

**Fishwork in Uganda:
A Multispecies Ethnohistory about Fish, People, and Ideas about
Fish and People**

by

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“Women pull in the fishing nets made entirely of papyrus stalks, and the men on rafts out on the lake watch to protect them from the hippopotami. The top knots of the papyrus stalks make a compact net through which fish cannot escape. They eat all and everything they catch. If the fish is only half an inch long, they eat it. The women pulling the net are as innocent of clothing as angels in heaven, and as modest and moral as any of their sisters in the civilized world.”



"Women Dragging a Fish-net"

Photo and quote above from: Peter MacQueen, In *Wildest Africa: The Record of Hunting and Exploration Trip through Uganda, Victoria Nyanza, the Kilimanjaro Region and British East Africa, with an Account of an Ascent of the Snowfields of Mount Kibo, in East Central Africa, and a Description of the Various Native Tribes* (Boston: LC Page & Company, 1909), 284–285.

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Dedication

For Helen Virginia Johnson
(who always made grandpa gut his fish outside, because she didn't like the smell)

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as resources that could, and indeed should, be managed there.

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Note on Naming

In Bantu languages the “mu-” prefix denotes a person or living figure, with *muntu* being a general term for one person. The prefix “ba-” denotes more than one person, with *abantu* or simply *bantu* meaning people. In the Bantu-based languages spoken along the southern shores of what is now Uganda, the “mu-” and “bu-” prefixes are applied to root stems (such as –ganda or –soga) to reference where people are from, or said by others to belong. That is, one’s identity is always relational.

For example, a woman or man born and raised on Kome Island may be known as a Mukome (a person of Kome) when she or he is on mainland Buganda (where people known as the Baganda live). If he or she travels eastward to Busoga (where the Basoga people live), he or she will likely be called a Muganda (a person of Buganda). Unfortunately, there is no easily available English prefix that captures the gender-neutral nature of this foundational conception of personhood.

For ease of writing, and indeed because so much historical writing has focused on men, most “Mu-‘s” are interpreted as male by default, thereby ascribing a masculine gender onto vernacular historical concepts of being that may or may not have been gendered. As we will see, histories of figures like Mukasa – the most revered once-living guardian of the littoral -- have described Mukasa as either male or female, but mostly male. As we will see, Mukasa is simultaneously both genders, or perhaps more accurately, genderless.

Abstract

Located between the dry world of humans and the wet world of fish, the littoral, or shoreline, generates dynamic and sometimes confusing mixtures of people, fish, and ideas about how best to organize life at the shore. By foregrounding women's work with diverse species and forms of fish – both indigenous and introduced – alongside linked social and ecological transformations, *Fishwork in Uganda* retheorizes the intersection of gender, history, and sustainability around Africa's largest body of water. Known to English speakers as Lake Victoria, this lake has long been a crucible for transformative social dynamics characterized by the littoral. It is a place of heightened prospects for mobility mediated by alternative moralities of sexual and economic exchange and competing valuations of space and the material and metaphorical stuff of life, including fish. Lake Victoria is represented in popular culture as an ecosystem in constant crisis – a “sick giant” still “in the heart of darkness.”

By focusing on the gendered movements, meanings, and material forms of fish that circulated and still circulate within and beyond the littoral, this dissertation offers a very different account. It demonstrates that a seemingly singular body – Lake Victoria – is ontologically multiple, that is, there are at least four bodies of water brought into being over time through the everyday and eventful practices of working with fish; **Victoria Nyanza**, named in honor of Imperial England's Queen Victoria, associated with resistance to the establishment of colonial rule and the dangers of recalcitrant nature; **Lake Victoria**, the so-called modern lake tamed by technology and managed by a transnational cadre of fisheries and development experts towards the intercontinental export of the Nile perch, a large invasive species; **Ennyanja Nalubaale**, the “lake of the feminine guardians” who were widely considered to influence wellbeing along the littorals of

this “Pre-Victorian lake;” and **Nyanja**, the contemporary lake as its residents know and experience it, where concepts, preferences, and species from Ennyanja Nalubaale, Victoria Nyanza, and Lake Victoria converge and reveal possibilities for a “Post-Victorian” vision of this body of water attentive to the multivocal and multispecies concerns of littoral residents and fish on their own terms.

Chapter One situates this study’s analysis of the histories that a century of scholarly focus on Lake Victoria has submerged within scholarly literatures and popular narratives about this body of water and its fisheries. Chapter Two details the methods used in this study, as well as the contributions of key interlocutors. Chapter Three details vernacular, scientific, and managerial readings of a type of fish known as *enkejje*, haplochromine cichlids, and “trash,” respectively, including a historical reconstruction of fishing gears, practices, and the meanings they embodied. Chapter Four reexamines Uganda’s early colonial encounters, focusing on islands and the transformation of Mukasa (the King Guardian of Ennyanja Nalubaale) from a multiply gendered figure to a single male figure. Chapter Five focuses on littoral vegetation and historical fishing to reexamine Uganda’s sleeping sickness outbreak in the early years of the 20th Century as well as the inauguration of Lake Victoria’s fishing industry. Chapter Six reconstructs a practice known as *okuwalula abaana*, or “hatching the children,” to retheorize the work of women in forming pre-colonial polities in what would become Uganda. Chapter Seven returns to Uganda’s contemporary fisheries and women’s work with technically illegal fish to rethink Lake Victoria’s assumed Nile perch fishery crisis. This study concludes with a brief epilogue posing the question: what futures might become possible for this body of water and its fisheries if Lake Victoria was allowed to die.

Chapter One

A Dying Lake, a Living Nyanja, and Other Bodies of Water

This is a study about a lake long considered one thing – Lake Victoria. By focusing on fisheries – as material things, practices, and concepts that straddle the artificial divide between nature and culture – I demonstrate that there are multiple ontologically different bodies of water historically and contemporaneously in play there. As we will see, these bodies of water are brought into existence (and some into extinction) over time through the different work that fish, people, and ideas about fish and people do.

Now bordered by Uganda, Kenya, and Tanzania in eastern Africa, the bodies of water at stake in this study are the largest of their kind – warm, productive, and African. At over 26,000 square miles in surface area, they are about the size of the American states of Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island, and the District of Columbia combined. Although its watershed does not extend far into Uganda from its northern shores, it is here where the “White Nile” begins its over four-thousand mile journey up through the wetlands, lakes, and deserts of South Sudan, Sudan, and Egypt, and finally into the Mediterranean Sea.

The hydrological extent of what is commonly known as the Lake Victoria watershed, or Lake Victoria Basin, is at least three times larger than the lake itself. Pictured in Figure 1-1, the basin includes all land, water, and variously wet lands west of the so-called White Highlands of Kenya, and north of Tanzania’s Serengeti plains. It extends several hundred miles from the southwestern shores of the lake across the political boundaries separating Uganda and

Tanzania from Rwanda and Burundi up to the crests of a large and long chain of mountains that mark a hydrological separation between this and three other great African lake basins. To the west of this basin's western boundary are the eastern shores of Lakes Edward, Kivu, and Tanganyika — lakes over which the contemporary administrative boundaries separating Burundi, Kenya, Rwanda, Tanzania, and Uganda from the Democratic Republic of the Congo (DRC) are drawn. The westernmost extent of the Lake Victoria Basin marks the administrative end of East Africa, and the beginning of Central Africa.

These administrative boundaries, however, are not as clearly articulated in practice as they may appear on paper. As just one example, the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (DRC), or MONUSCO, is located in Uganda's formal colonial administrative capital of Entebbe. MONUSCO and their "Intervention Brigade" are authorized by the United Nations to do much of the administrative work of a state in the DRC — protect citizens, disarm rebel groups, and support national and international judicial processes. As we will see, it is difficult to determine exactly where these administrative boundaries end and others begin.

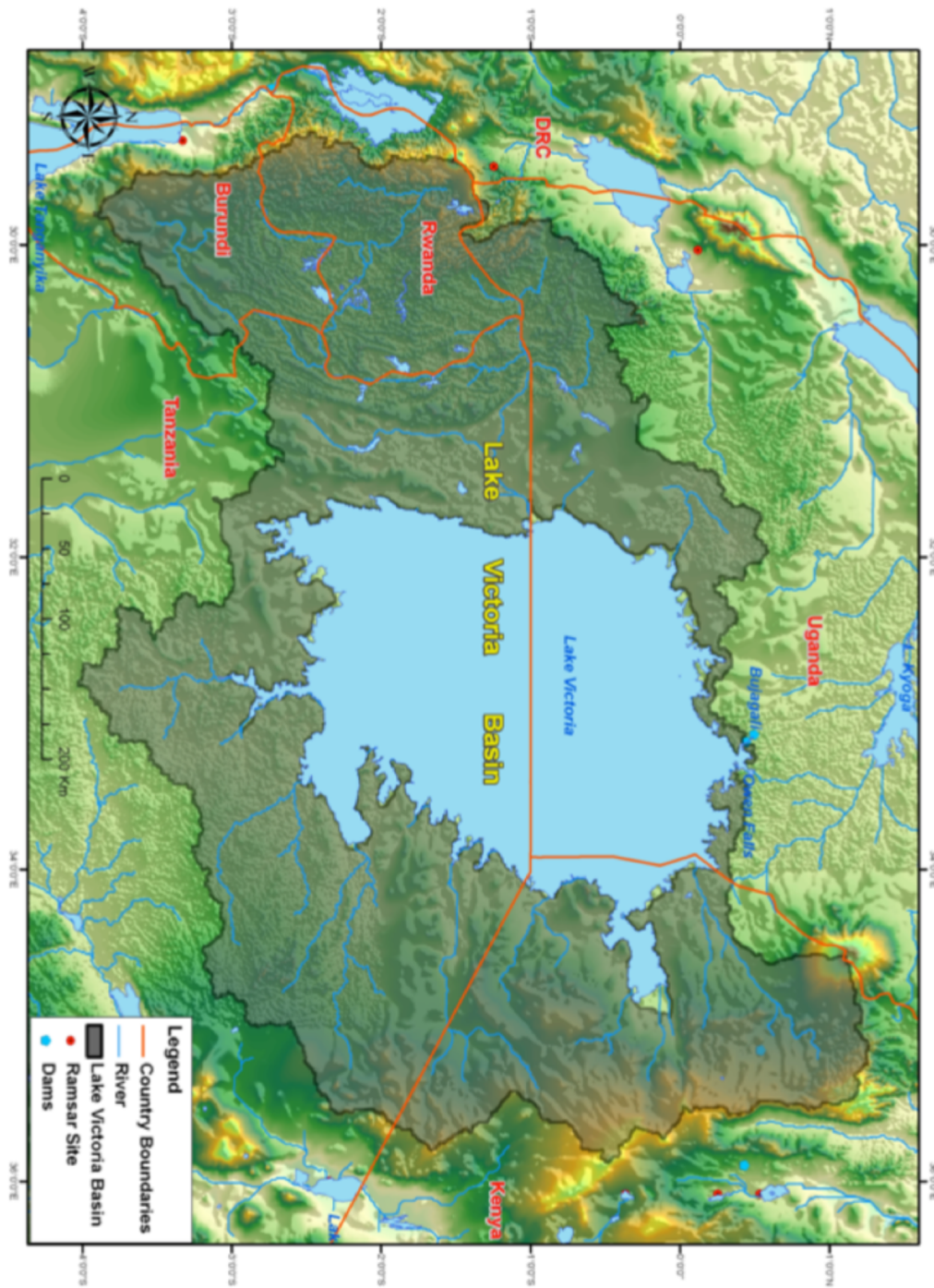


Figure 1-1: Lake Victoria Basin. Note, although there are more than one hundred islands within the basin, none are depicted here. From: UNEP, “Lake Victoria Basin,” GRID Africa GeoPortal (United Nations Environment Program, 2013)

Approximately one hundred and twenty islands skirt Uganda's highly crenellated southern coastline. These islands vary in size and character from large and densely settled landmasses with fertile soils, rolling hills, and hardwood forests to uninhabited clusters of rocky outcroppings appearing to offer merely a resting place for weary birds in flight. The physical territory of these islands, and the cultural histories of their residents, however, remains largely off the map. Almost 20% of all geographical territory now known as Uganda is composed of open water or permanent wetlands (approximately 40% in rainy seasons). General geographical accounts describe the country as having no actual coastline because, without a coastline that borders an ocean, Uganda is considered completely landlocked.¹

More than just an artifact of sloppy geographical classification, Uganda's contemporary landlocked status highlights an uneasy correspondence between the practices, perspectives, and materials through which different versions of these lakes come into being.

