torrend and Fowler’s dictionaries have /v/, which suggests a reconstruction as *-dýka rather than C1 as /j/.**Replaces:** *buka(to)**Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe: *buhuka* beeswax

Proto-Kafue

Lenje:

Sala: *bunzuka* beeswax

Tonga: *bunzuka* beeswax; *bunzuka* beeswax (Collins, 153); *bunzuka* beeswax (Plateau Tonga, Torrend, 49);

Ila: *buhuka*, *buzuka* beeswax; *bumvuka* beeswax (Torrend, 49); *bumvuka* (Fowler, 58); *bunvuka* beeswax, *musamu wezo mbunvuka*, this medicine is sticky (Fowler, 61)

Proto-Falls

Toka: *bunzuka* beeswax

Leya: *βuzuka* beeswax

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

628

Root: *kulida

Gloss: to collect honey

Protolanguage: Proto-Eastern Botatwe It is odd that the C2 is /d/ but this is common with noun class 5 with a preceding /i/. Importantly, most speakers stressed that this word was only used to talk about collecting honey and was never used to talk about any other kind of food collection.

Etymology: This word is *-dī ‘to eat’ with a relational suffix to form ‘to eat from’ (BLR3 944; C.S. 550)

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *kulida buchi* to collect honey; *mulihi wa βuchi* person who collects honey

Proto-Kafue

Lenje:

Sala:

Tonga: *kulida* to collect honey, this verb is only applied to honey and never another direct object; *kulida* to eat from, reduce pay, etc. (Collins, 165)

Ila: *kukalile* to collect honey in the bush; *kulila* to eat from, to eat for (i.e. eat medicine against) (Fowler, 346)

Proto-Falls

Toka: *kulida* to go collect honey having already located it; *simulida* a person who collects honey

Leya: *kulida* to collect honey

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Luban (L31a, Eastern Savanna Bantu): *kidyā bwīcī* to take honey; *tirer du miel* (Yukawa, 31);

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

629

Root: *(i)mpuma

Gloss: Comb full of Honey

Protolanguage: Proto-Kafue, borrowed into Lundwe (note the odd noun class prefix). The word was borrowed into Sabi and Lamba at a later date as the word does not appear in other Sabi languages.

Etymology:

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *tumpuma* white honey

Proto-Kafue

Lenje: *mpuma* dark honey from the larvae, old honey; *lupuma* bee comb with honey (Kovanda); *lupuma* honeycomb with honey (Torrend, 299)

Sala: *mpuma* yellow part of the honey (pollen, beebread?)

Tonga: *impuma* honeycomb with honey (Torrend, 279); *impuma* honeycomb (Torrend, archival notes)

Ila: *impuma* honeycomb with honey (Torrend, 279); *impuma* a comb full of honey (Fowler, 205)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *ulupuma* comb filled with honey (Guthrie, 76);

Lamba (M54, Sabi): *ulupuma* honeycomb (Doke, 80);

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

APPENDIX FIVE, PART D
RECONSTRUCTIONS IN SUPPORT OF CHAPTER 7

701

Root: *-swa

Gloss: noose trap (as a broad category that includes spring noose trap)

Protolanguage: Proto-Western Botatwe semantic innovation

Etymology: Uncertain. Could this root derive from an older root *-cúá ‘grass,’ describing the original material of manufacture, perhaps borrowed by Kusi or Kaskazi peoples? (BLR3 684, known distribution in zones D, E, F, H, J, L, M, S; C.S. 393). Inhabitants of this region are famous for weaving grass tools today.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka: *kaswa* rope for spring trap for birds or, when there is a hole as part of the spring trap, for a duiker

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *iswa* noose trap, including a spring noose trap; *akaswa* string trap tied to a stick (*omubeto*) (Crane, Zambian Totela); *muswa* bowstring (Crane, Namibian Totela)

Subiya: *kaswa* noose trap, including a spring noose trap

Mbalangwe: *kaswa* any noose trap including a spring noose trap

Proto-Zambezi Hook

Fwe: *kaswa* spring noose trap

Shanjo:

Other Savanna Bantu: Shona (S10, Kusi): *chishwe* noose (running or fixed) (Hannan, 857).

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

702

Root: *-kúnj

Gloss: falling trap (with log)

Protolanguage: Proto-Western Botatwe semantic innovation

Etymology: This word derives from an older, probably Proto-Bantu root for ‘firewood,’ *-kúnj because the older root described the material integral to the functioning of the trap (BLR3 2042; C.S. 1218). This word was borrowed into Thimbukushu, probably during recent centuries of prolonged interaction in southwestern Zambia and the Namibian Caprivi Strip.

Replaces: *-díbá

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *mukuni* fall trap with wood for small animals like hare, wild cats, birds, etc.

Subiya:

Mbalangwe: *mukuni* fall trap where animal or bird is crushed by the weight of the rock

Proto-Zambezi Hook

Fwe: *mukuni* wood fall trap for birds or, with big traps, for leopards

Shanjo:

Other Savanna Bantu: Thimbukushu (K333, Luyana/Southwest Bantu): *mukúnyi* trap made of a log balanced to fall (Wynne, 565)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

703

Root: *-lili

Gloss: pitfall trap

Protolanguage: Proto-Machili

Etymology: The innovation may, in fact, represent a new pronunciation for the inherited form *-lindi by reduplicating the first syllable. It could also be a reduplication of the inherited word for a stone falling trap, *-díbá (BLR3 955; C.S. 558). The BLR3 reconstruction, for which no

distribution is noted, *djɔ̌mɪd* ‘to sink down’ provides a third possible source (BLR3 583). Finally, a Shona word, *dí*, is used south of the Zambezi as an ideophone of falling, focusing our attention on this first syllable of each of the three roots, *-lili, *-lindi, and *-díbá, as a signifier of falling. Thus, *-lili may also be an independent innovation of Proto-Machili speakers.

Replaces: *-lindi

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kalili* pitfall trap

Subiya: *kalili* small pitfall, covered

Mbalangwe: *kalili* pitfall trap

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Shona (S10, Kusi): *dì* ideo. of falling (Hannan, 127)

704

Root: *-yamba

Gloss: to fish with a net or trap by encircling

Protolanguage: Proto-Western Botatwe, borrowed from Botatwe into Lozi

Etymology: There are a few roots that might be related to this root. Ehret has reconstructed *-ambj ‘large palm mat’ to Kaskazi languages in Kati and Yao (1998: 311). Scholars at Tervuren have had a similarly difficult time reconstructing related roots and are particularly uncertain about the C1 in their reconstruction of *-byambi, ‘narrow part of fish trap, goulet de nasse’ (BLR3 4023; distribution in zones K, L, and M). Attestations for ‘fish net’ in Falls languages would need C1 ‘j’ if they are inherited. Two semantically similar possibilities lack the nasal before C2: *-jábù ‘net’ (distribution in zones G, E, N, and P BLR3 3142; as *-yábù in C.S. 1887) and *-jábj ‘net; (distribution in zone N, BLR3 8817). Indeed, a more likely related root for

the Falls (and Ila) attestations listed in the Notes is *-jàmb- with two reconstructed (and thought to be unrelated) glosses ‘to begin’ and ‘to spread as disease or fire’ (BLR3 3190; C.S. 1914 and BLR3 3194; C.S. 1916, respectively).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kuyamba* to catch fish with a line and hook (Baumbach, 375);
emyumba fish fence (Zambian Totela, Crane)

Subiya:

Mbalangwe: *kuyamba* to fish, to fish with a net or trap; *muyambi*
fisherman

Proto-Zambezi Hook

Fwe:

Shanjo: *kuyamba* fish with a net or trap; *muyambi* fisherman

Other Savanna Bantu: Lozi (K21, Kusi): *kuyamba* to fish with nets (O’Sullivan, 107); *muyambi* or *muyambuli* a net fisherman (O’Sullivan, 108, Jalla 482-3); *kuomba* to pull a net ashore (O’Sullivan, 108); *kuyamba* 1) to cast a net *kuyamba lituwa* to cast the large net 2) to surround (warrior ants, etc.) fig. to attract, to catch people (as a prostitute) (Jalla 482); *kuyambula* v.t. 1) to take a net out of the water, to pull a net to the shore 2) v.t. from Luyana to inherit the character to one’s parents 3) to contract a contagious disease (Jalla, 483);

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Toka: *kazamba* a small net; Leya: *kuzamba* to fish with a net or trap; *kazamba* fishnet; Ila: *kuzamba* to bind around (Fowler, 771)

705

Root: *shuta

Gloss: to angle, to fish with hook and line

Protolanguage: This word is either Proto-Zambezi hook spread into Lozi and other Botatwe languages, Lozi spread into Botatwe languages, or a combination of the two. See root 815.

Etymology: Uncertain.

Replaces: *-dób- (or *-lób-)

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka: *kushuta* to fish, considered a Lozi, not a Toka word; *kashuto* hook

Leya: *kushuta* to fish, to fish with hook and line; *kashuto* fishhook

Proto-Western Botatwe

Proto-Machili

Totela: *kushuta* to fish, generic word for all kinds of fishing; *kashuto*

fishhook

Subiya: *kushuta* to fish with a hook and line; *kashuto* hook

Mbalangwe: *kushuta* to fish with a hook and line; *kashuto* hook; *kashuto*

fishhook (Baumbach, 360)

Proto-Zambezi Hook

Fwe: *kushuta* to fish, to fish with a net, a trap, or a hook and line; *kashuto*

hook

Shanjo: *kushuta* to fish with a hook and line; *kashuto* fishhook

Other Savanna Bantu: Lozi (K21, Kusi): *kushuta* to fish with rod and line (O'Sullivan, 107); *kushuta* 1) to miss the target, the goal, the aim, etc. 2) to fish (angling) (Jalla, 389)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Ila *kusyuta* to scoop to pick up (Fowler, 687)

706

Root: *-weja or *-eja

Gloss: to chase > to hunt > to spear

Protolanguage: Independent borrowing from Mashariki languages into Proto-Eastern and Proto-Western Botatwe

Etymology: see comments in root 610, above.