Littoral Bodies of Water

Residents of the three countries that share these cosmopolitan shores – Uganda, Kenya, and Tanzania – speak many different languages; some residents there are from Rwanda, Burundi, and the DRC. Most, however, use a similarly distinct term when referring to this body of water. They call it Nyanja or Nyanza.² Nyanja, as this study will demonstrate, is not

¹ "The World Factbook," Central Intelligence Agency, accessed October 21, 2013,

<https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html>. "The World Factbook." 2013.

²Nyanza is the term used often by residents of Kenya and Tanzania who grew up speaking Kiswahili – whether as their first language, their "mother tongue," or as a language taught in school and/or learned while interacting with other Kiswahili speakers. Luo speakers may refer to this body of water as Nam, or Nam Lolwe. Nyanja is the term most often used by residents of northwestern Tanzania and most of Uganda, but also in Mozambique, Malawi, and Zambia. Because this study focuses on the history of the geographical territory now known as contemporary Buganda, which is centered between the Nile river in the east and Uganda's lake border with

Lake Victoria.

Nyanja isn't even a lake.

Nyanja is a term that references the uncontainable material and metaphoric qualities of certain bodies of water. A particular Nyanja could be a wide and vigorously flowing river, like the Mayanja or Namayanja, twin streams that spring forth from the top of a hill in south-central Uganda and combine to flow as a river into one in a northwestern direction for almost one hundred miles. Or, it could be a body of water that is completely encircled by land, but is so large that it is dangerous, maybe even impossible, to navigate a straight course directly from one end to another.

Nyanja references more than simply the physical attributes of these exceptional and exceptionally moving bodies of water. For some residents who proclaim themselves to be proficient in the traditions of their ancestors, Nyanja represents the life-giving possibilities that women possess as lovers, mothers, grandparents, and stewards of land, but also the proficiencies of men as lovers, fathers, grandparents and catchers of fish in distant waters. The Nya- and Na- prefixes on terms and titles of historical authorities there indicate their associations with femininity, though most remembered titles of political authority are now almost always remembered as belonging to men. As one littoral cultural expert told me, "In ancient culture women were not so much considered, not until the whites came." This, as this study will demonstrate, is reflective of what Eric Hobsbawm and Terence Ranger have described as the invention of tradition.³

Tanzania in the south – I use the term Nyanja throughout this text.

³ Terence O. Ranger and Eric J. Hobsbawm, *The Invention of Tradition* (Cambridge: Cambridge University Press, 1983).

The Nyanja around and within which this study focuses, like many regional rivers, are still considered by some littoral residents to have actually sprung forth from the waters that break inside the bodies of women just before the labor of childbirth begins. That is, Nyanja emerge through what Hugh Raffles might call one of many “aquatic or “fluvial intimacies” between women and men.⁴ However, the actual material stuff of life that makes Nyanja possible, “delicious, quenching, and healing water,” emerges specifically from the body of a woman.⁵

The waters that nourish the Nyanja once splashed the earth, alerting a long-pregnant woman, and those around her that their new baby is on its way. The women who formed these Nyanja long ago, however, did not deliver normally. Maybe most were expecting to bear children at the time their waters burst, but instead of children some say they produced only water.

Lots and lots of water.

There is good reason to believe that the waters through which Nyanja once came into existence are not comprised of fluids from a single eruption of an amniotic sac, but rather are

⁴ Hugh Raffles, *In Amazonia: A Natural History* (Princeton N.J.: Princeton University Press, 2002); Hugh Raffles, “Fluvial Intimacies,” in *Waterscapes: The Cultural Politics of a Natural Resource*, ed. Amita Baviskar (New Delhi: Permanent Black, 2007).

⁵ The quote in the main text above is from Kasirye Zzibukulimbwa, “The Beginning of Ennyanja Nalubaale and the Inhabitants of the Lake,” trans. Robert Bakaaki (Entebbe and Kampala, Uganda, November 14, 2011), 22. Christopher Wrigley reads Appolo Kaggwa to reach a different conclusion. He describes these rivers as forming because prior his ascension to the throne, King Kiggala “lay with his sister Nazibanja who gave birth to the twin Mayanja rivers.” This myth, Wrigley argues, offers evidence for sacred Kingship – the “sacred one must prove his sacredness by an act that in profane life was most stringently forbidden.” Kiggala, he argues, is “the father of the rivers,” saying nothing more of the mother, or sister of these rivers. The contemporary littoral residents that inform my interpretation – interestingly, only men have told me stories about this – do not mention men or King Kiggala when they talk of the Mayanja rivers being born. That is, they attribute parentage of the Nyanja to women, not to men. Christopher Wrigley, *Kingship and State: The Buganda Dynasty* (Cambridge: Cambridge University Press, 1996), 155–156.

the kinds of waters that spring forth over time as uncontainable evidence for women's, and presumably men's, mutual pleasure, affection, and interdependence.⁶

They not only link fluids to the interconnections between royalty and commoners – they link bodies of water to the life-giving abilities of women's bodies as mothers.⁷ As Rhiannon Stephens has demonstrated, the powers of a royal woman like Namayanja, who features in the canoe song included below, are “derived from her maternity and activated by her widowhood.”⁸

Namayanja: kubakungoma erawe	Namayanja: beat the drum, let it speak out
Namayanja: abazalakabaka bazala	Namayanja: those who bare [sic] the king bare
Namayanja: kubakungoma erawe	[sic] well
Namayanja: azala Kabaka	Namayanja: Beat the drum, let it speak out
alilusaka	Namayanja: she who bore the king is at Lusaka
Namayanja!	Namayanja!

⁶ These liquids are similar to those Christopher Taylor has described for Rwanda as *imaana* – fluids through which Kingly authority, the health of land and of resident are mediated and circulate. Taylor, however, overlooks conceptually productive Rwandan sexual practices that produce waters like *Nyanja*. *Imaana* is as much about women's everyday sexual pleasure as it is about masculine royal authority. It is no coincidence that one word for vagina in use at the littoral is *emaana*. Although these are spelled differently, David Schoenbrun confirms that link between the two. David Lee Schoenbrun, *The Historical Reconstruction of Great Lakes Bantu Cultural Vocabulary: Etymologies and Distributions* (Rüdiger Köppe Verlag, 1997), 215–216. See also: Deborah Kaspin, “A Chewa Cosmology of the Body,” *American Ethnologist* 23, no. 3 (1996): 561–78.

⁷ Harry Hamilton Johnston, *The Uganda Protectorate: An Attempt to Give Some Description of the Physical Geography, Botany, Zoology, Anthropology, Languages and History of the Territories under British Protection in East Central Africa, between the Congo Free State and the Rift Valley and between the First Degree of South Latitude and the Fifth Degree of North Latitude* (London: Hutchinson & co., 1902), 699.

⁸ Rhiannon Stephens, *A History of African Motherhood: The Case of Uganda, 700-1900*, vol. 127 (Cambridge University Press, 2013), 106.



Figure 1-2: "Sezibwa Waterfall, Kyagwe, Uganda." From Roscoe, *The Baganda*, 1911. Frontispiece.

One account of the origins of Nyanja stressed that a child was indeed eventually born from these waters that brought the Nyanja into existence, but not until the child's parents produced lots and lots of water. This child was named Mukasa, and became famous around Nyanja and beyond as the guardian of the multiple objects and phenomena that presented themselves within and around the Nyanja itself. Mukasa offered timely and practical advice on

how to best bear children, behave, and engage (or not) with outsiders. After Mukasa's death, Mukasa was made known through winds, rain, and gifts of twins – a male-female pair being the most treasured form. Safety on the lake and perennially productive banana gardens were also expressions of the duality of Mukasa's domain. Mukasa's abilities to overcome immense heat, for example, extinguishing a spreading house-fire through a just-in-time downpour, associated Mukasa with the production of iron for hooks to catch fish, hoes to farm the land, and weapons to protect littoral residents' abilities to pursue both activities. Both the canoe paddle and hammerstone were once widely known material symbols of Mukasa, referencing the interconnections between water, land, and the littoral, and between liquid, metal and stone.⁹

Mukasa's multiple natures, however, make it analytically irresponsible to refer to him as a singular entity as I just did. To call Mukasa a man is to ignore that when the earliest European explorers, missionaries, and traders encountered Mukasa; they encountered the still-strong physical body of a postmenopausal woman. The problems associated with interpreting Mukasa within Euro-American frameworks will be taken up in the chapters that follow. It is important to note now that when contemporary scholars and littoral residents refer to Mukasa, they refer to a man. However, when Protestant missionary Alexander MacKay first wrote home in 1880 about “the Lubare...Mokassa,” however, he referred to an old woman:”

For several months I have found the word Lubare more or less in every one's mouth. Many spoke of the name with awe, while others refused to say anything good or bad of such a being. At last I learned that the lubare was really a spirit, but was personified in an individual – an old woman – who lives on the lake.¹⁰

⁹ John Roscoe, *The Baganda; an Account of Their Native Customs and Beliefs* (London: Macmillan and co., limited, 1911), 290.

¹⁰ CMS, “Letter from Mr. A.M. Mackay January 7, 1880,” *Church Missionary Intelligencer and Record*, 1880, 419.

By the time MacKay's letters and journals were edited by his sister and published in 1893, the being MacKay originally described as "the lake goddess Mokassa," had become one of several "men [who] were great liars, and Mukasa as the head of the *lubare*" Harrison quotes MacKay as stating the Mukasa "was the greatest liar, and the greatest rebel of all."¹¹ Almost twenty years later, Martin Hall, a Protestant missionary assigned to the Ssesse Islands and Mukasa's watery domain recounted:

There was also a class of persons, chiefly old women, called *Nakangu*, who were said to be inspired by the gods, and were consulted on almost all knotty points. There still lives one of these women on the island of Bukasa. She was a specially celebrated soothsayer in the old days. She was the one who went up to Mengo in Mackay's time to try to cure Mtesa's illness, and who succeeded in reviving the old heathen customs of worship in the king's enclosure. Heathenism is almost dead on Bukasa now, thank god! And is "sick unto death" throughout Buganda.¹²

Whether or not Nyanja's contemporary residents believe that various Nyanja's were created through childbirth, or believe that Mukasa was a man – and many do – they may, from time to time, refer to this body of water as Lake Victoria. This is not a slip of the tongue, but rather, marks the intentional use of an "exotic phrase" when the more commonly used term there, Nyanja, does not satisfyingly capture the entity or phenomena being discussed in the same way that "Lake Victoria" does.

Significantly, women fishworkers who do not speak English will frequently use the English words "capital" and "customer." In littoral vernacular, "capital" refers to the amount of money one has or does not have to purchase fish at any given time. When littoral residents use the phrase "my customer," they reference economic relationships without ascribing specific

11 Mrs. J.W. Harrison, A.M. Mackay, Pioneer Missionary of the Church Missionary Society to Uganda (Hodder and Stoughton, 1893), 151.

12 Martin John Hall, Through My Spectacles in Uganda: Or the Story of a Fruitful Field (Church Missionary Society, 1898), 97.

roles of buyers or seller. “My customer” refers to people who purchase things *and* to people from whom these things are purchased. Though this term references relationships generated through the exchange of goods or services for cash, a “customer” is not a stranger. They are familiars who repeatedly buy *or* sell with whomever is using the term. For example, sometimes a fisherman obtains a particularly large quantity of fish, but there are few buyers immediately available to purchase them. When this happens, he may call one of his customers on the phone to see whether she would like to purchase his fish. If she does, but does not have capital available at the moment, her customer (the fisherman) may offer to give her the fish on credit. If he is a particularly “good customer” he may even have one of his other customers (in this instance a motorcycle driver) deliver the fish to her home.

For empirical philosopher and ethnographer of the body Annemarie Mol, “ontological politics...has to do with the way in which problems are framed, bodies are shaped, and lives are pushed and pulled into one shape or another.”¹³ In her study of how atherosclerosis is enacted in a particular Dutch teaching hospital, Mol demonstrates that objects – in her case, bodies -- are not singular already existing entities interpreted differently by differently situated actors. Rather, because different actors experience, use, and shape different concepts and material components of bodies, they are ontologically multiple. Her work thus far has not been to judge the multiple ontologies that she describes ethnographically. Instead, she offers a theoretical repertoire for others to think with and make their own judgments. As Webb Keane has suggested, “ontologies, as something people might be able to talk about, are a response to the

13 Annemarie Mol, *The Body Multiple: Ontology in Medical Practice* (Duke University Press, 2002), viii.

ethical demands of social life (which may include relations with animals and other entities).¹⁴ It is, he argues, “*within* the world” and not some “set of beliefs about the world” that ethical positions are formed and where the consequences of multiple ontologies play themselves out.¹⁵

Fisheries, by their very definition, cannot exist without humans and fish. Fish help to navigate the potentially slippery terrains of cultural and ecological change that follow. Ideas about what the interactions between people and fish are not simply different interpretations; they are based on different interactions and experiences with materially different fish. This brings very different bodies of water into being through different bodies of fish.

The littoral practices and knowledges described in the chapters that follow advance theoretical and methodological approaches ranging beyond question of management, but nevertheless have vital implications for future of fishwork.¹⁶ While scholarship on traditional, local, or indigenous ecological knowledge offers key insights on seasonality, fishing practice, ecosystem health, consumption, ritual practice, and resource access, they do not accurately correspond to the situated realities and ambitions of Nyanja's littoral residents.¹⁷ Nor has a

14 Webb Keane, “Ontologies, Anthropologists, and Ethical Life,” *HAU: Journal of Ethnographic Theory* 3, no. 1 (2013): 188.

15 *Ibid.*, 190.

16 E. Ostrom, “A General Framework for Analyzing Sustainability of Social-Ecological Systems,” *Science* 325, no. 5939 (July 2009): 419–22, doi:10.1126/science.1172133; James Acheson and Bonnie McCay, *The Question of the Commons: The Culture and Ecology of Communal Resources* (Tucson: University of Arizona Press, 1990); Svein Jentoft, Bonnie J. McCay, and Douglas C. Wilson, “Social Theory and Fisheries Co-Management,” *Marine Policy* 22, no. 4–5 (1998): 423–36.

17 Andrew S. Mathews, “Unlikely Alliances: Encounters between State Science, Nature Spirits, and Indigenous Industrial Forestry in Mexico, 1926–2008,” *Current Anthropology* 50, no. 1 (February 1, 2009): 75–101; Berkes, *Sacred Ecology: Traditional Ecological Knowledge and Resource Management* (Hemisphere Pub, 1999); A. Davis and J. R. Wagner, “Who Knows? On the Importance of Identifying ‘experts’ When Researching Local Ecological Knowledge,” *Human Ecology* 31, no. 3 (2003): 463–89; Sam Bikangaga et al., “Perceived Benefits of Littoral Wetlands in Uganda: A Focus on the Nabugabo Wetlands,” *Wetlands Ecology and Management* 15, no. 6 (December 1, 2007): 529–35; Daniel P. Kisangau et al., “Use of Traditional Medicines in the Management of HIV/AIDS Opportunistic Infections in Tanzania: A Case in the Bukoba Rural District,” *Journal of Ethnobiology and Ethnomedicine* 3, no. 1 (2007): 29.

formal activist culture developed here.¹⁸ Instead, I focus on the vernacular – the working knowledge and practices that littoral residents innovate – as they live and move amongst particular littoral places where the multi-species politics of commerce, patronage, conservation, property, and post-colonialism converge.¹⁹ Even in a region solidly understood as “belonging to the Baganda,” that is, the geographically territory known as Buganda, it is common for at least five vernacular languages and English to be in use at any given time, because so many people who live there are from other places and grew up speaking different languages. Regular movements between littoral places, consumption and reinvention of global urban culture, and aspirations for regional integration, resemble those experienced and expressed amongst the region's urban elite and international managerial professionals, amongst others.

At its most basic formulation, a managerial ontology emerges from the materials and concepts that enact the “view from above” and the idea that what is below can and should be parsed into individual components for their development and control. In fisheries, managerial ontologies come into being through material and methodological practices (e.g. tons of fillets processed in a factory analyzed for microbial loads, data from research trawl surveys, or maps of fishing territories not yet “fully exploited”), as well as epistemological commitments (e.g. to

18 K. Fortun, *Advocacy after Bhopal: Environmentalism, Disaster, New Global Orders* (University of Chicago Press, 2001).

19 Rebecca Hardin, “Concessionary Politics: Property, Patronage, and Political Rivalry in Central African Forest Management: With CA Comment by Serge Bahuchet,” *Current Anthropology* 52, no. S3 (2011): S113–25; M. J. Remis and R. Hardin, “Transvalued Species in an African Forest,” *Conservation Biology* 23, no. 6 (2009): 1588–96; Pnina Werbner, ed., *Anthropology and the New Cosmopolitanism: Rooted, Feminist and Vernacular Perspectives*. (Oxford: Berg, 2008); Tsing, “Worlding the Matsutake Diaspora, Or, Can Actor-Network Theory Experiment with Holism?,” in *Experiments in Holism: Theory and Practice in Contemporary Anthropology* (Oxford: Wiley-Blackwell, 2010), 53–76; Tsing, “Arts of Inclusion, or How to Love a Mushroom,” *Mānoa* 22, no. 2 (2010): 191–203; Tim Ingold, *Epilogue: Towards a Politics of Dwelling*, 2nd ed., vol. 3, 2005; Mamadou Diouf, “The Senegalese Murid Trade Diaspora and the Making of a Vernacular Cosmopolitanism,” *Public Culture* 12, no. 3 (October 1, 2000): 679–702.

science, development, and donor institutions) directed towards the taming of nature and the control of culture. These combine to create a bounded lake, and a landlocked Uganda.



Figure 1-3: The Rhodes Colossus From: Edward Linley Sambourne (1844–1910), in Punch and Exploring History 1400-1900: An Anthology of Primary Sources, by Rachel C. Gibbons

Littoral ontologies come into being through experiences with fish and a body of water that are simultaneously nourishing and potentially dangerous. They are enacted through different, but no less real, kinds of materials and methods (e.g. cravings for the oily flesh of the Nile perch over the drier flesh of tilapia, or the use of fishing nets that simultaneously catch fish for intercontinental export and local markets), and commitments (e.g. to family, friends, and “customers”). At their most basic, littoral ontologies emerge from the practices, materials, and

perspectives that allow for living well within. Together they create a permeable shoreline, and a Uganda defined by water as far as the eye can see.



Figure 1-4: Walking Towards the Littoral. Kome Island facing the open water.

The separate material and conceptual terrain outlined above for littoral and managerial ontologies are not completely discrete domains of practice and thought, and they cannot they accurately be described as either African or Euro-American. There are moments of coherence that cut across continents. For example, most high-level African fisheries scientists and managers have received university degrees, and short course training certificates in Europe, North America, and increasingly China and Egypt. Their work is published in academic journals and policy reports and widely read. They may have participated in adventurous fisheries surveys, including those that involve hauling and counting fish on the decks of research vessels, or interviewing fishworkers, but none (to my knowledge) have ever made their living from fishing, processing, or selling fish.

Littoral ontologies do not end directly at the littoral. Lake Victoria and its fish in general appear in vernacular and English national newspapers and television talk shows in politically charged commentary addressing corruption, inequality, and the precarities of financial accumulation in a globalized world. Fish offer a way to signal the decay of once promising institutions attributed to political leaders who “overstay” in office as in: “a fish rots from its head.” Although this expression is in no way unique to Uganda, given the especially large bodily forms and oily flesh of the introduced Nile perch, the metaphor generates particularly visceral sentiments there. The potential profits from a particularly large catch of Nile perch, as well as their awareness of the international drivers of investments in Uganda have inspired some fishermen to playfully refer to Lake Victoria itself as “the World Bank.”

The differences between large Nile perch and small *enkeje* generate additional comparative material for commentary on the differential meting out of justice and punishment between the wealthy and the poor. In 2012, a businesswoman, socialite, and tabloid news icon known as “Bad Black” was sentenced to four years in prison for embezzling over 4 million USD from a company she owned with her European boyfriend many years her senior. She appeared to be an expert in “detoothing,” as it is referred to in Ugandan English, what some of its practitioners term “Uglish” – the practice of well-educated young women using feminine wiles to extract as much wealth and pleasure from men as possible. Not long after sentencing, she was released on bail citing “serious medical complications that could only be treated in Dubai,” in part, related to a pair of breast implants that she had obtained prior to her conviction and

sentencing. These, she argued, “needed medical attention.”²⁰ When news began to circulate that Bad Black was released from prison on bail, it was common to hear a version of “if she was an ordinary peasant she'd be speared on a stick like *enkejje*, but because she's 'Bad Black,' they export her from jail like a precious Nile perch.”