Replaces: Used alongside *-gúim

Botatwe Distribution:

Soli: *kuweza* to hunt (this was described as a Lenje word and, indeed, the phonology confirms that this form was borrowed, although not from Lenje, as the Lenje form should appear

as *kuwesa*. The term was probably borrowed into Soli from Proto-Eastern Botatwe as its gloss and phonological form and meaning follow those attested in that branch)

Proto-Eastern Botatwe

Lundwe: *kuweza* to hunt alone with spears or bows and arrows; *kuweza kutenta* to hunt with fire; *kuweza ababwa* to hunt with dogs; *kuweza kuchila* communal hunt; *muwehi* or *muwezi* hunter

Proto-Kafue

Lenje: -*wesa* 1) to catch, to seize, hold, take in the hand 2) cut with an adze, shape, smooth point (this attestation is polysemic, not cognate, with *-*wéja*; Madan 119).

Sala: *kuweza* to hunt; *muwezhi* hunter

Tonga: -*weza* to hunt (generic term; Plateau Tonga, Torrend 284); *muwezi* hunter (Torrend, 284); -*weza* to hunt (Collins, 179); -*weza* to hunt (Hopgood, 249); *kukwezya* to imitate hunting or fighting with a spear (is this word borrowed? See attestations in Notes; Collins, 179)

Ila: *kuweza* to hunt alone; *kuweza kuchila* communal hunt through enclosing prey and stabbing; *muwehi* or *muwezi* hunter; -*weza* to hunt (generic term, Torrend, 284); *muwezi* hunter (Torrend, 284); *muwezi* hunter (Fowler, 493); *kuweza* to hunt, to track down. *Balifwile baakuweza bumi bwamwana* ‘They are dead, the ones who were trying to hunt down the child.’ *Kuweza lubono mung’anda* ‘To hunt for wealth at home,’ the practice whereby a wife prostitutes herself with her husband’s connivance (Fowler, 761); *kuwezela* (v.t. relational of -*weza*) to hunt on behalf of; to prostitute oneself with the connivance of one’s husband (Fowler, 761); *kuwezya* (verb tr. causative of -*weza*) to cause to help to hunt (Fowler, 761); *kuwezya-wezya* (redup. -*wezya*) to hunt a little; to deride, make light of. *Ndamutola mubwa wako nkawezye-wezye*, ‘I’m taking your dog to do a bit of hunting’; *Wamutuka mwinakwe, wamuwezya-wezya bulyo ati ‘Koya nkuuya! Intakuboni! Ndakuleda cinicini! Utabi ucako ncuuluba!’*, ‘He reviled his wife [and] derided her, saying ‘On your way! I never want to see you again! I’m finishing with you! Make sure you leave nothing behind!’ *Kuwezya-wezya nkuubauzya sintu katakacitwa* ‘*Kuweza-weza* means to make light of difficulties.’ (Fowler, 761); *buweza* burrow of the antbear or of the warthog (the killing of the antbear was considered a specialty form of hunting among some societies, such as the Bisa, of South Central Africa; Fowler, 70); *muwezele* a popular person (Fowler, 493; NB: this appears to be the relational of -*weza* but also in the subjunctive, with an approximate translation of ‘the one who may hunt for’)

Proto-Falls

Toka: *kuweza* to hunt (This word was described as a Tonga word, not a Toka word, although it follows the expected sound changes for Toka).

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kuweza* to spear something

Subiya: *kuweza* to throw the spear

Mbalangwe: *kuweza* to spear something

Proto-Zambezi Hook

Fwe:

Shanjo: *kuweja* to spear something

Other Savanna Bantu: Nyanja (N31, Kusi): *-wedza nsomba* to fish (Paas, 148; this form does not follow expected Nyanja patterns and was probably borrowed, perhaps from eastern Botatwe languages).

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: We might expect Lundwe to shift /z/ to /h/, but some words Lundwe retains /z/, suggesting a sound change that is still in process. The Nyanja attestation is recently borrowed and probably refers to fishing with a spear. For the following near homophones, it is possible that the vowel shift is a regressive assimilation of the final *-a. However, this is not a common shift in other verbs and what are we to make of the C1 cluster of -kw in these roots if they are cognate with the roots listed above? Some are probably cognate with another Botatwe verb 'to stab' that usually takes the form *kuyasa*. Consider: Bemba (M42, Sabi): *-kwabil-* to stalk (animal) (Guthrie, 43) *-kwas-* to stab (a person with knife, etc.) (Guthrie, 43); Shona (S10, Kusi): *kukwàsha* to look for anything, to hunt (Hannan 302) to hunt (Biehler, 125); Lozi (K21, Kusi): *kukwaza* to spear (Jalla, 253; O'Sullivan, 277), *mukwazo* short spear (Jalla, 253; O'Sullivan, 277). For more information on *-gèdj 'to try,' see C.S. 797 and 797a. Consider: Lungu (M14, Kaskazi): *ukuwezuya* to close; to test, to try (Kagaya 83, 126); Shona (S10, Kusi): *-edza* to try (Hannan, 920).

707

Root: *-týmò

Gloss: spear, probably of iron and referring to the iron spearhead

Protolanguage: Kaskazi loan borrowed independently by the Proto-Eastern and Proto-Western Botatwe speech communities, possibly from two different sources. See comments in root 611.

Etymology: See comments in root 611, above.

Replaces: Proto-Bantu *-gòngá (Ehret 1999: 83)

Botatwe Distribution:

Soli: *lifumo* spear

Proto-Eastern Botatwe

Lundwe: *isumo* spear

Proto-Kafue

Lenje: *lisumo* spear; *lisumo* spear (Madan, 92); *lisumo/másumo* spear (Kagaya, 73); *lisumo* assegai (Kovanda); *kasumo*, *lisumo* javelin (Kovanda)

Sala: *lisumo* spear

Tonga: *ihumo* spear; *kasumo* arrowhead; *isumu* spear (Fell, 17); *isumo* spear (Hopgood, 240); *isumo* spear (Collins, 161)

Ila: *lisumo* spear; *kasumo* arrowpoint (metal point); *kasumo* a small spear (Fowler, 286); *isumo* 1) a spear 2) a pointed bullet (Fowler, 242)

Proto-Falls

Toka: *isumo* spear; *kasumo ka kadali* arrow

Leya: *isumo* spear; *kasumu* arrowhead; *isumu* leaf-shaped arrowhead

Proto-Western Botatwe

Proto-Machili

Totela: *isumu* spear; *kasumu* arrowhead; *isúmu* spear (Baumbach, 378); *akasumu* arrow and arrowhead (Crane, Zambian Totela); *isumu* spear and spearhead, spear point (Crane, Zambian Totela)

Subiya: *ilumo* spear (Pfouts, 177)

Mbalangwe: *isumu* spear; *isúmu* spear (Baumbach, 350); *ilumo* or *isumu* spear (Pfouts, 177)

Proto-Zambezi Hook

Fwe: *lisumo* spear; *kasumu* arrowhead; *esumu* spear (Pfouts, 177)

Shanjo: *isumu* spear

Other Savanna Bantu: Bemba (M42, Sabi): *ifúmo* spear (Guthrie, 21); *ifumo* 1) abdomen, belly 2) womb, pregnancy 3) spear (confusion of tone of two different roots blended as one in this entry?; White Fathers, 328); Bisa (M51, Sabi): *ifumo* heavy hunting spear (Madan, 127); Nsenga (N31, Sabi): *-fumo* spear, spearblade (Madan, 93); Lamba (M54, Sabi): *ifumo* spear (Doke, 149); Luba (L31a, Eastern Savanna Bantu): *difuma* (Yukawa, 27); Kiha (D/J66, Kaskazi): *ichumu* spear (Schoenbrun, FN, 104); Kitembo (D/J531, Kaskazi): *éfumo* spear (Schoenbrun, FN, 105); Olunande/Rukoonzo (D/J42, D/J41, Kaskazi): *erityumu* spear (Schoenbrun, FN, 106); Lungu (M14, Kaskazi): *isúmo* spear (for animals, fishes) (Kagaya, 80); Shona (S10, Kusi): *pfumo* spear (Hannan, 901); Lozi (K21, Kusi): *lilumo* spear (O'Sullivan, 276); Tsonga (S53, Kusi): *-fumu* stabbing spear (Swiss Mission, 88); Tswana (S31, Kusi): *lerumo* (Hartshorne, 421 and 626).

Other Bantu:**Other Non-Bantu:**

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend says *-sumo* is 'Common' for spear (Torrend, 525).

708

Root: *-kálula

Gloss: hunting medicine for dogs causing them to be fierce for hunting

Protolanguage: Common Western Botatwe. Borrowed into western Botatwe and, later, Lozi languages from western Savanna/Njila?

Etymology: This root is derived from the Proto-Bantu root *-kád- 'to be bitter, sour, sharp, fierce' (BLR3 1657; C.S. 978) and is attested in most languages with a separative verbal extension connoting an intensive or repetitive action. Thus, the root might be crudely glossed as 'to be fiercer and fiercer' or 'to be fierce again and again.' The root is attested in Thimbukushu in an inherited form and may be a Proto-Western Savanna or older Bantu innovation.