This fisheries-focused study engages the proposition that historical residents of the lakeshore were no less observant of and concerned with the qualities and abundance of *enkejje* than are contemporary fisheries scientists concerned with understanding and sustaining viable populations of Haplochromines in Lake Victoria. Though it diverges from the scientific lamentations, and subsequent exuberance that accompanied past efforts to document the decline of Haplochromines and the recent race to uncover the origins of this 'aquatic tribe.' It instead attempts to describe a time during which historical residents of this Nyanja's island and mainland shores worked to live well with each other by trying to live well with fish. This reveals fisheries practices that contemporary residents now describe as “ancient,” but nevertheless offer insights into the kinds of uses for fish and the shoreline that have, and may again, come to benefit both fish and people in the lake. In so doing, I consider what historians, anthropologists, and natural scientists might learn from each other when a concerted effort is made to traverse between the elements and surfaces that seemingly separate the dry world of humans (“culture”) from the wet world of fish (“nature”).

²⁰“Bad Black” later “jumped bail” and was eventually arrested in Rwanda, where she was taken back to Uganda to serve her sentence. Hillary Nsambu, “Bad Black Denied Bail,” *The New Vision*, 2014, June 18, 2013 edition, <http://www.newvision.co.ug/news/656715-bad-black-denied-bail.html>.

Buganda, Uganda, and the Submerged Political History of the Littoral

Buganda, where this study focuses, was the strategic stage on and from which European, but also American, Belgian, and German imperialism was built in central and eastern Africa. Beginning in the 1860s, explorers, traders, surveyors, administrators, leisure travelers, and lay ethnographers began writing lengthy texts of their encounters to, from, and within Buganda. These circulated widely amongst English-speakers interested in adventurous accounts of faraway lands and generated increased investments, but also heated debates about the kinds of material technologies – steamships, railroads, Bibles, printing presses, and guns that shifted the metaphorical terrain that made these accounts possible.²¹ Uganda as a geographical place and a space of managerial intervention much larger than Buganda came alive on the pages of these texts. The accounts of these English speakers describe the people who then lived in what would become Uganda as both living objects of a distant Euro-American past and as subjects amenable to the kinds of historical progress that newly industrialized Europe and America had to offer.

Buganda and Uganda offer fascinating places from which to examine the conceptual and

²¹ Consider for example: John Hanning Speke, *What Led to the Discovery of the Source of the Nile* (Edinburgh: William Blackwood & Sons, 1864); John Hanning Speke, *Journal of the Discovery of the Source of the Nile* (New York: Harper & Brothers, 1864); Henry Morton Stanley, *Through the Dark Continent: Or, The Sources of the Nile, Around the Great Lakes of Equatorial Africa, and Down the Livingstone River to the Atlantic Ocean*, vol. 2 (London: George Newnes, Limited, 1899); J. T. Headley, *Great Explorations in the Wilds of Africa: Including Sir Samuel Baker's Expedition, Lieut. Cameron's "Across Africa," and Henry M. Stanley's "The Congo Free State."* (A.H. Hovey, 1886); Harrison, A.M. Mackay; Albert Bushnell Lloyd, *In Dwarf Land and Cannibal Country: A Record of Travel and Discovery in Central Africa* (C. Scribner's sons, 1899); Harry Hamilton Johnston, *The Nile Quest; a Record of the Exploration of the Nile and Its Basin* (New York: Frederick A. Stokes Company, 1903); W. Grinton Berry, *Bishop Hannington and the Story of the Uganda Mission* (New York: Fleming H. Revell Company, 1908); Leonard John Vanden Bergh, *On the Trail of the Pigmies: An Anthropological Exploration under the Cooperation of the American Museum of Natural History and American Universities* (New York: James A. McCann Co., 1921). Following the expiration of their respective copyrights, these sources are now available online in open access formats on websites including Google Books and archive.org.

material shifts that accompanied “imperial penetration” into one of the most cosmopolitan inland coastal locations in Africa.²² Though the boundaries of Buganda were eventually mapped, expanded, and mapped again, the Baganda people did and still do not comprise a territorially bounded ethnic group. People, materials, and ideas from the Swahili coast to the Mediterranean Sea and from central and southern Africa have been circulating there at least for one thousand years, long before Europeans ever knew the body of water they would call Lake Victoria ever existed.²³

The contemporary boundaries of Buganda now include almost all of the islands that fringe the southern shores of Uganda, which are themselves products of successful collaborations between European colonial administrators and elites of the Baganda Kingdom, but also amoebic protozoans traveling in the blood of tsetse flies, and interconnected ideas about the proper place of religion in politics and commerce.²⁴ Prior to 1900, the hundreds of islands that fringe the southern shores of what would become Uganda were affiliated with Buganda and neighboring landed polities to varying degrees, although they did not belong to any one of them. Indeed, according to John Roscoe, a Protestant Missionary and the most thorough and widely-cited early ethnographer of Buganda, “when the islands were brought into

²²This quoted phrase is from: Michael Twaddle, “The Emergence of Politico-Religious Groupings in Late Nineteenth-Century Buganda,” *Journal of African History* 29, no. 1 (1988): 85.

²³ Andrew Reid, “Buganda: Unearthing an African Kingdom,” *Archaeology International* 7 (2003): 41; Michael G. Kenny, “Pre-Colonial Trade in Eastern Lake Victoria,” *Azania: Archeological Research in Africa* 14, no. 1 (1979): 97–107.

²⁴ For an examination of Buganda's expansion alongside the expansion of colonial administration see: A. D. Roberts, “The Sub-Imperialism of the Baganda,” *Journal of African History* 3, no. 3 (1962): 435–50. For a more recent regional treatment of physical and social boundaries in the Great Lakes region, see: Henri Médard, “Building and Transgressing Borders in the Great Lakes Region of East Africa,” *Journal of Eastern African Studies* 3, no. 2 (2009): 275–83. Médard, however, seems to underestimate the historical resistance of the Bavuma Islanders to mainland administration, noting that it seemed that only the Banyoro, northwest of Buganda who seemed to have resisted integration into the Buganda Kingdom. Subduing the islanders through militarized conflict helped create the conditions for sleeping sickness to do its work.

subjection, they were allotted to different chiefs whose districts did not touch the lake; hence almost every important chief held either land on one of the islands, or land which bordered upon the lake.”²⁵ The reasons for and processes of this subjugation will be taken up in different ways in Chapters Four and Five of this study. It is important to note here, however, that although the large majority of Uganda’s islands are now considered to always have belonged to Buganda, this was not the case on paper until 1900, and not the case in practice until several decades later. The islands become a part of Buganda only after most littoral residents had been forcibly resettled inland or had already died of a disease identified as sleeping sickness.²⁶

Archeologists, social historians, and ethnographers of this region have all suggested that the mainland and island littoral along the southern shores of Uganda form an interconnected cultural area.²⁷ Historical littoral residents, these scholars may argue, may have had more in common with residents two-hundred miles across the lake than they may have had with residents just one mile away inland. Still, it has been difficult for these same scholars to take their own insights seriously. Much of the difficulty associated with an outbreak of sleeping sickness in the earliest years of the 1900s said to have killed upwards of 300,000 littoral

²⁵ Roscoe, *The Baganda*, 391.

²⁶ For a recent examination of the extension of Buganda’s borders inland see: Shane Doyle, “Immigrants and Indigenes: The Lost Counties Dispute and the Evolution of Ethnic Identity in Colonial Buganda,” *Journal of Eastern African Studies* 3, no. 2 (2009): 284–302.

²⁷ See for example: David W. Cohen, “The Cwezi Cult,” *Journal of African History* 9, no. 4 (1968): 651–57.10; Jürgen Jensen, “Die Erweiterung Des Lungenfischs-Clans in Buganda (Uganda) Durch Den Anschluss von Bavuma Gruppen,” trans. Annette Klein, *Sociologus* 19 (1969): 153–65.; Jürgen Jensen, “Assimilationstendenzen Und Identitätsstreben Bei Einigen Ethnischen Minoritäten Im Südlichen Uganda,” trans. Annette Klein, *Ethnische Minoritäten Im Prozeß Nationaler Integration in Afrika*. Hamburg, 1974, 45–58; Michael G. Kenny, “The Powers of Lake Victoria,” *Anthropos Freiburg* 72, no. 5–6 (1977): 717–33; H. O. Ayot, *Historical Texts of the Lake Region of East Africa* (Nairobi: Kenya Literature Bureau, 1977); Michael G. Kenny, “A Stranger from the Lake: A Theme in the History of the Lake Victoria Shorelands,” *Azania* 17, no. 1 (1982): 1–26; David W. Cohen, “Towards a Reconstructed Past: Historical Texts from Busoga, Uganda” (British Academy, 1986); David W. Cohen and Atieno Odhiambo, *Siaya : The Historical Anthropology of an African Landscape* (Athens: Ohio University Press, 1989).

residents between 1900 and 1910 alone. By 1907, one long-serving Protestant missionary declared that: “the fishermen on the lake shores have become practically an extinct race.”²⁸ Four years later, John Roscoe noted, “it is impossible” to study the history and culture of the islands “owing to the barrier raised by the terrible disease [sleeping sickness]...which has been so prevalent on the islands and along the shores of the lake.”²⁹

In the decade that followed the publishing of Roscoe’s tome, *The Customs of the Baganda*, the colonial state, African elites, and their armies worked hard to erect barriers of a different kind. They established colonial political boundaries that later became national ones -- between Buganda and Busoga, for example, and between British-claimed Uganda and German-claimed Tanganyika on the western shores of Lake Victoria. The concepts and material practices that accompanied the establishment of so-called modern governance in Uganda and in colonial Africa more broadly were initiated by men and women who believed that nature is something that must be overcome.³⁰

In 1900, Harry Johnston and eight Baganda male elites signed the most enduring treaty between “Her Majesty the Queen of Great Britain and Ireland, Empress of India” and “the people of Uganda.” Johnston, in his words, was committed to “fight[ing] the devil of reactionary Nature if our species is to be preserved” through “faith in a divine purpose.” For Johnston, Jesus Christ produced “the only faith worth dying for.” Because “God made man,” Johnston argued, this “Divine purpose of our evolution and existence” was “the conquest of this

²⁸ Alfred R. Tucker, *Eighteen Years in Uganda and East Africa*. New Edition. (Westport: Negro Universities Press, 1911), 309.

²⁹ Roscoe, *The Baganda*, 384.

³⁰ Consider, for example, the famous line delivered by missionary Rose Sayer to steamboat captain Charlie Allnut from the 1951 film *The African Queen*: “Nature, Mr. Allnut, is what we are put in this world to rise above.” John Huston, *The African Queen* (United Artists, 1951).

planet and perhaps more beyond.” For this great task, Johnston requested “all the help that Science can give us.”³¹

In 1901, the Uganda Railway extended from the Swahili Coast to the eastern shores of Lake Victoria at Kisumu in what is now Western Kenya. Steamships began plying routes between newly developed ports strategically located around the lake.³² These literal engines-of-progress transported new kinds of material technologies, commercial aspirations, and ideas about what constitutes a moral and productive society. For Protestant missionary Alexander MacKay, extending a railway into Uganda was the “one sure means of 'breaking the backbone of native cantankerousness.’”³³

There was, however, “one dark trouble” in this “era of progress.”³⁴ In a 1906 meeting of the Royal African Society in London, George Wilson, then the Acting Deputy Commissioner of the Uganda Protectorate Government expressed his frustration that much remains to be done to “secure simple and practical means of preventing infection [with sleeping sickness] when dealing with *such inconsequential beings as are native peasants!*”³⁵ His statement is worth repeating. One of the highest-ranking Englishmen in charge of fulfilling the “divine purpose” of the Protectorate Government thought that the lives of littoral residents, indeed the majority of “Ugandans,” were “inconsequential.” As if to reassure his London audience of the extent of progress and the safety of would-be visitors to Uganda, he noted that “the capital, Entebbe, is a

31 Harry Hamilton Johnston, *Views and Reviews from the Outlook of an Anthropologist* (London: Williams & Norgate, 1912), 239–240.

32The Uganda Railway was colloquially known as the “Lunatic Express.” For a popular account of the building of the railway see: Charles Miller, *The Lunatic Express: An Entertainment in Imperialism* (Macmillan, 1971).

33 James Horne Morrison, *The Missionary Heroes of Africa* (New York: George H. Doran Company, 1922), 192.

34 George Wilson, “The Progress of Uganda,” *Journal of the Royal African Society* 6, no. 22 (1907): 132.

35The italics are mine, exclamation point Wilsons. See: *Ibid.*

picture...the prettiest town in East Africa.” Entebbe, he detailed, houses a full range of government buildings and services, shops, botanical gardens, and a “sports-ground giv[ing] vigorous evidence that tennis, cricket, football and hockey have all become practicable and have their devotees, while others enter zealously into the rifle-club contests on the local range.”³⁶

The material infrastructures that supported Uganda’s colonial economies of leisure and governance remain visible in contemporary Entebbe. Although many buildings housing colonial government offices and homes are now being renovated or demolished entirely to make way for the peninsula’s recent, almost explosive, growth of new leisure and “modern” lifestyle opportunities, the Entebbe International Airport, the botanical gardens, zoo, veterinary institute, and large buildings housing Christian congregations and government ministries are all available within a short distance from the former colonial governor’s office (where Uganda’s National Archives are now housed). Cricket and hockey have fallen out of fashion, however, tennis, basketball, golf, and aerobic dance classes are gaining in popularity. Much of Entebbe’s littoral is now fenced off as private beaches where many middle-class Ugandans spend their weekends swimming or watching others swim, enjoying a cold beverage, and eating fish. New hotels, discotheques, pizza parlors, and shopping malls have been completed there in recent years, catering to the tastes foreign visitors and wealthy Ugandans alike. Indeed, in July 2014, Kentucky Fried Chicken opened up its third branch in Uganda at Entebbe’s recently completed Victoria Mall.

The loss of historical littoral knowledge now feels so permanent, and the reach of these administrative boundaries so deeply entrenched. Even so, as John Taylor noted in his 1958

³⁶ Ibid., 134.

account of *The Growth of the Church in Buganda*, “the fishermen are a community on their own.”³⁷ This community, as anthropologist Jürgen Jensen has argued based on his fieldwork on and around the Buvuma islands in the 1960s, developed specialized forms of commerce around fishing in the absence of Euro-American intervention.³⁸

This is the first study to examine this important insight – that the mainland and island littoral together compose a distinct cultural locality – within the cultural history of Buganda as well as within the contemporary fisheries of Lake Victoria. The littoral as locality ought not to be considered only as a territorially bounded geographical location, although the littoral can certainly be located physically. Rather, I consider the littoral as locality in the sense that Hugh Raffles suggests, as “a set of relations, an ongoing politics, a density, in which places are discursively and imaginatively materialized and enacted through the practices of variously positioned people and political economies.”³⁹ Littoral residents look to the potential bounty, but also dangers of their expansive inland sea to generate the material and conceptual possibilities for better living.

It is in and around these mainland and island shores where women and men have long specialized in catching, processing, trading, and thinking with fish – all activities I term fishwork -- but also with ironstone, clay, trees, shrubs, herbs, birds, insects, reptiles, wild game and domesticated livestock -- and of course, each other. Through a littoral fiduciary culture and

37 John Vernon Taylor, *The Growth of the Church in Buganda: An Attempt at Understanding* (London: SCM Press, 1958), 118.

38 Jürgen Jensen, “Walwanda Und Kiyindi, Zwei Lokale Zentren Am Viktoria-See,” trans. Annette Klein, *Sociologus* 18 (1968): 123–37. David Gordon reaches the same conclusion in his study of fisheries that straddle Zambia and the DRC. See: David Gordon, “Growth without Capital: A Renascent Fishery in Zambia and Katanga, 1960s to Recent Times*,” *Journal of Southern African Studies* 31, no. 3 (2005): 495–511.

39 Hugh Raffles, “Local Theory’: Nature and the Making of an Amazonian Place,” *Cultural Anthropology* 14, no. 3 (2008): 324.

culinary repertoire that joins the produce of the land with the potential bounty of an expansive body of water, the littoral both seeps and is channeled into life on solid ground.⁴⁰ Fishworkers often earn their living from their work near the lake, though many entrust their earnings to friends and family inland through investments in land, livestock, and small businesses inland.

More recently, littoral residents also work to provision imported and regionally produced forms of refrigeration, fossil fuels, the latest styles in music and dress, as well as anti-retroviral therapies for HIV/AIDS. One well-known fisherman from the Ssesse Islands has even built a petrol station, a car dealership specializing in cars imported from Japan, and several expansive buildings housing a market, office buildings, and a discotheque popular with students from the nearby Nkumba University. “Doing local theory” here, however, requires recognizing that there is not one body of water that is called Lake Victoria by one set of actors, and called something else by another. Rather, there are multiple, materially and conceptually different bodies of water that come into being through the different work that fish, people, and ideas about fish and people do.

Although this study is focused within the contemporary cultural geography of southern Buganda in what is now Uganda, the material and metaphoric importance of fish and the bodies of water described in the chapters that follow extend throughout the region in historically, materially, and culturally specific ways. As important work on other freshwater fisheries has

⁴⁰ Fiduciary culture is a useful concept elaborated by anthropologist Parker Shipton for addressing the extraeconomic aspects of transactions glossed by professionals as economic or uneconomic. Multiple forms of borrowing and lending – what Shipton terms entrustment – and their implications for Luo lives in western Kenya are the focus of Shipton’s three substantial and engaging volumes. See: Parker Shipton, *The Nature of Entrustment: Intimacy, Exchange, and the Sacred in Africa* (New Haven: Yale University Press, 2007); Parker Shipton, *Mortgaging the Ancestors: Ideologies of Attachment in Africa* (New Haven: Yale University Press, 2009); Parker Shipton, *Credit between Cultures: Farmers, Financiers, and Misunderstanding in Africa* (New Haven [Conn.]: Yale University Press, 2010).

shown, littoral residents have simultaneously cooperated and resisted colonial and independent state fisheries interventions to meet their needs first, even amongst the introduction of exotic species and new networks of political and economic patronage.⁴¹ This highlights the impossibility of a simple correspondence between global discourses of sustainability and development and the ways in which they are adopted and adapted in littoral places.⁴² I consider sustainability to be both a compelling concept and an empirical reality enacted through the work of a shifting assemblage of littoral actors that include transnational and multidisciplinary managerial professionals, investors, clients, concerned consumers of Lake Victoria's Nile perch, and Nyanja's elite littoral residents who are increasingly involving themselves in the project of co-management. However, this project does not interpret formally illegal fishwork as incommensurable with sustainability concepts, but rather recognizes the artful practice required to both enact sustainability as reality and avoid being governed by its various enactments.⁴³

This study combines classic anthropological interest in migratory subsistence production, ritual practice, cultural ecology, and exchange, with pressing questions about the gendered practice and politics of commerce and control within globally integrated commodity

41 Orlove, *Lines in the Water* (University of California Press, 2002); Lance van Sittert, "The Tyranny of the Past: Why Local Histories Matter in the South African Fisheries," *Ocean & Coastal Management* 46, no. 1–2 (2003): 199–219; Gordon, "Growth without Capital: A Renascent Fishery in Zambia and Katanga, 1960s to Recent Times*."

42 Christine Walley, *Rough Waters: Nature and Development in an East African Marine Park* (Princeton: Princeton University Press, 2004); Paige West, *Conservation Is Our Government Now: The Politics of Ecology in Papua New Guinea* (Duke University Press, 2006); Ajantha Subramanian, *Shorelines: Space and Rights in South India* (Stanford Calif.: Stanford University Press, 2009).

43 Jake Kosek, *Understories: The Political Life of Forests in Northern New Mexico* (Durham: Duke University Press, 2006); James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998).

supply chains, and the governance structures that sustain them both.⁴⁴ By focusing on vernacular languages and practices, this study advances scholarship challenging received wisdoms about environmental degradation, political participation, regional economies and disease ecologies by examining a shifting set of vernacular fisheries practices as they now articulate with the application of an assumed universally appropriate participatory managerial approach.⁴⁵ Inspired by Rebecca Hardin's analysis of equatorial African forest concessions as situated places where the politics of commerce, patronage, conservation, property, and post-

⁴⁴ For migratory subsistence production see: E Evans-Pritchard, *The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People* (Oxford: Oxford University Press, 1969). For ritual practices see: Roy Rappaport, *Pigs for the Ancestors: Ritual in the Ecology of a New Guinea People*, 2nd ed. (Prospect Heights Ill.: Waveland Press, 1984); Victor Turner, *The Ritual Process: Structure and Anti-Structure* (Transaction Publishers, 1995). For cultural ecology see: Julian Steward, *Theory of Culture Change: The Methodology of Multilinear Evolution*, Illini Books ed. (Urbana: University of Illinois Press, 1972). For exchange see: Franz Boas, *Contributions to the Ethnology of the Kwakiutl*, *Columbia University Contributions to Anthropology*, Ed. by Franz Boas. vol. III (New York: Columbia University Press, 1925); Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies* (New York: W.W. Norton, 1925); Bronislaw Malinowski, *Argonauts of the Western Pacific* (Waveland Press, 1922).