Dictionaries rarely attest vocabulary as specific as hunting dog medicine so it is difficult to determine the speech community that invented this word.

Replaces:**Botatwe Distribution:**

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kukalula* to give medicine to hunting dogs

Subiya: *inkalula* medicine for hunting dogs to be fierce

Mbalangwe: *kukalula* to put medicine for dogs in their *shima* (stiff porridge) to make them fierce while hunting

Proto-Zambezi Hook

Fwe: *inkalula* medicine that is put in a dog's food to make it fierce

Shanjo:

Other Savanna Bantu: Lozi (K21, Kusi): *kukaluka* 1) to be lustful, to be driven by appetite 2) to be hot on the scent (as a dog specially drugged for the chase) (Jalla, 96), *kukalula* 1) to inspire or cause lustful desires esp. in young people 2) to drug a dog for the chase 3) to run fast (Jalla, 96); Thimbukushu (K333, Luyana/Southwest Bantu): *-karura* to give medicine to dogs to make them fierce (Wynne 335).

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

709

Root: *-co > *-so

Gloss: arrow, generic term

Protolanguage: Proto-Western Botatwe or Proto-Zambezi Hook appears to be the source for this root as attestations outside the western Botatwe languages occur only among immediate, adjacent neighbors. Yet, the fricative correspondences in Totela and Mbalangwe suggest later re-borrowing, perhaps from Thimbukushu or Fwe during contact over the last few hundred years in the Caprivi Strip. With an underlying form *-co, the Lozi attestation *lisho* could be inherited, but this does little to account for languages that attest C1 /s/, like Subiya and Mwenyi, which followed inherited, not borrowed, sound correspondences. It is likely that Lozi borrowed the root from western Botatwe languages. Could this be a Proto-Western Botatwe or Proto-Zambezi Hood innovation? Fwe, Shanjo, and Subiya all follow expected sound patterns. Totela and Mbalangwe /sh/ is borrowed.

Etymology: Unknown source.

Replaces: *-gúí

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *isho* arrow; *isho* arrow (Baumbach, 374); *isho* arrow (Crane, Namibian Totela)

Subiya: *kaso* arrow

Mbalangwe: *isho* arrow; *isho* arrow (Baumbach, 346); *isho* arrow (Pfouts, 172)

Proto-Zambezi Hook

Fwe: *esho* arrow; *ndisho* arrow (copulative); *masho* arrow (Pfouts, 172)

Shanjo: *busho* arrow

Other Savanna Bantu: Lozi (K21, Kusi): *lisho/masho* arrow, fig. fast runner (O'Sullivan, 13, Jalla 172); Mwenyi (K352, Luyana/Southwest Bantu): *elisó* arrow (Yukawa, 22); Thimbukushu (K333, Luyana/Southwest Bantu): *disho* arrow, generic (Wynne, 29)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

710

Root: *-teku

Gloss: spearshaft

Protolanguage: Proto-Machili loan into Lozi or more recent loanword borrowed from Lozi. The absence of this root in other Kusi languages suggested the former. Totela and Mbalangwe share different words for both arrowshaft and spearshaft than the rest of western Botatwe languages, suggesting either recent areal contacts, probably as these communities settled the Caprivi in recent centuries, or a particularly innovative period in tool technology among Proto-Machili speakers.

Etymology: Unknown.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *luteku* spearshaft

Subiya:

Mbalangwe: *inteku* spearshaft

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lozi (K21, Kusi): *luteku* shaft of a spear (O'Sullivan, 260)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

711

Root: *kakuni

Gloss: arrowshaft

Protolanguage: Proto-Machili or recent Caprivi areal form?

Etymology: The source root of this word, innovated through the addition of the diminutive class 12 noun prefix, is an ancient inherited word for 'firewood,' *-kuni (BLR3 2042; C.S. 1218). The application of the word for 'firewood' to 'arrowshaft' may be the result of a particular species of wood being the preferred species for both fires and arrowshafts.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kakuni* arrowshaft

Subiya:

Mbalangwe: *kakuni* arrowshaft

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

712

Root: *-pinda

Gloss: To hunt for Honey

Protolanguage: Proto-Western Botatwe

Etymology: Could this root be related to *-pind- “to put across” (BLR3 2522 zones L M N ; C.S. 1523)?

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kuhinda buchi* to collect honey (this word can be applied to many other kinds of things)

Subiya: *kuhinda buchi* to collect honey from out in the bush

Mbalangwe:

Proto-Zambezi Hook

Fwe: *kahinda buchi* to collect honey from far away; *kuhinda* to collect honey from nearby

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

713

Root: *bulota

Gloss: Beeswax

Protolanguage: Common Western Botatwe

Etymology: Uncertain. Could the word be a semantic innovation for a Kusi root for ashes, *-dòtà (BLR3 7330, distribution in zones M, N, S)? Perhaps Botatwe speakers were playing with dark color of cinders and beeswax (though ashes are light?). In fact, several speakers in different languages referred to the beeswax as the dark, or black part of the honey. Alternatively, both beeswax and ashes are soft to the touch and bind to other surfaces in which they come into contact, as attested in the Lozi definition of this root.

Replaces: *buka(to)

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *bulota* beeswax; dark, old honey

Subiya: *bulota* beeswax

Mbalangwe: *bulota* beeswax

Proto-Zambezi Hook

Fwe: *bulota* black honey, beeswax

Shanjo: *bulota* beeswax

Other Savanna Bantu: Lozi (K21, Kusi): *bulota* beeswax (O'Sullivan, 23; fig. softness, laziness, Jalla, 32)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

APPENDIX FIVE, PART E
RECONSTRUCTIONS IN SUPPORT OF CHAPTER 8

801

Root: *-dandana

Gloss: bow

Protolanguage: Proto-Falls

Etymology: Based on attestations in Kusi languages, the underlying root for the Proto-Falls word for ‘bow’ seems to come from those languages and, further, seems to be a root describing the act of bending, probably *-dànd- (C.S. 493 with the osculant root *-dònd-, C.S. 654). This root has an associative, or reciprocal, extension, but reciprocal verbs require more than one agent so until the underlying verb is reconstructed, it is difficult to assess the derivational processes that produced *idandana*. However, if the word entered Proto-Falls via a Shona (or closely related language) it could be that the reciprocal extension does not require several agents, but rather is “used of a single subject with reference to its parts and their relation to one another” (Fortune 1955:219, cited in Schadeberg 2003:76). Thus, it could literally translate as “that which follows on itself (e.g. in a circular fashion to form an arc).”

Replaces: *-tà

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka: *idandana* bow (Baumbach, 313)

Leya: *idandana* bow

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Shona (S10, Kusi): *chidandari* mouth bow (Hannan, 775), *dàndàmù* ideo. of englarging, extending, *-dàndamudza* to cause to enlarge or extend, *-dàndamuka* to stretch out (what was coiled, e.g. rope), *-dàndamura* to stretch out what was coiled (Hannan, 109); Lozi (K21, Kusi): *mundandanyi* string for making bow-nets (O’Sullivan, 287); Tumbuka (N21, Kusi): *lundandati* ring (same underlying root related to bending around?, Turner, 80)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

802

Root: *kadali

Gloss: Small Bow, probably a mouth bow (musical instrument)

Protolanguage: Proto-Falls

Etymology: This root was clearly formed by adding the agent suffix to a verb and the class 12 manner / diminutive noun prefix, -ka. This root is probably related to source root of *idandana, *-dànda. Consider the Shona attestation for mouth bow.

Replaces: *-tà

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka: *kadali* bow

Leya: *kadali* bow

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Shona (S10, Kusi): *chidandari* mouth bow (Hannan, 715).

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: False near cognates or related near polysemes?: Rumanyo (K332, Luyana/Southwest Bantu): *ndáyi* arrow, wooden knob arrow (for shooting birds) (Möhlig, 289); Gciriku (K332, Luyana/Southwest Bantu): *ndayi* arrow with wood head, reed shaft, fastened with sinew, used for small birds (Pfouts, 99); Luvale (K14, Western Savanna Bantu): *njindavi* wooden-headed arrows? (White 1955: 6)

803

Root: *-d̥joka > *-jioka > *-yoka

Gloss: ferrule, metal?

Protolanguage: Borrowed into Proto-Falls and Subiya upstream of the Falls, the source of this root is unknown, although it might have been Kusi communities.

Etymology: Semantic innovation from a verb referring to the twisting or encircling of an object to a ferrule on a spear. This root is related to *-d̥jok-, ‘to turn inside out, make round about way’ by adding a common deverbative final suffix *-a* (Schadeberg 2003:81) and using the 7/8 noun class, an impersonal class often used for object (BLR3 6462, distribution in zones L and M).