⁴⁵ For studies of received wisdoms about ecology and the economy see: Melissa Leach and Robin Mearns, eds., *The Lie of the Land: Challenging Received Wisdom on the African Environment* (Oxford ;Portsmouth N.H.: International African Institute in association with James Currey ;Heinemann, 1996); James Fairhead and Melissa Leach, "False Forest History, Complicit Social Analysis: Rethinking Some West African Environmental Narratives," *World Development* 23, no. 6 (June 1995): 1023–35; Holly Hanson, *Landed Obligation: The Practice of Power in Buganda* (Portsmouth NH: Heinemann, 2003); Neil Kodesh, *Beyond the Royal Gaze: Clanship and Public Healing in Buganda* (Charlottesville: University of Virginia Press, 2010); Jane I. Guyer, *Money Matters: Instability, Values and Social Payments in the Modern History of West African Communities* (Heinemann Portsmouth, NH, 1995); Janet MacGaffey, *The Real Economy of Zaire: The Contribution of Smuggling & Other Unofficial Activities to National Wealth* (Philadelphia: University of Pennsylvania Press, 1991); Sara Berry, "Value and Ambiguity: Evidence and Ideas from African 'Niche Economies,'" *African Economic History*, no. 32 (January 1, 2004): 143–51; James Giblin, *The Politics of Environmental Control in Northeastern Tanzania, 1840-1940* (Philadelphia: University of Pennsylvania Press, 1992); Helge Kjekshus, *Ecology Control and Economic Development in East African History: The Case of Tanganyika 1850-1950* (Heinemann London, 1977). For studies of the application of perceived universally appropriate development and managerial regimes see: Anna Tsing, *Friction: An Ethnography of Global Connection* (Princeton N.J.: Princeton University Press, 2005); J. Peter Brosius, Anna Lowenhaupt Tsing, and Charles Zerner, "Representing Communities: Histories and Politics of Community-Based Natural Resource Management," *Society & Natural Resources: An International Journal* 11, no. 2 (1998): 157–68; Julia Olson, "Re-Placing the Space of Community: A Story of Cultural Politics, Policies, and Fisheries Management," *Anthropological Quarterly* 78, no. 1 (2005): 247–68, doi:10.1353/anq.2005.0014; Conner Bailey, Dean Cycon, and Michael Morris, "Fisheries Development in the Third World: The Role of International Agencies," *World Development* 14, no. 10–11 (1986): 1269–75.

colonialism converge, this study focuses on the littoral to think in historically attentive ways about cultural forms of rivalry, control, and contestation that are reproduced over time in particular sites.⁴⁶

With the rise of scientific fisheries management in the late 1920s, new economic and ecological frames were overlaid on Nyanja's fisheries that were inextricably linked to the colonial project. By rendering accounts of aquatic natures without humans, or naturalizing littoral people as living in harmony with their aquatic natures, early scientific study of Lake Victoria transformed what is more appropriately understood as an inland sea into a placid pond awaiting domestication.⁴⁷ Similar to hunting on land, subsistence fishing was categorized as environmentally detrimental, whereas commercial and recreational fishing came to be a mark of civilization and progress.⁴⁸

Inspired by non-climax and non-equilibrium ecology, scholars grounded in the humanities and social sciences have written histories of dynamic adaptation and sophisticated institutional arrangements that guided resource access and use in Africa, revising early colonial accounts that documented either pristine or degraded landscapes, and 'traditional' or ruptured

46 Hardin, "Concessionary Politics: Property, Patronage, and Political Rivalry in Central African Forest Management: With CA Comment by Serge Bahuchet."

47 For environmental histories of the littoral elsewhere in Africa see: Emmanuel Akyeampong, *Between the Sea & the Lagoon: An Eco-Social History of the Anlo of Southeastern Ghana, C. 1850 to Recent Times* (Athens: Ohio University Press, 2001); Sandra Greene, *Sacred Sites and the Colonial Encounter a History of Meaning and Memory in Ghana* (Bloomington: Indiana University Press, 2002); Gordon, "Growth without Capital: A Renascent Fishery in Zambia and Katanga, 1960s to Recent Times*." For studies of domestication in fisheries see: Dean Bavington, "Homo Administrator: Managing a Needy Nature?," in *Recognizing the Autonomy of Nature: Theory and Practice*, ed. Thomas Heyd (New York: Columbia University Press, 2005); Jahn Petter Johnsen et al., "The Cyborgization of the Fisheries: On Attempts to Make Fisheries Management Possible," *Maritime Studies* 7, no. 2 (2009): 9–34.

48 For environmental histories of hunting in eastern Africa see: Edward Steinhart, *Black Poachers, White Hunters: A Social History of Hunting in Colonial Kenya* (Oxford; Nairobi; Athens: James Currey; EAEP; Ohio University, 2006); Jan Shetler, *Imagining Serengeti: A History of Landscape Memory in Tanzania from Earliest Times to the Present* (Athens: Ohio University Press, 2007).

tenure arrangements.⁴⁹ In fisheries, Michael Gordon's work on the environmental and social history of Lake Mweru has shown that open access resource conditions were not a natural feature of this lake, but rather created through colonial-era efforts to industrialize fisheries production, as these interventions undermined the complex social strategies Africans had developed to cope with and profit from past ecological and social change. Further, Robert Harms, Rebecca Hardin, and Tamara Giles-Vernick have shown that fishing was probably never an isolated subsistence or economic activity, but coexisted with complimentary hunting and gathering, agro-pastoral, and even industrial food systems.⁵⁰ However, the contributions that women have made to sustaining trade between individuals and communities with different food production strategies, as well as their contributions to economic accumulation in-land, remains largely absent from this literature, including important studies examining the environmental history and economic anthropology of Lake Victoria.⁵¹

Parker Shipton's recent three-volume series provides compelling theoretical insights from Nyanza that reopen, rather than abandon rich intellectual traditions of the Luo in Western Kenya, and the 'West,' in relation to intimacy, exchange and morality. Shipton

49 Nancy Jacobs, *Environment, Power, and Injustice: A South African History* (Cambridge ;New York: Cambridge University Press, 2003); James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-Savanna Mosaic* (Cambridge: Cambridge University Press, 1996); Leach and Mearns, *The Lie of the Land: Challenging Received Wisdom on the African Environment*.

50 Robert Harms, "Fish and Cassava: The Changing Equation.," *African Economic History, Contributions to a History of Agriculture and Fishing in Central Africa*, 7 (1979): 113–16.; Robert Harms, *Games against Nature*. (Cambridge University Press, 1999); Hardin, "Concessionary Politics: Property, Patronage, and Political Rivalry in Central African Forest Management: With CA Comment by Serge Bahuchet"; Tamara Giles-Vernick, *Cutting the Vines of the Past: Environmental Histories of the Central African Rain Forest* (Charlottesville: University Press of Virginia, 2002).

51 J.J. Beuvig, "Playing Pool Along the Shores of Lake Victoria: Fishermen, Careers and Capital Accumulation in the Ugandan Nile Perch Business," *Africa* 80, no. 2 (2010): 224–48; Robert M. Pringle, "The Origins of the Nile Perch in Lake Victoria," *BioScience* 55, no. 9 (2005): 780–87; Robert M. Pringle, "The Nile Perch in Lake Victoria: Local Responses and Adaptations," *Africa* 75, no. 4 (2005): 510–38; Kenny, "The Powers of Lake Victoria"; Kenny, "A Stranger from the Lake: A Theme in the History of the Lake Victoria Shorelands."

elaborates how intimacy shapes expectations and obligations that production, consumption, and exchange generate within what he calls Luo fiduciary culture. As Shipton shows, the politics of producing of certain commodities may involve much more than production inputs and rights to produce, but also intimate attachments to those no longer and not yet living.⁵² In so doing he shows how the non-economic meanings and material qualities of what is exchanged still matter, as do local understandings of governance and government, providing important contributions to scholarship examining newly emerging enclave-based geographies of production elsewhere on the Continent.⁵³

Ajantha Subramanian urges scholars to examine subalternity in fisheries in relational and processual terms by examining how fishing, and fish processing and trading, constitutes rights bearing subjects in relation to the multiple forms and species of fish they produce, to other fisheries actors, and to those who participate in non-fishing related activities, including religious institutions.⁵⁴ This project advances Subramanian's relational and processual approach by explicitly incorporating gender and the littoral to expand understanding of other relevant entities and transformations such as consumption patterns and preferences in particular places. Ecofeminist approaches advance theories that avoid essentializing ecological and social change while explicitly detailing the contributions women make to sustaining and

⁵² Shipton, *Mortgaging the Ancestors*; Parker Shipton, *Bitter Money : Cultural Economy and Some African Meanings of Forbidden Commodities* (Washington D.C.: American Anthropological Association, 1989).

⁵³ Shipton, *The Nature of Entrustment : Intimacy, Exchange, and the Sacred in Africa*; Shipton, *Credit between Cultures : Farmers, Financiers, and Misunderstanding in Africa*. For studies of extractive enclaves particularly oil production see: Michael Watts, "Resource Curse? Governmentality, Oil and Power in the Niger Delta, Nigeria," *Geopolitics* 9, no. 1 (March 2004); James Ferguson, "Seeing Like an Oil Company: Space, Security, and Global Capital in Neoliberal Africa," *American Anthropologist* 107, no. 3 (2005): 377–82; James Ferguson, *Global Shadows : Africa in the Neoliberal World Order* (Durham: Duke University Press, 2006).

⁵⁴ Subramanian, *Shorelines*.

innovating production and consumption patterns across multiple scales.⁵⁵ However, in fisheries, these flexible gendered practices are often concealed through well-intentioned academic discourses that strip the “-men” from the category of those who fish for a living, even all fisherm**en** are men in study sites, although Benjamin Orlove’s work on fishermen in Lake Titicaca remains a notable exception.⁵⁶ Even a recent special issue the on gender in fisheries in the academic journal *Development*, while advancing understanding of gendered fisheries practices, still defaults to gender neutral language.⁵⁷ And yet, as historical and ethnographic work on fisheries outside of Africa has demonstrated, it is women who are largely responsible for working with fish on land, including the processing and trading of fish.⁵⁸

Men and women who fish, process and trade fish, repair nets, bait hooks and so on, are described as fishers, or fisherfolk through many littoral people in Nyanja, as elsewhere, reject this classification. Given the flush of professional managerial attention to 'empowering' women and creating 'gender balance' in Uganda's fisheries co-management institutions, and the continued though shifting existence of gendered fisheries practices, gender is central to this project.⁵⁹

⁵⁵ J Gibson-Graham, *The End of Capitalism (as We Knew It): A Feminist Critique of Political Economy*, 1st University of Minnesota Press ed., 2006. (Minneapolis: University of Minnesota Press, 2006); A. Escobar et al., “After Nature: Steps to an Antiessentialist Political Ecology. Commentaries. Author’s Reply,” *Current Anthropology* 40, no. 1 (1999): 1–30; Carolyn Merchant, “The Theoretical Structure of Ecological Revolutions,” *Environmental Review: ER* 11, no. 4 (1987): 265–74; N. Sturgeon, *Ecofeminist Natures: Race, Gender, Feminist Theory, and Political Action* (Psychology Press, 1997); K. Soper, “Feminism and Ecology: Realism and Rhetoric in the Discourses of Nature,” *Science, Technology & Human Values* 20, no. 3 (1995): 311.

⁵⁶ Orlove, *Lines in the Water*.

⁵⁷ P. S Choo et al., “Guest Editorial: Gender and Fisheries,” *Development* 51, no. 2 (2008): 176–79.

⁵⁸ Jane Nadel-Klein, “Granny Baited the Lines: Perpetual Crisis and the Changing Role of Women in Scottish Fishing Communities,” *Women’s Studies International Forum* 23, no. 3 (2000): 363–72; Valerie Burton, “Fish/Wives: An Introduction,” *Signs* 37, no. 3 (2012): 527–36.

⁵⁹ S. A Mojola, “Fishing in Dangerous Waters: Ecology, Gender and Economy in HIV Risk,” *Social Science & Medicine*, 2010; Christophe Bene and Sonja Merten, “Women and Fish-for-Sex: Transactional Sex, HIV/AIDS and Gender in African Fisheries,” *World Development* 36, no. 5 (2008): 875–99; E. H. Allison and J. A. Seeley,

Further, Nyanja's cosmopolitan cultural ecology, which includes the extinction of an estimated several hundred species of indigenous and the rapid development of new species and forms of fish production and consumption has made establishing mutually agreeable criteria for environmental subject formation difficult, as the politically charged categories of indigenous and local are circulated globally about this fishery, but have much less purchase here.⁶⁰ The question is not simply whether to protect or degrade native or commercially important fish, but rather why, how, and when to harvest particular species and forms of fish that circulate differently in different places – debates that are also about scientific discovery, becoming and belonging, migration, militarization, disease, and trajectories of economic growth.⁶¹

Colonizing Fishes

A 2012 Government report on “Uganda's Agriculture Sector Performance” covered in the Uganda national press, noted that Uganda's Nile perch catches in 2011 were just over 69,000 tons. This, the authors of the report state, is “the lowest level ever recorded.” This is historically impossible.

“HIV and AIDS among Fisherfolk: A Threat to ‘responsible Fisheries?’,” *Fish and Fisheries* 5, no. 3 (2004): 215–34.

60 Arun Agrawal, *Environmentality: Technologies of Government and the Making of Subjects* (Durham: Duke University Press, 2005); Arun Agrawal and Clark C. Gibson, “Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation,” *World Development* 27, no. 4 (April 1999): 629–49.

61 Richard N. Mack et al., “Biotic Invasions: Causes, Epidemiology, Global Consequences, and Control,” *Ecological Applications* 10, no. 3 (2011): 689–710; Charles R Warren, “Perspectives on the ‘alien’ versus ‘native’ Species Debate: A Critique of Concepts, Language and Practice,” *Progress in Human Geography* 31, no. 4 (2007): 427–46; Comaroff and Comaroff, “Naturing the Nation: Aliens, Apocalypse and the Postcolonial State,” *Journal of Southern African Studies* 27, no. 3 (2001): 627–51; Lesley Head and Muir, Pat, “Nativeness, Invasiveness, and Nation in Australian,” *Geographical Review* 94, no. 2 (2004): 199–217; Dominique P. Leveil and Benjamin Orlove, “Local Control of Aquatic Resources: Community and Ecology in Lake Titicaca, Peru,” *American Anthropologist, New Series*, 92, no. 2 (June 1990): 362–82.



Figure 1-5: Nile Perch from Lake Albert. From: Captain C.R.S. Pitman Collection, British Natural History Museum.

As early as 1954, members of the Uganda Fish and Game Department under the direction of the Chief Game Warden Bruce Kinloch introduced small numbers of Nile perch (*Lates niloctus*) into Lake Victoria.⁶² Despite a prohibition on the introduction of invasive species

⁶² Bruce Kinloch, *The Shamba Raiders: Memories of a Game Warden* (Southampton: Ashford, 1988); Peter BN Jackson, "EAFRO Directorate, FAO, Final Tropical Service: 1963-72," *Transactions of the Royal Society of South Africa: Freshwater Fishery Research Organisations in Central and Eastern Africa: A Personal*

into the lake, and ongoing scientific debate about its introduction, Kinloch believed that there was “overwhelming evidence” that Nile perch was valuable “not only as a sporting and tourist amenity, but as an important factor in maintaining the productivity of rich tropical fisheries.”⁶³ Lake Victoria’s fisheries at the time were perceived by natural resource managers like Kinloch as unproductive because the overwhelming majority of fish in this body of water at the time were small, boney fish. These fish were known to scientists as Haplochromine cichlids, to many of the lake’s residents as *enkejje* or enfulu and to men like Kinloch as “trash” or “coarse” fish.

The Nile perch, pictured in Figure 1-5, is a large carnivorous fish species endemic to the Nile River and most major West African river systems. Given their dramatic accounts of Nile perch fishing in Lake Albert, it is reasonable to assume that their longings for a sport fishery physically close to the administrative headquarters of the colonial government in Entebbe motivated the Nile perch introductions as much as did any theories about ecological inefficiency.⁶⁴ The Nile perch is now an integral part of the littoral ecology and economy. Under the right conditions, namely abundant sources of food and an absence of predators, individual Nile perch are capable of growing up to 70 kilograms. The Haplochromine cichlids or *Enkejje* provided an ideal source of food for these voracious and indiscriminate predators.

In addition to Kinloch’s covert introduction of Nile perch, four species of tilapiine cichlids were intentionally introduced into the lake. As reported by Graham in 1929, stocks of the preferred native tilapias, *Oreochromis variabilis* and *Oreochromis esculentus*, were declining. To

Recollection: Special Issue 55, no. 1 (2000): p. 59–67.(

63 Kinloch, *The Shamba Raiders : Memories of a Game Warden*, 316.

64A discussion of the colonial desire for the sportfishery is included in: A. P. Achieng, “The Impact of the Introduction of Nile Perch, *Lates Niloticus* (L.) on the Fisheries of Lake Victoria,” *Journal of Fish Biology* 37 (1990): 17–23.

remedy this, four species of exotic tilapia, *Oreochromis leucostictus*, *Oreochromis niloticus*, *Tilapia zillii* and *Tilapia rendalli*, were introduced between 1951 and 1954. It was thought that these species would be able to coexist with native tilapia stocks and possibly also prey on the abundant Haplochromine populations. In the early 1980s, catches of native *O. variabilis* and *O. esculentus* were still common, but the invasive *O. niloticus* began to dominate inshore tilapia catches, as they still do today.⁶⁵

Given the legal restrictions against the introduction of invasive species into the lake at the time, the Nile perch introduction first began as a small clandestine operation in Murchison Bay south of Kampala.⁶⁶ They then extended to include the Kabaka's Lake in Kampala, as well as Lake Kyoga, so that the ecological effects of the Nile perch introductions could be studied in these smaller lakes.⁶⁷ Murchison Bay was an ideal location for this introduction for two reasons. Firstly, the sheltered bay provided calm waters for the Nile perch to grow in, and ample fish on which to feed. Secondly, the introduction represented a symbolic victory of the “modernizing” colonial state over ancient forms of African food production and authority. The bay, particularly at Munyonyo was a long-standing stronghold of the Kabaka (Male King) of Buganda. Just like many powerful men and women of old who had their own landing sites, his personal canoes would launch from Munyonyo and he would fish and hunt from its shores. Just prior to the Nile perch introductions, the then Kabaka Mutesa II was forcibly exiled to London amongst the increasingly vociferous and violent demands of his subjects for autonomy

65 P. C. Goudswaard, F. Witte, and E. F. B. Katunzi, “The Tilapiine Fish Stock of Lake Victoria before and after the Nile Perch Upsurge,” *Journal of Fish Biology* 60, no. 4 (2002): 838–56.

66 Pringle, “The Origins of the Nile Perch in Lake Victoria.”

67 EAFFRO, Annual Report 1965, East African Common Services Organization (Jinja, Uganda: East African Freshwater Fisheries Research Organization, 1965), 9.

from the colonial state and Uganda more generally.⁶⁸ The Nile perch began colonizing the ecology of the lake, just as anti-colonial struggles on land were heating up.

Six months before Uganda would gain official independence from colonial rule, the Nile perch introductions became official policy. In May of 1962, the Department released thirty-five perch off of the Entebbe Pier. In September of 1963 – just under a year after Uganda gained legal independence – another three hundred and thirty-nine Nile perch fingerlings (small juveniles) were again introduced from Entebbe.⁶⁹

Throughout the 1960s, fishing was restricted in the Murchison Bay to protect growing Nile perch populations. Fishworkers began saying that their President Obote had “sold the lake to the whites.” Fisheries development efforts provided legitimacy for Obote’s government, including an influx of research and development dollars. However, Obote’s efforts towards transforming the lake, as well as his increasingly dictatorial tendencies, encouraged his largest and most local constituency along Uganda’s south-central shores to associate Obote with these fish and efforts to exclude littoral residents from fishing and eating them.

Fishworkers and fish consumers began calling Obote *Sabulanya* – a vernacular term used to refer to Nile perch in Northern Uganda where Obote was also from. He eventually “outlawed” the use of the term *sabulanya*, and residents eventually began using different terms. Reminiscences of *sabulanya* are still reflected in what Ugandans playfully call “Uglish,” that is, Ugandan English, and the street food culture that circulates around the capital city. Fried pieces of Nile perch are still known as “sabs” an excellent accompaniment to “kabs,” or

68 Kevin Ward, “The Church of Uganda and the Exile of Kabaka Muteesa II, 1953-55,” *Journal of Religion in Africa*, 1998, 411–49.

69 EAFFRO, Annual Report 1962/63, East African Common Services Organization (Jinja, Uganda: East African Freshwater Fisheries Research Organization, 1964).

Kabalagala, fried pancakes made of ripe plantains.

According to one elder woman from the Buvuma Islands who is still working with fish around Kampala, contemporary efforts to reduce fishing effort are related to Obote's arrangement with "the white men," but not in the way that most fishworkers understand it today:

Listen, they tendered the lake when I was older, though I did not yet have kids. The white men brought most of these species of fish and they just reproduced and later the whites took a large percentage of the bigger fish. People don't actually understand this concept. I am old now, and I can understand why people are now told not to take out the young fish. It's an old issue. It's the whites who brought fish here and they have a right to take some big fish for exports, that's an old agreement with Obote. When Amin came in the 1970s, we were told that Obote sold the lake, but actually he didn't. He *rented* the lake, for a period of time. He just wanted people to give whites their big fish back to take outside the country. Emputa has a reproductive rate that is really high. The rate of reproduction of the local species was not too high, but at least it was enough for those who existed at the time.

In the 1970s and 1980s people had so many nets, but there was no congestion like today. Whites wanted tons of fish, so they set up the first factory here, called Cape Factory, sometime in the 1980s. Cape Factory exported fish to Denmark; even the signpost was there. We always said that when fish reduced, it affected the budgets of the white people. That's how things went on.⁷⁰

While *enkejje* comprised an estimated eighty percent of all fish in the lake in the early 1970s with only a few Nile perch swimming below the surface, by the mid-1980s the situation reversed.⁷¹ Nile perch populations had experienced explosive growth. *Enkejje* seemed to disappear.