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka: *chiyoka* ferrule outside the wood (as opposed to *musaki* inside the wood around the tang)

Leya: *chiyoka* metal ferrule

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *chiyoka* metal ferrule

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *-shoka* 1) to take the roundabout way 2) to be winding, roundabout (of road, path) 3) to allude to (White Fathers, 704); Luba (L31a, Eastern Savanna Bantu): *kúkóká* to stretch out (Yukawa, 66), *kúkóká* to tighten (Yukawa, 64); Lozi (K21, Kusi): *kusoka* to bind a spearhead to the shaft with a ring, *-soka* iron ring tightening a spearhead to its handle (O’Sullivan, 25; Jalla 424-5); *-soka* to stir, fig. to twist, to wring (Jalla, 424-5); Tsonga (S53, Kusi): *xìsòhò* 1) anything used to tie by twisting, as a grass rope, 2) piece of wood with which the twisting is done 3) fig. erect male member (Cuenod, 247)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansna 2004

Notes:

804

Root: *-coco

Gloss: iron foot on end of spear, usually tapering to a point for digging and to thrust the spear into the ground for storage

Protolanguage: eastern Botatwe Areal with Sabi, probably also borrowed into Sabi

Etymology: This root could be from *-còoc- 'to poke in' (BLR3 634, zones F, G, L, N, S (Mashariki?); C.S. 365; Nurse and Hinnebusch, 582)

Replaces:

Botatwe Distribution:

Soli: *chocho* butt of a spear that is flat metal on the shaft and tapering, for digging
Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *chocho (coco)* 1) iron as on the foot of a spear, 2) spike (Kovanda)

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *coo-có* iron shod butt of spear (Guthrie, 15); Bisa (M51, Sabi): *chocho* spike at the butt end of a spear (Madan, 127)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

805

Root: *maluko

Gloss: Honeycomb

Protolanguage: Eastern Botatwe Areal with Lamba

Etymology:

Replaces:

Botatwe Distribution:

Soli: *maluko* honeycomb, milky honey with or without larvae
Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *maluko* (s. *liluko*) larvae of bee still in the comb and also the comb itself (Torrend, 49); *ma/li-luka* honeycomb with larvae or young bees (Kovanda); *li/ma-luko* honeycomb (Kagaya, 78)

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba (M54, Sabi): *iluko* larva of a bee (Doke, 15);

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

806

Root: *-panda

Gloss: To Collect, Hunt Honey

Protolanguage: Eastern Botatwe Areal in this meaning with Sabi

Etymology: From *-pànd- to split (tr.), the action taken on a hive to extract the honey, but in a manner that was probably far less careful to preserve the hive for future extraction than the older verb *kulida*, “to eat from.” Perhaps this more destructive form of honey hunting was practiced to meet demand for trade in regional markets or to provision trade caravans.

Replaces: *-lida (628)

Botatwe Distribution:

Soli: *kupanda bwichi* to collect honey

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *kupanda buuchi* to collect honey; *kupanda* to extract honey from the nest (Kovanda); *kupanda* to extract honey from the nest (Torrend, 279, the source for

Kovanda?); *kúpándá búuci* to take out honey (Kagaya, 78); *-panda* 1) to prepare medicine (drug, charm, potion); app. *-pandila* to use drugs for, against, etc.; rv. *-pandula* eg. to remove charm; 2) take honey from tree; 3) beat, flog, thrash (Madan, 109, 140)

Sala: *kupanda buuchi* to collect honey

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *-pand-* 1) to gather honey 2) split 3) become lucky and get things; *umúpandwé* place for getting honey; *úmupanda* honourable person (Guthrie, 67); *-panda* 1) to strive, set brains to work, trying to get out of difficulty 2) to concoct remedies, to prepare witchcraft medicine, charms 3) to remove honey from beehive '*Tabupanda waluse*' he who is afraid to remove honey from the hive will not get much, meaning he who takes no risks will get nothing. Also: you must sometimes be cruel to be kind 4) to open up or lay out new path 5) *alipanda* he is lucky! According to native mentality, he who overcomes difficulty must have provided himself with charms of some sort to bring him luck 6) to spread out shoots (White Fathers, 587); Lamba (M54, Sabi): *-panda uβuci* collect honey (Doke, 80); Lungu (M14, Kaskazi) *úkúpanda úuci* to take out honey (from the hive); *ukupanda* to take out (Kagaya, 83);

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Ila: *kupanda* to get medicine; to branch out; to go to a new place to build or cultivate; to divide as a path. *Isamu lyapanda*, *lyavuzya bana* The tree has branched out and produced offspring. *Apanda manungu*, *aanka kutandabala* The seeds have sprouted and started to spread (Fowler, 560); *kupandaula* (pres.rep. of *-pandula*) to go here and there; to grind coarsely (Fowler, 560); *-pandula* to branch off, as from a path (Fowler, 560)

807

Root: *chishango

Gloss: shield

Protolanguage: Mid-Zambezi Areal, source of Botatwe attestations is probably Nyanja

Etymology: Bemba attestations of words derived from the verb *-shangil-* 'to catch, seize, grasp, cling to,' 'to resist being taken captive' or 'to be strong, full of courage' allude to the extreme violence and insecurity that characterized the nineteenth century in much of south central Africa,

and the regions around Bemba speakers in particular, as immigrants from the *mfecane* of southern Africa and local emergent leaders sought to expand political and economic control in the context of the intensified ivory and slave trades.

Replaces:

Botatwe Distribution:

Soli: *chishango* shield

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *cishango* shield, battle thing used as a shield (Kovanda)

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *cishangu* a shield (White Fathers, 128), *kushangila* 1) to catch, seize, grasp, cling to 2) to be strong, full of courage (White Fathers, 681), *-shangil-* to resist being taken captive (Guthrie, 88); Nyanja (N31, Kusi): *chishango* shield (Paas, 323-4); Shona (S10, Kusi): *-shangu* shield (Hannan, 891)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

808

Root: *malala

Gloss: multiple night group hunting trip in the bush

Protolanguage: eastern Botatwe areal

Etymology: This root builds on a much older root, *-dáad- ‘lie down, sleep; spend night; be fallow (field)’ (BLR3 795; C.S. 455, 456).

Replaces:

Botatwe Distribution:

Soli: *malala* kind of hunting when you go and sleep in the bush with young men as assistant/apprentices (as opposed to *kuweza*, a kind of hunting that only lasts one day)

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *kuya malala* to hunt for several days with overnights in the bush

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Note that *kuya*, combined with the noun *malala* in the Lenje attestation, derives from *-gi, usually glossing as ‘to go’, and is often also glossed as ‘to hunt’ in Savanna languages (consider Luba [L34] *kúyá* to hunt [Yukawa, 27]). This semantic extension, like that proposed by Jan Vansina in which *-támb- ‘to walk, to travel’ derives *-támb- ‘to trap’ in addition to *-tég- illustrates how mobility into and within the bush lay at the heart of the skills necessary to undertake those activities. Consider also: Mbalangwe: *βayachilala* a system of hunting for many days in a group (this word seems to combine *mulala* with *-cila).

809

Root: *moondo

Gloss: Fish spear

Protolanguage: Lenje, Soli, Lamba Areal

Etymology: From a word, *kóndò, for ‘war’ (BLR3 1942 notes a distribution of E, G, K, L, M, N, P, S; C.S. 1147)? Other Mashariki languages use this root to develop vocabulary for spears and other aspects of warfare (see Notes for one example).

Replaces:

Botatwe Distribution:

Soli: *moondo* fish spear

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *móondo* fishing spear (Kagaya, 76); *mondo*, *miondo* fish spear (Madan, 98); *moondo* fish spear (Torrend, 525)

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba (M54, Sabi): *umonde* fish spear (Doke, 149)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Bemba (M42, Sabi): *úmukóndo* spear, war (Guthrie, 36)

810

Root: *kombe

Gloss: Fiber Net for Fishing

Protolanguage: Eastern Areal; Spread to Botatwe from Kusi or Sabi languages along the middle Zambezi

Etymology:

Replaces:

Botatwe Distribution:

Soli: *koombe* net made of washi fiber (plant near the river), fish are trapped in the holes of the net when they try to swim through it, you can use a maize cob as bait.

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *kombe* fishing net; *koombe* long fishing net (Torrend, 213); *koombe* big bag net with a wide mouth for fishing or trawling (Kovanda); *kombe* net for fishing, etc. (Madan, 86)

Sala: *koombe* big fishing net

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Nsenga (N41, Sabi): *kombe* fishing net (Madan, 83); Lamba (M54, Sabi): *akombe* net (Doke, 106); Cewa-Nyanja *kombe* fishing net (Paas, 149); Lozi (K21, Kusi) *liomba* large fishing net (loss of /k/??), *kuomba* to pull a fish net ashore (O'Sullivan, 108); Luban (L31, Eastern Savanna Bantu): *-kumbi* la nasse (de pêche) (Vandermeiren, 799, 842), *nkómbo* nasse fait de feuilles de palmier et à une chambre (Vandermeiren, 799)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Lenje: *búkónde* fishing net (Kagaya, 76)

811

Root: *-céngò

Gloss: horn used as a whistle to attract duiker

Protolanguage: central/western Batoka Plateau Areal

Etymology: The root of this word is the Proto-Savanna term *-séngò (*-céngò in BLR3 555; C.S. 327; Ehret 1999: 63). This semantic extension was probably originally based on the material of manufacture of decoy whistles and then later applied to a new material, leaves, when the meaning referring to the utility of the horn in attracting duiker while hunting had taken hold. The *s followed expected inherited sound patterns and could be relict attestations of the Proto-Savanna term, however the distribution in extant adjacent languages of the central and western Batoka Plateau and the fact that *-séngò is not the inherited generic term for 'horn' in Proto-Botatwe (despite its place as a Proto-Savanna innovation) suggests that this is a recent areal development, dating to the second half of the second millennium CE. See Notes for other examples using the material of manufacture to define the name of the whistle, namely other terms for 'horn' and 'leaf.'

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe: *kasengo* duiker horn used to attract duiker when used as a whistle

Proto-Kafue

Lenje:

Sala:

Tonga: *kasengo* a whistle of horn or leaf of the muntowa tree used to decoy duikers (Torrend, 635)

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *kasengo* used leaves of the mopane to attract duiker

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Totela: *kanaka* literally ‘small horn’ used in hunting; Subiya: *kakoba* hunting horn, literally ‘leaf’; *ombinga* horn, whistle (from the root **-bìngà* for ‘horn’ in Western Savanna Bantu [BLR3 215; C.S. 130; Ehret sees this root as a defining innovation of Western Savanna Bantu, 1999:74; WCAM, 97]). Other roots name this whistle for how it functions: Ila: *mwanalalila* ‘the child, he who cries’ to describe that the works by whistle sounding like the cry of the offspring of a duiker.