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71 Although The Nile perch was the primary cause of these changes, it was not the only one. Increased nutrient inputs from agriculture, particularly phosphorus, decreased levels of dissolved oxygen in the lake, effectively reducing the kinds and extent of habitats available to *enkejje*. R. E. Hecky et al., "Deoxygenation of the Deep Water of Lake Victoria, East Africa," *Limnology and Oceanography* 39, no. 6 (September 1994): 1476–81; Witte, F. et al., "Eutrophication and Its Influences on the Fish Fauna of Lake Victoria," in *Restoration and Management of Tropical Eutrophic Lakes* (Enfield (NH), USA: Science Publishers, Inc., 2005), 301–38.

Beginning in the late 1980s, when Uganda's current President came to power, the Nile perch began dominating fish catches. Fisheries biologists and ecologists identified new species of *Haplochromis* throughout the 1970s and 1980s, they simultaneously tracked the decline in the types and quantities of these fish. Targeted donor funding and investment in industrial fish production inspired new methods of fishing, processing, and trading fish, but also research. The United Nations Development Program, the Food and Agricultural Organization of the United Nations, World Bank, Global Environment Fund, International Union for the Conservation of Nature, European Union, African Development Bank, Sweden, Finland, Belgium, Japan, Canada, and the United States of America have all allocated funds towards the scientific study of Lake Victoria's fisheries. These investments in scientific data collection and quantitative analysis of the ecological and sociological elements of fisheries accompanied investments in cement loading docks, cold storage chains, and industrial fish processing plants. By the late 1990s, fillets of Nile perch, a fish sold whole or in cubed form in southern Uganda since only about the 1970s were available frozen or chilled on at least four continents.



Figure 1-6: Top: 200 Shilling Coin and 2,000 Shilling Note. Bottom: September 29, 2011 Headline from the “Business Vision,” A Periodic Supplement to the New Vision, Ugandan “Government-Owned” news daily.

By the late 1990s, approximately 600,000 tons of fish were exported from Lake Victoria – an estimated two-thirds of all fish caught in the lake each year. This brought an annual average of 250 million USD in foreign exchange into the three countries that share the lake. Industrially processed fish fillets soon became Uganda’s second most lucrative export commodity after coffee, with its contributions to the national economy commemorated in 2010 with several images of fish printed on the new 2,000 shilling banknote and 200 shilling coin. By 2012, however, rapid inflation, particularly in food prices as experienced throughout 2011 and mid-2012, encouraged the popular press to liken money in general to “trash” (See Figure 1-6).

Because the large majority of catches of Nile perch were taken directly to fish factories,

and women did not fish for Nile perch, they were largely excluded from the legal production of Nile perch. However, littoral residents associate the growth of women's fishwork with the growth of the fish factories. Factories lured increasing numbers of men to the littoral to fish. Catches were high, and the large fish were in high demand. Fishermen caught both large and small fish. They took the large ones to the factories, and left the small ones for their "wives for processing and local sale, just like today."⁷²

Much of women's work with fish, however, remains illegal. Two notable exceptions, however, are women's work drying and selling small *mukene*, or silverfish. As well as women's processing of byproducts of the Nile perch factory filleting process. Women smoke portions of "fish frames" -- the heads, bones, and flesh remaining after the industrial filleting process, and rolled Nile perch skins. In Uganda, most of these "frames" and skins are exported to the DRC. Women's work with these byproducts has been vilified in popular documentary film, such as *Darwin's Nightmare* for exploiting women's labor.⁷³ In Uganda, however, the women who run the byproduct trade are some of the wealthiest fishworkers. They have invested their earnings in purchasing their own homes, have built rental homes for others, and one woman interviewed for this study even owns a fleet of cars that she rents out to special hire taxi drivers. It is only the women workers they employ that earn low wages.

The development of Lake Victoria's fish export industry reconfigured the geographies of vernacular fisheries practices at the littoral, as well as the reach of what Timothy Mitchell might call the "rule of experts" in creating a manageable Lake Victoria.⁷⁴ Reflected in the

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73 Hubert Sauper, *Darwin's Nightmare* (Mille et une Productions, 2004).

74 Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley: University of California

number of fishermen, fish landing sites, outboard motors, and nets or hooks per boat, most fish were still captured from wooden boats with gillnets or hook-and-line gear, and fishing effort more than doubled between 2000 and 2006 alone. On land, new configurations of fish collection and trade emerged to concentrate the supply of fish towards industrial fish factories, rather than local and regional markets. Resident fishermen who invested early in the Nile perch export trade purchased more boats and nets, expanded existing communities of fishworkers and established new ones on distant islands. They also made a great deal of money. Some of the most successful built schools, hotels, supermarkets, and car dealerships inland. New and existing fishing sites attracted young men and women from inland with little to no education who were eager to begin working with fish for the economic opportunities and cosmopolitan culture provided at mid-to-large sized landing sites.⁷⁵ For others migrating to fishing sites from other inland lakes, rivers and wetlands, where political conflict and military intervention had made fishing and farming difficult, and indeed almost impossible, the littoral provided a fresh start.

The presumed socio-economic impacts of Lake Victoria's predicted commercial fisheries demise appear incredibly high. Experts argue that when Nile perch populations collapse, tens of millions of eastern Africans will be “without livelihoods,” and that many more will be without Nile perch to eat. Industrial fish processing plants will close and the three governments that share the lake will be without an important, and an importantly shared, source of “much

Press, 2002).

⁷⁵ Beuving, “Playing Pool Along the Shores of Lake Victoria: Fishermen, Careers and Capital Accumulation in the Ugandan Nile Perch Business.”

needed” foreign exchange.⁷⁶ From this vantage point, armed with these numbers, sustaining stocks of Nile perch may appear a worthy, if difficult, goal.

The ecological implications of Lake Victoria's predicted Nile perch collapse, however, are much less clearly articulated. In the decades that followed the introduction of Nile perch, mechanized trawl fishing, changes in water quality due to increased deforestation and precipitation, and the voracious appetites of Nile perch led to the extinction of an estimated two- to-three-hundred species of indigenous fish.⁷⁷ At the same time, investments in fishing capacity, statistical data collection, and the Nile perch itself substantially increased forms of quantifiable fisheries production including levels of exports, inflows of foreign currency, and job creation through formal employment. As we will see in Chapter Three, because most fisheries production is not in the formal sector, it is consistently undervalued.

Most quickly consumed were small species of cichlid fish within the Haplochromine genus. Certain haplochromine cichlids that had evolved to inhabit and indeed thrive in open waters where Nile perch could easily catch and make a meal of them began to disappear. Haplochromines in rocky or vegetated habitats inshore, where the Nile perch had and still has a harder time reaching were able to survive, or at least survive possible extinction.⁷⁸ Populations of these same rock and wetland dwelling haplochromines have increased in recent years, alongside decreases in stocks of large Nile perch. A collapse of Nile perch stocks would be

⁷⁶For an analysis of how these data are compiled, transformed, and indeed are rarely too poor to accurately access even the most basic characteristics of African economies see: Morten Jerven, *Poor Numbers: How We Are Misled by African Development Statistics and What to Do about It* (Cornell University Press, 2013).

⁷⁷D. Verschuren et al., “History and Timing of Human Impact on Lake Victoria, East Africa,” *Proceedings of the Royal Society B: Biological Sciences* 269, no. 1488 (February 2002): 289–94.

⁷⁸F. Witte et al., “Differential Decline and Recovery of Haplochromine Trophic Groups in the Mwanza Gulf of Lake Victoria,” *Aquatic Ecosystem Health & Management* 10, no. 4 (2007): 416–33.

ecologically beneficial in terms of biodiversity – the hallmark of ecosystems considered, in the parlance of scientists concerned with the better management of ecological and social systems, to have high levels of adaptive capacity and resilience. Ecological systems with high densities of different kinds of species can make small transformations allowing the various components of the system to withstand potential shocks from outside, while still maintaining core ecosystem functions. Though species-rich ecosystems are probably more ecologically sustainable than others that are species-poor, fish ought not only to be conceptualized as individual species whether alive and still swimming, or dissected into so many pieces on a laboratory table. Rather, they are a flexible part of an assemblage of fish, people, and so many other living and non-living things that continue to exist because they keep coming into existence with each other. Haplochromines, or rather the *enkeje* as they are called in the littoral vernacular, were once the source of an incredibly significant food fishery described in Chapter Four. If given the chance, they could be again.

While scientists estimate that there are still several hundred species of fish swimming in Lake Victoria, most fisheries experts concern themselves with only three – Nile perch, Nile tilapia, and a small cyprinid species known in Uganda as *mukene*.⁷⁹ These are the only three fish in Lake Victoria considered by most managers and development economists alike to have any demonstrable value as a source of both protein and financial exchange.⁸⁰ Of them, *mukene* alone

⁷⁹Mukene is known as dagga in Tanzania and omena in Kenya.

⁸⁰ It is worth noting that the value that development professionals tend to ascribe to forms of fish that feature in local and regional markets, such as smoked and sun-dried fish are often “low.” They are recognized as nutritionally important, but are nevertheless discussed as “low value fish.” See for example: M. K. Kabahenda et al., “Protein and Micronutrient Composition of Low-Value Fish Products Commonly Marketed in the Lake Victoria Region,” *World Journal of Agricultural Sciences* 7, no. 5 (2011); M. K. Kabahenda and S. M. C. Hüsken, A Review of Low-Value Fish Products Marketed in the Lake Victoria Region, Regional Programme Fisheries and HIV/AIDS in Africa: Investing in Sustainable Solutions., Project Report 1974 (Lusaka, Zambia: The WorldFish

is “indigenous” to the lake.⁸¹ The other two were introduced in the 1950s and 1960s by the European staff of the colonial Game and Fisheries Departments of Uganda, Kenya, and Tanzania.⁸² Since at least the 1990s, management of the Lake Victoria's fisheries has focused almost exclusively on the Nile perch, a large quantity of which is exported outside of the continent in the form of chilled or frozen fish fillets.⁸³

By focusing on the material and metaphorical “stuff of life,” I examine fish, people, and ideas about fish and people to demonstrate that there are multiple versions of this body of water that have co-existed, corresponded, and competed over time. In the process, I argue that conventional received wisdoms about gender – specifically the seemingly timeless nature of eastern African patriarchy and the emancipatory possibilities of Euro-American-inspired feminism – have emerged from reading Lake Victoria's histories of colonial domination and post-independence liberation back onto the history of a region constituted through very different bodies of water. Similar to a fishing industry that must first be invested in and expanded before it can be managed, contemporary efforts to empower women in fisheries around Lake Victoria must first constitute women as marginalized subjects before they can be empowered by any number of non-governmental organizations, micro-credit loaning

Center, 2009).

81 Simon Jennings, Simon Greenstreet, and John Reynolds, “Structural Change in an Exploited Fish Community: A Consequence of Differential Fishing Effects on Species with Contrasting Life Histories,” *Journal of Animal Ecology* 68, no. 3 (1999): 617–27.

82 The Nile perch introductions began in 1954 and continued up to 1