812

Root: **kanamasaka*, **-kana*

Gloss: medicine for hunter’s protection

Protolanguage: It is difficult to determine the proto-language of this root. Sala is geographically separated from the other three languages, which form something of a belt from the Falls area to the western Batoka Plateau and down into the Caprivi (in recent centuries). This relict distribution suggests some age; the root may be either a Proto-Eastern Botatwe root later borrowed into Totela via the Falls languages (or Proto-Falls itself) or a Proto-Botatwe form. Diachronic phonology does little to solve this question.

Etymology: It is difficult to determine how best to deconstruct this compound noun: 1) *ka-nama-saka* ‘little animal of the bush’ 2) *kana-masaka* ‘little child of the bush / thick forest / thicket’ 3) *kanama-saka* ‘denier of the bush/forest’ from **-káan-* ‘to deny, to refuse’ (see Ila attestation in Notes and BLR3 1701; C.S. 1000; Nurse and Hinnebusch, 590). However, the third option seems the most likely.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala: *mukana* cloth tied around the arm with medicine inside as protection while hunting

Tonga:

Ila:

Proto-Falls

Toka: *kanamasaka* plant burned or worn as a charm

Leya: *kanamasaka* plant to scare animals, you bring this tree to protect you from animals but you don't use it while hunting because it will scare off the game, you use it while camping during the hunting trip or traveling through the bush

Proto-Western Botatwe

Proto-Machili

Totela: *kanamasaka* medicine plant that is put in the pocket against snakes

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Ila: *kukanama* 1) to rail at, abuse 2) to lord over 3) to climb (Fowler, 274)

813

Root: *-gòngá

Gloss: elephant spear

Protolanguage: Semantic Innovation, Could be as early as Proto-Eastern Botatwe or Proto-Kafue or it could be a recent areal form invented during intense ivory trading in the 19th century

Etymology: From the inherited Proto-Bantu root for spear. This specialized meaning is found only in Botatwe languages, according to Christopher Ehret (Ehret 1999:83). Botatwe attestations support an inherited form as *-jòngá. See root 506.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *ijonga* long-bladed spear (Plateau Tonga and We, Torrend, 525); *kayonga* thin, short-shanked spear (Plateau Tonga, Torrend, 525); *muyonga* long-bladed spear (Plateau Tonga, Torrend, 525)

Ila: *iyonga* long bladed spear (Torrend 525); *iyonga* elephant spear (Fowler, 250)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu: see C.S. 857

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes:

814

Root: *-yala

Gloss: to hunt by surrounding

Protolanguage: Semantic Innovation, Areal in eastern Batoka Region

Etymology: From *-jäd- “to spread [tr.]” (BLR3 3147; C.S. 1890). See root 607.

Replaces:

Botatwe Distribution:

Soli: *kuyala* to hunt in a group (by burning the bush or with dogs)

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *kuyala* to hunt in a group with nets

Sala:

Tonga: *kuyala* to hunt for birds

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu:

Other Bantu: see C.S. 857

Other Non-Bantu:

Checked: BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Schoenbrun, Vansina 1990, Vansina 2004

Notes:

815

Root: *shuta

Gloss: to angle, to fish with hook and line

Protolanguage: This word is either Proto-Zambezi hook spread into Lozi and other Botatwe languages or Lozi spread into Botatwe languages.

Etymology: Uncertain.

Replaces: *-dób- (or *-lób-)

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka: *kushuta* to fish, considered a Lozi, not a Toka word; *kashuto* hook

Leya: *kushuta* to fish, to fish with hook and line; *kashuto* fishhook

Proto-Western Botatwe

Proto-Machili

Totela: *kushuta* to fish, generic word for all kinds of fishing; *kashuto*

fishhook

Subiya: *kushuta* to fish with a hook and line; *kashuto* hook

Mbalangwe: *kushuta* to fish with a hook and line; *kashuto* hook; *kashuto*

fishhook (Baumbach, 360)

Proto-Zambezi Hook

Fwe: *kushuta* to fish, to fish with a net, a trap, or a hook and line; *kashuto*

hook

Shanjo: *kushuta* to fish with a hook and line; *kashuto* fishhook

Other Savanna Bantu: Lozi (K21, Kusi): *kushuta* to fish with rod and line (O'Sullivan, 107); *kushuta* 1) to miss the target, the goal, the aim, etc. 2) to fish (angling) (Jalla, 389)

Other Bantu:**Other Non-Bantu:**

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Ila *kusyuta* to scoop to pick up (Fowler, 687)

816

Root: kanyandi

Gloss: small net for fishing or hunting

Protolanguage: This root is thought to be Lozi by many Botatwe speakers but with the C2 cluster, an inherited /nd/ would go to /t/ in Lozi (Guthrie, vol. 2, 53). Thus, while the spread of the Lozi language may be responsible for the distribution of this particular form, the underlying root is less certain.

Etymology: From *-jánd- “to spread [tr., intr.]; increase” (BLR3 3215; C.S. 1931)

Replaces:**Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe: *kanyandi* small-holed net, for catching *kapenta* (small fish)

Proto-Kafue

Lenje:

Sala: *kanyandi* small fishing net

Tonga: *kanyandi* net of small cotton thread

Ila: *kanyandi* net (to hunt and fish); *kanyandi* a fishing net (Fowler, 281)

Proto-Falls

Toka: *kanyandi* a big net, from Lozi

Leya: *kanyandi* a net for hunting or fishing

Proto-Western Botatwe

Proto-Machili

Totela: *kanyandi* a fishing net

Subiya: *kanyandi* a fishing net

Mbalangwe: *chiyandi* a fish fence trap; *kanyandi* net (Baumbach, 360)

Proto-Zambezi Hook

Fwe: *kanyandi* a net for hunting or fishing

Shanjo: *ka/tu-yandi* fishing net

Other Savanna Bantu: Cewa-Nyanja (N31, Kusi): *kanjanda* fishing net (Paas, 149); Lozi (K21, Kusi): *kanyandi* small fish-net (O’Sullivan, 108); *kanyandi* a small fishing net; fig. a whore (sometimes applied to a dissolute man) (Jalla, 102); Nkoya (L62, Luyana/Southwest Bantu): *kanyandi* fish net (Yukawa, 26); Ruwund (L53, Western Savanna Bantu): *wând* net, web (Nash, 66)

Other Bantu:**Other Non-Bantu:**

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:**817****Root:** *-mbuC_ɥ**Gloss:** red-breasted bream (*Tilapia rendalli* or *Tipapia melanopleura*)**Protolanguage:** Southeast Bantu? Borrowed into Botatwe**Etymology:****Replaces:****Botatwe Distribution:**Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:Sala:Tonga:Ila: Ila: *imbavu* a kind of fish similar to bream (Torrend, 212); *imbavu* red-breasted bream (*Tilapia rendalli*) (Fowler, 196).

Proto-Falls

Toka:Leya:

Proto-Western Botatwe

Proto-Machili

Totela:Subiya:Mbalangwe: *imbufu* red bellied bream

Proto-Zambezi Hook

Fwe: *imbufu* breamShanjo:**Other Savanna Bantu:** GiTonga (S62, Southeast Bantu, Kusi): *mbuvu* kind of fish (Turner, 206); Lozi (K21, Southeast Bantu, Kusi): *mbufu* red and white like bream, taboo to women, *Tilapia melanopleura* (O'Sullivan, 106); Nkoya (L62, Luyana/Southwest Bantu): *mbúfu* a kind of fish (Yukawa, 25)**Other Bantu:****Other Non-Bantu:****Checked:** Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004**Notes:****818****Root:** *ingweshi**Gloss:** Tiger Fish (*Hydrocymus vittatus*)**Protolanguage:** Depending on how the relationship between Thimbukushu, Njila/Southwest Bantu, and Luyana languages looks after more study, this root is probably either a Proto-Luyana

or Proto-Luyana/Southwest Bantu root with a form something like *-gùètj (see below). The root spread to Botatwe either via Lozi in the 19th century or, perhaps was an earlier Zambezi Floodplain Areal spreading to Proto-Zambezi Hook. The shape of the word in Lozi and Botatwe languages seems to indicate the former.

Etymology: The root is a compound of ‘leopard’ and ‘fish’: *-gùè [or *-gò] and *-tj.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila: *ingweshi*- tiger fish (Fowler, 215)

Proto-Falls

Toka: *ingweshi*- tiger fish, considered a Lozi term

Leya: *ingweshi*- tiger fish, considered a Lozi term

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe: *ingweshi*- tiger fish

Proto-Zambezi Hook

Fwe: *ingweshi*- tiger fish

Shanjo: *ingweshi*- tiger fish

Other Savanna Bantu: Lozi *ngweshi* tiger fish (O’Sullivan, 304); *ngweshi* 1) tiger fish 2) the Litunga’s personal spears (Jalla, 319); Thimbukushu (K333, Luyana/Southwest Bantu): *ngwethi* tiger fish (Wynne, 223); Mwenyi (K352, Luyana/Southwest Bantu): *ngwésí* kind of fish (Yukawa, 23);

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

819

Root: *-ndui

Gloss: Professional Fisherman, Kusi meaning as ‘fisherman’

Protolanguage: Kusi, borrowed into western Botatwe languages from Lozi, especially those in the swamps of the Caprivi Strip

Etymology: Uncertain.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *amandwi* fisherman (Zambian Totela, Crane)

Subiya: *mundwi* a very good, very skilled fisherman

Mbalangwe:

Proto-Zambezi Hook

Fwe: *munduyi* (sometimes *munduwi*) fisherman

Shanjo:

Other Savanna Bantu: Lozi (K21, Kusi): *ndui/modui* fisherman, general word (O'Sullivan, 108); *ndui* 1) fisherman 2) kind of water insect living on fish (Jalla, 306); Cewa-Nyanja (N31, Kusi): *msodzi* fisherman (Paas, 149)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes:

820

Root: *-tèbè (tone?)

Gloss: shield, protector or protective medicine

Protolanguage: Borrowing from Lozi into Botatwe but perhaps a Proto-Sotho root. This root appears in perfect relict inherited form but /b/ correspondences are off and ethnography suggests that the Botatwe did not use shields. Thus the seeming relict distribution might actually outline the edges of the Lozi raiding zone (as is probably the case with Sala living in the Blue Lagoon swamps) or the peoples with whom they were most often in contact (Fwe, Mbalangwe and the Zambia Totela whose lands they needed to cross on the way to raids on Ila and Tonga cattle herds).

Etymology: The root under consideration, *-tebe, may derive from the same source root, but developed among the southeast Bantu branch of the Kusi languages, spreading to western Zambia and the Botatwe languages during the *mfecane* as it appears in borrowed phonological form in Mwenyi and Ovimbundu (where there should be a weakened /b/ as /β/). Glosses in Sotho and Lozi also hints at the important role of medicine in the success of war parties; it may be that this shield was invented during the *difaqane*, during the *difaqane*, when Kololo moved north

from the western highveld, raiding Tswana states east of the Kalahari before warring with the Ndebele and eventually settling in the Zambezi floodplain. Attestations in Tonga of **intobo* probably derived from **-tòb* ‘to break, smash, hit’ (see Notes; BLR3 2956; C.S. 1771).

Replaces: At some point, the Proto-Bantu root **-gùbà*, ‘shield,’ (inherited into Proto-Western Savanna as **-gùbò* through progressive vowel assimilation and into Eastern-Savanna Bantu as **-gàbò*), dropped out of Botatwe vocabularies as I could find no attestation of this root, even in a relict distribution (Ehret 1999:80; C.S. 906 and 756; Schoenbrun 1997:34-5; BLR3 considers **-gàbò* and **-gùbà* to be derivatives of different roots, see 1278 and 1528).

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala: *intebe* shield

Tonga:

Ila:

Proto-Falls

Toka:

Leya: *intebe* shield

Proto-Western Botatwe

Proto-Machili

Totela: *intebe* shield (Crane, Zambian Totela)

Subiya:

Mbalangwe: *intēbe* shield adopted after *mfecane*

Proto-Zambezi Hook

Fwe: *-tebe* shield

Shanjo:

Other Savanna Bantu: Tswana (S31, Kusi): *thebe* shield, a piece of metal, wood, or hide or other substance used by soldiers of old as a protection against arrows and sword and spear thrusts, and usually worn on the left arm (Hartshorne, 398 and 621); Lozi (K21, Kusi): *litebe* shield, war shield, fig. protector (O’Sullivan, 262; Jalla 446); Sotho [southern] (S30, Kusi): *thèbè* shield (Mabille, 423); *thêbê* (di-) shield; *mothêbê* the plant *Richardia africana*, pig lily, arum.; *sethêbê* grinding mat, on which the meal is made to fall from the millstone; *thêbêadira* see *thêbê*; *thêbêla*, *thêbêrê* (di) all the drugs of a medicine man; medicine; *nthêbêrê* large lips; *sethêbêrô hlonepho* substitute for *moriana*, medicine (Paroz, 514); Mwenyi (K352, Luyana/Southeast Bantu): *étébe* shield (Yukawa, 22); Ovimbundu (R11, Western Savanna Bantu): *otevele* shield (cognate?; WCAM, 118)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Tonga: *intobo* shield (Torrend, archival material, 27), *itobo* skin (Hopgood, 240), *intobo* shield (Collins, 160); Torrend lists *intobo* as the ‘Common’ word for shield, taking the Tonga

attestation as representative of all Botatwe languages (Torrend, 490). Ila: *intebe* a bag made from bark string from the Umbombo tree, the fleshy back of the thigh (Fowler, 229)

821

Root: *mukotana, cl. 3

Gloss: container, applied to quiver

Protolanguage: Borrowed into western Botatwe languages from Lozi.

Etymology: From *-kòt- “to stoop; to be bent” (BLR3 7350, zones G, N) or *-gót, “to enclose, [enemy]” (BLR3 7335, zone J) with a reflexive suffixe. Generally, ethnography and field research suggest that quivers were not in use among Botatwe peoples until recent centuries so it may, indeed, be the case that this word was borrowed during the violence that accompanied the *mfecane* and the expansion of the Lozi state in the middle and later decades of the nineteenth century. See Notes below for a listing of words for ‘quiver’; note that all are distributed among adjacent languages, further supporting the conclusion that Botatwe did not use quivers in the deep past.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila:

Proto-Falls

Toka: *mpatana* quiver (borrowed from another source?, insertion of –pa locative “to hold inside”)

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *mukotana* quiver (Crane, Namibian Totela); *omukotana* quiver (Crane, Zambian Totela)

Subiya: *mukotana* quiver (Pfouts, 176)

Mbalangwe: *kakotana* general word for sack; *mukotana* quiver (Pfouts, 176)

Proto-Zambezi Hook

Fwe: *mukotana* quiver

Shanjo:

Other Savanna Bantu: Lozi (K21, Kusi): *mukotana* bag of any kind (Jalla, 249); Sotho [southern] (S30, Kusi): *morutlhoana* bag filled with stones for dancing (Mabille, 231);

-*kotahana* to get close together, packed up in the same place; to become narrow, crowded (Paroz, 200); Ndebele (S44, Kusi): *umgodhla* quiver, bag, sack (Elliot, 395 and 232); Zulu (S42, Kusi): *umgodla* bag (Dent and Nyembezi, 17)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Other vocabulary for ‘quiver’: 1) Lundwe: *inkomo* quiver, kept at the side of the body, not over the back; Ila: *inkomo ya mishongo* quiver; *inkomo* a bag (Fowler, 219). 2) Lenje: *insumbilo* quiver (Torrend, 30); (*i*)*nsumbilo* quiver for arrows (Kovanda); Ila: *insumbilo* quiver (Torrend, 30); Lamba (M54, Sabi): *insumbilo* quiver (Doke, 126). 3) Subiya: *tihindilo* quiver (borrowed; Pfouts, 176); Fwe: *mahindilo a masho* quiver (Pfouts, 176). 4) Tonga: *intimbwa* quiver (Valley Tonga, Torrend, 30); Ila: *muntemba* quiver (Torrend, 30); Nsenga (N41, Sabi): *mtumbwa* quiver (Madan, 11). 5) Mbalangwe: *chipaupau* quiver (Pfouts, 176); Shanjo: *chipaupau* quiver

822

Root: *-kólí

Gloss: knobkerrie

Protolanguage: recent areal during violence of ivory or slave trade, probably from Sabi speakers, perhaps with an origin in Kaskazi speech communities

Etymology: This word is a derivative of two older, possibly polysemic roots. Both share the reconstruction *-kód-, with the first glossing as ‘to be strong, to be hard’ and the second as ‘to take, to touch.’ Speakers added the agent deverbative suffix *-i to develop a noun referring to either ‘that which is strong, hard’ or ‘the thing that takes, that thing that touches.’ It is unlikely that this weapon was used to capture either ivory or slaves; rather it may have been used against slaves in the trek to the coast. Indeed, the two meanings of a possible Swahili cognate suggests the connection between a branch of a tree and captivity. Consider also the related Sabaki reconstruction *i□kolo ‘base of a tree trunk’ (Nurse and Hinnebusch, 627).

Replaces:

Botatwe Distribution:

Soli: *nkoli* knobkerrie

Proto-Eastern Botatwe

Lundwe: *inkoli* knobkerrie

Proto-Kafue

Lenje: *inkoli* club; (*n*)*koli* knobbed stick, club (Madan, 105); (*i*)*nkoli* club (Kovanda)

Sala: *inkoli* club

Tonga: *inkoli* club, weapon; *inkoli* knobkerrie (Hopgood, 240); *inkoli* a club, knobbed stick (Collins, 160); *inkoli* knobkerrie (Torrend, 29)

Ila: *inkoli* a knobkerrie (Fowler, 219)

Proto-Falls

Toka:

Leya: *nkoli* club

Proto-Western Botatwe

Proto-Machili

Totela: *inkoli* club; inkoli staff, club (Crane, *Zambian Totela*)

Subiya: *inkoli* knobkerrie

Mbalangwe: *inkoli* club

Proto-Zambezi Hook

Fwe: *inkoli* club

Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *inkoli* knobkerrie (Guthrie 35); Nsenga (N41, Sabi): *nkole* knobkerrie, prisoner of war (Madan, 18); Lamba (M54, Sabi): *ing'koli* club (Doke, 31); Bisa (M51, Sabi): *inkoli* knobkerrie [sic] (Madan, 111); Luganda (E/J15, Kaskazi): *embukuli* club (is this an independent innovation or regressive assimilation of the more closed final root vowel leading to a more closed V1? Blackledge, 120); Swahili (G41, Kaskazi): -kole 1) branch of a coconut palm 2) person seized in place of a brother or relative who has committed an offense and has absconded (Tuki, S-E, 157)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Torrend notes *inkoli* as the “Common” Bantu Botatwe word for ‘knobkerrie’ (Torrend, 320).

823

Root: *-linga (tone?)

Gloss: type of point (spear and, sometimes with the class 12 diminutive prefix, arrow)

Protolanguage: Areal form of western Batoka Plateau; source uncertain.

Etymology: This root may come from *-ding- ‘to be equal’ (BLR3 995, distribution D, E, F, G, H, L, M, N, P, and S; C.S. 584). Alternatively, depending on the reconstructed tone, the source root could be *-ding ‘to search for; desire; watch for’ having spread into Botatwe languages of the Plateau from languages to the east or southeast (zones B C H J N S, BLR3 997; C.S. 585; in light of the complicated possibility of an /ng/ to /nd/ correspondence between Kaskazi and some Bantu languages in central Africa, consider also *-dind ‘to wait, watch, desire’ BLR3 and C.S. 580 in zones B C G H J M N P and S). Attestations for ‘stockade’ in Tumbuka and Ila suggest the spread of term during a period of insecurity, probably in the nineteenth century as a result of the Ngoni and Kalolo invasions and the pressures of the intensifying slave and ivory trades. Indeed, this gloss connotes the meaning ‘to watch for.’ However, if, instead, the tone is reconstructed as descending, the *-linga point may, then, have been a new technology that served as an equalizer of sorts, leveling the advantages of one or another side during periods of warfare.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga: *isumo lya mulinga* big spear used at close quarters (Plateau and We Tonga, Torrend, 525)

Ila: *isumo lya mulinga* big spear used at close quarters (Torrend, 525); *mulinga* a spear made entirely of metal (Fowler, 426); *ilinga* [foreign] stockade (Fowler, 192)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela: *ilinga* spearhead; *kalinga* arrowhead

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Tumbuka (N21, Kusi): *malinga* stockade, fence, paling (refuge), *kulinga* 1) peep over 2) to appear (a small part only is seen) 3) to aim (Turner, 65)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Bemba (M42, Sabi): *mulinga* 1) person who does not belong to the Butwa secret society, as opposed to *mutwa* 2) a happy and prosperous person 3) efficiency (White Fathers, 462); *-ling-* measure by bulk (Guthrie, 48)

824

Root: nkombalume

Gloss: ‘group of professional elephant hunters,’ spread with meaning ‘professional (elephant) hunter’

Protolanguage: This word was borrowed into eastern Botatwe languages from Bisa as Botatwe communities began to supply the Indian Ocean ivory trade but it seems that it may have been a more ancient Zambezi Valley areal form, considering that it follows sound change patterns of inherited words in some Shona dialects

Etymology: This root is most certainly a compound ending in a common word, *balume*, for ‘men, pl.’ or ‘respected man, sing.’ The preceeding root poses something of a challenge but is central to the meaning of the word as compounds in Bantu languages usually use the first root as a modifying describing the kind of the second root. Furthermore, compounds built using two full nouns (called syntactic compounds) are uncommon except with names and titles, a grammatical rule that tells us something more about how this word probably functioned in communities of speakers who used it to refer to an earned, respected title, a kind of named person (Schadeberg, 86-9). Among Sabi languages, *nkoma* is often combined with other roots to form compound nouns about types of people (e.g. *nkoma-bantu* murderer, tyrant; *nkoma-mutwi* deaf person;

nkoma-nkubolele sickly person White Fathers, 540). *Nkoma* is a derivative of *-koma* ‘to hit, to kill, to cut with an axe’ (White Fathers, 266). Thus *nkombalume* could be ‘men who kill’. However, Marks’ observation among the Bisa that chiefly power was tied up in the work of the professional guild of elephant hunters, *nkombalume* suggests another possibility (Marks, 61). In Bemba, *nkombe* is a messenger, envoy, apostle (WF, 540) and *nkome* is a guardian (WF, 540). However, it is most likely that the oldest meaning of the root can be seen in Shona, rather than Sabi languages, as Shona attestations follow a phonological pattern demonstrating inheritance with the meaning ‘successful hunter.’ With a class 7 prefix, however, the root takes on another, related set of meanings in Shona. These meanings derive from *-kòmba* ‘to bend, esp. metal; to be striking, important, beautiful, strange, valuable etc.’ (Hannan, 71, 278; see also **-kúmb* ‘to bend’ BLR 3 2120; C.S. 1266 with a distribution in zones B C D H J K and L) and produce a set of words that are tied to the ideals of fame and bravery. Yet, additional meanings also imply fame that comes from sexual exploits, though whether they were exploits to be sanctioned is difficult to tell with the likely missionary influence on glosses like ‘adulteress’ or ‘lover of a married woman.’ It is likely that Chikunda elephant hunters were borrowing these probably older (Proto-Kusi?) ideas about heroism and bravery to name their work hunting ivory to supply the Indian Ocean from the eighteenth century.

Replaces:

Botatwe Distribution:

Soli: *nkombalume* professional, specialized hunter, leader of a hunting group

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *nkombalume* a professional hunter, one who is skilled at hunting and always gets their target; brave man, fearless man; *nkombalume*, *bankombalume* professional hunter (Kagaya, 73)

Sala:

Tonga:

Ila:

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:

Mbalangwe:

Proto-Zambezi Hook

Fwe:

Shanjo:

Other Savanna Bantu: Lamba (M54, Sabi): *ng’kombalume* elephant hunter (Doke, 81); Bisa (M51, Sabi): *nkombalume* Of the professional guilds, none surpassed the elephant hunters in status. These were the aristocrats of the hunting guilds. *Nkombalume*, a respectful term by which elephant hunters were addressed, were groups of skilled hunters whose magics and rituals gave them leadership roles and monopolies to exploit elephants. These guilds were closely associated

with the chiefs, to whom belonged the valued products of the chase—ivory and tail hairs. Ivory was a major trade item in Central Africa, and its directional flow in the past from hunters to subordinate chief to paramount chief reflected allegiance [*sic*] and political strategies (Marks, 61); Chikunda (number and subgroup unknown, probably Kusi): *nkumbalumi* master hunter, great hunter; *nkumbalume* ‘master hunters, known as *nkumbalume*, enjoyed a sense of invulnerability because of special medicines they possessed that, they believed, enhanced their hunting prowess and made them invisible. The strict sexual prohibitions the *nkumbalume* observed prior to the hunt reinforced their sense of themselves as invincible’; *nkumbalumi* ‘the guardians of generations of accumulated knowledge about hunting passed on to them by their fathers and grandfathers. According to Chikunda tradition, it was only those ex-slaves who had demonstrated their mastery of the bush and all that lived there who achieved this elevated status. “The *nkumbalumi* was the person who knew how to kill large animals and had killed them. Only after many successful expeditions was a hunter recognized as *nkumbalumi*.”’ (Note the switch back and forth between *nkumbalumi* and *nkumbalume* as well as the value /u/ in the V1 position—is this borrowed or inherited?; Isaacman and Isaacman, (respectively): 342, 57, 87 and chapter 3 more generally); Shona (S10, Kusi): *hòmbàrùmè* successful hunter, title given to one who has killed the game in a hunting party (implies more permanent skill than *mudzimba*) (NB: this look like it maybe inherited as Guthrie notes that /ng’k/ goes to /h/; Hannan 224, 834), *hombarume* hunter who has had success, successful person (Beihler 125, 249); *chikòmbà* suitor of an unmarried girl, lover (of married woman), outstanding person or personality in a group, adulteress (Hannan, 71); *chikòmbàmàbwè* person of credit and renown (Hannan, 71); *chikòmbàrùmè* hero, brave person (Hannan, 71); *chikómbè* important or striking matter or event (from –kòmba 1) to bend, esp. metal 2) be striking, important, beautiful, strange, valuable etc. Hannan, 71, 278); KiLuba (L33, Eastern Savanna Bantu): *nkùmbí* aide de chasseur (borrowed with a skewed meaning as *nkombalume* were hunters who worked with assistants; Gillis, 85)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: False Cognates: Tonga: *Vwambalume* hunter (Torrend, 284); *nkungalume* a bachelor (Collins, 171); Lozi (K21, Kusi): *ngomalume* from Luyana, a traditional dance for men only; new moon dance (Jalla, 313)

825

Root: fúndi

Gloss: Professional Hunter (using a gun)

Protolanguage: Spread with gun-using ivory hunters linked to the Indian Ocean trade, especially in the 19th century. In this region, Bisa and/or Bemba speakers were probably responsible for the spread of the gloss ‘professional gun hunter’.

Etymology: This word comes from Swahili but builds on an older root, *-tund-, ‘to teach’ (BLR3 3122; C.S. 1876). The legacy of the inherited form can be seen in glosses related to craftsmen and skill.

Replaces:

Botatwe Distribution:

Soli:
 Proto-Eastern Botatwe
Lundwe:
 Proto-Kafue
Lenje: *fundi* professional hunter with a gun, considered to be a Bemba word
Sala:
Tonga:
Ila:
 Proto-Falls
Toka:
Leya:
 Proto-Western Botatwe
 Proto-Machili
Totela:
Subiya:
Mbalangwe:
 Proto-Zambezi Hook
Fwe:
Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *fundi* hunter, skilled artisan; *buufundi* hunting craft (Guthrie, 22); *fundi* (from Swahili) craftsman, trained worker, *fundi wa njelwa* a mason, *fundi wa nama* a hunter with a gun (White Fathers, 176); Bisa (M51, Sabi): *Bafundi* ‘Gun hunters, called *Bafundi*, also had their hierarchies, and their members took turns discharging their weapons at a beast until it died. The leader supplied the powder, shot, and in some cases, the guns’ (Marks, 63-4); Lungu (M14, Kaskazi): *fundi wa nyáma* expert of hunting (Kagaya, 79); KiLuba (L33, Eastern Savanna Bantu): *mfundi* chasseur professionnel (Gillis, 85)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Lungu (M14, Kaskazi): *fundi* expert (Kagaya, 79); Cewa-Nyanja (N31, Kusi): *mfundi* skilled person (Paas, 328); Tumbuka (N21, Kusi): *fundi* expert, skilled person (Turner, 29); Lamba (M54, Sabi): *bumfundi* craft, occupation, *mfundi* craftsman (Doke, 39); Bemba (M42, Sabi): *fundi* hunter, skilled artisan; (Guthrie, 22); *fundi* (from Swahili) craftsman, trained worker, *fundi wa njelwa* a mason, *fundi wa nama* a hunter with a gun (White Fathers, 176).

826

Root: *-bín-

Gloss: to hunt, to have expertise and demonstrate it by excelling at something (hunting, speaking, leading, forging metal, singing, or overcoming difficulties)

Protolanguage: Scattered Savanna distribution (zones J, M, S, and K, L, M in BLR3 5594 and 5595, respectively; “Savanna Bantu and Mashariki distribution” according to Ehret 1998: 313; Meeussen 10 and 43). This root is probably not Proto-Botatwe, nor Proto-Eastern or Proto-Kafue

with the meaning ‘hunter’ because the C1 /b/ should attest with the value /β/ in Soli and, perhaps, Lenje. Rather, they follow the form of their Sabi neighbors to the east. The class 7 prefix is used in some instances, while the masculine pre-stem element appears in other attestations, unless those attestations are borrowed from Nkoya speakers to the north of the Kafue River. A period of dispersal may have been tied to the spread of the influence of the Luban polity in the middle second millennium as nominal attestations with various forms of the class 7 prefix and/or the masculine pre-stem element occur in an arc to the south of the Luban polity, through many of the lands and communities claiming connections to the Luba. Another period of dispersal was probably in the late second millennium when this word was used to talk about hunting tied to trade. This may have been an earlier period of trade than the famous 19th century ivory trade because some of the attestations of this root occur in languages that are spoken in the hinterland of Ingombe Ilede, a trade emporium that supplied ivory and skins to the Indian Ocean during the 15th century. Indeed, Botatwe attestations form a block distribution along the Kafue River, whose confluence with the Zambezi was the site of Ingombe Ilede. Moreover, the copper working at Ingombe Ilede (including the drawing of copper into wires and the creation of wire bracelets) further suggests regular links with the copper fields of Zambia and the Luba speaking region of DRC.

Etymology:

Replaces:

Botatwe Distribution:

Soli: *chibinda* hunter (I was told, when I pressed whether Soli speakers use the term ‘*kubinda*’ for ‘to hunt’ that that verb for hunting was unknown and that the noun derives from *kubinda*, when an animal puts its tail between its legs in fear)

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje: *cibínda*, *bácibinda* master hunter (Kagaya, 73); *liina ya bucibinda* hunting name (Kovanda, 21); *shibinda*, *báshibinda* companion (this appears to be a word developed by adding either the masculine / ‘father’ pre-stem element added to the root –*binda* or it could be borrowed from Nkoya, perhaps via Ila and/or Tonga?; Kagaya, 100)

Sala:

Tonga: *sibinda* hunter (borrowed from Lenje or independent use of masculine pre-stem element on an inherited root?; Plateau Tonga, Torrend, 284)

Ila: *cibinda* hunter (Torrend, 284); *cibinda* name given to iron doctor or smith (Fowler, 97; in class 7 instead of 1a, *cibinda* is ‘an old worn-out loin-cloth’); *sibinda* a chief; a leader, ringleader *Ubwasunu kateo sibinda wesu utuvuna* Today our chief who could save us is absent. *Sibinda nyaya banyama* The leader who dispatches the game. *Bwasubila kale ukwasibinda*, *ubwasunu wayaya kale* Our leader is already red, he’s killed already today (Fowler, 609)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya:
Mbalangwe:
 Proto-Zambezi Hook

Fwe:
Shanjo:

Other Savanna Bantu: Bemba (M42, Sabi): *cibindá* 1) owner of property 2) hunter, song-leader (Guthrie, 13) *cibinda* 1) an expert craftsman, leading actor, choir leader, expert dancer; one full of life and fun 2) responsible person 3) honey badger (White Fathers, 85); Bisa (M51, Sabi): *chibinda* hunter (Marks, 68) *icibinda* hunter (Madan, 109); Lamba (M54, Sabi): *icibinda* hunter (Doke 81); Luban langauges (L20-40, L60, Eastern Savanna Bantu): **kibinda* hunter (Ehret 1998: 313); KiLuba (L33, Eastern Savanna Bantu): *kibindà* chasseur usant bubinda (Gillis, 85) KiSwahili (G41, Kaskazi): *kuwinda* to hunt, to pursue a foe or fugitive (Tuki S-E, 366); Sabaki languages (subgroup of Kaskazi): **-bind(i)-* to hunt (Ehret 1998: 313); Tumbuka (N21, Kusi): *chibinda* hunter (Turner, 218), *kuβinda* to protect, or gain influence over by use of ‘medicine’ *kuβinda munda* to prevent theft, *kuβinda mwanakazi* to prevent adultery, *kuβinda nyama* to gain success in hunting, *chibinda* (*mu- βa-*, also *viβinda*, *nya* in plural only) one who excels, *chibinda wa sumu* a leader in songs, *chibinda wa nyama* a successful hunter, *chibinda wa marango* one who knows the law (Turner, 9); Lozi (K21, Kusi): *-binda-binda* to try to do a difficult thing, to be unequal to (Jalla, 20); *sibinda* ungovernability, fig. strong-headed person (Jalla, 392); Nkoya (L62, Luyana/ Southwest Bantu): *shibinda* hunter (Yukawa, 24); Lucazi (K13, Western Savanna Bantu): *civinda* blacksmith (Fleisch, 63); Lunda (L52, Western Savanna Bantu): *chi/ayi-binda* hunter; *ubinda* art of hunting, huntsmanship; *kubinda* to construct a strong framework of branches as a temporary shelter to keep off wild beasts; *ka-atu binda* youngest child (White, 12); Ruwund (L53, Western Savanna Bantu): *cibind-* hunter, *cibind- wa ânsh*-fisherman (Nash, 46); Ovimbundu (R11, Western Savanna Bantu): *uvinda* blacksmithing (WCAM, 154), *ocivinda* blacksmith (WCAM, 76);

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: Tumbuka (N21, Kusi): *chibindi* the liver, *kuβa chibindi* the be brave, *mutunge chibindi* pluck up courage (Turner, 9)

827

Root: **-nyanga*

Gloss: specialist ivory hunter

Protolanguage: recent areal tied to the spread of the ivory trade up the Zambezi River from the middle Zambezi zone

Etymology: This noun derives from a Kusi innovation for ‘horn’, **-nyàngá*, based on its attestation in Makua, Nyasa, Shona and Southeast Bantu languages (Ehret 1999: 136). However, the root spread along the Zambezi as an areal with the meaning ‘ivory’ in the Yao (P21, Kaskazi), Bisa (M51, Sabi), and Lwena (K14, Western Savanna Bantu) languages, undoubtedly during the late second millennium ivory trade, probably in the 19th century, based on the fact that

an attestation carrying the semantic innovation, ‘ivory,’ in Yao (Ehret 1999: 136). As the attestations below suggest, the root also spread into the western Botatwe languages, probably via Lozi, in a form referring to ‘specialist hunter,’ surely a specialist elephant hunter. The distribution of the different semantic innovations applied to the Kusi innovation for ‘horn’ tell us about the directions and contacts developed during the closing centuries of the second millennium as central African people found themselves on the inland moving frontiers of the Atlantic and Indian Ocean ivory trades.

Replaces:

Botatwe Distribution:

Soli:

Proto-Eastern Botatwe

Lundwe:

Proto-Kafue

Lenje:

Sala:

Tonga:

Ila: *bunyanga* the feel, lungs and heart of game, which only men were allowed to eat (Fowler, 61)

Proto-Falls

Toka:

Leya:

Proto-Western Botatwe

Proto-Machili

Totela:

Subiya: *sinyanga* hunter who is skilled and also knows medicines, leader of a hunting group

Mbalangwe: *chinyanga* professional, skilled, specialist hunter

Proto-Zambezi Hook

Fwe: *chinyanga* or *munyanga* professional hunter

Shanjo:

Other Savanna Bantu: Bisa (M51, Sabi): *inyanga* tusk (of elephant) (though note the use of *inzovu* for ‘tusk as article of trade’), Madan, 132); Shona (S10, Kusi): *mùnyàngá* ivory; Lozi (K21, Kusi): *sinyanga* hunter (Jalla, 412; O’Sullivan, 144); Luvale (K14, Luyana/Southwest Bantu): *chinyanga* hunter (White, 4), *chinyanga* professional hunter [who have poles for performing special dances?] (White 1955: 3); Lunda (L52, Western Savanna Bantu): *chi/ayi-nyanga* professional hunter *u-nyanga* skill in hunting or status of *chinyanga* (White, 53); Ovimbundu (R11, Western Savanna Bantu): *unyanga* skillfulness in hunting (WCAM, 149); *enyanga* a clever, successful hunter (WCAM, 14)

Other Bantu:

Other Non-Bantu:

Checked: Ahmed 1996; BLR3, Ehret 1998, Ehret 1999, Fourshey, Gonzales, Guthrie, Klieman, Meeussen, Pfouts 2003; Schoenbrun, Vansina 1990, Vansina 2004

Notes: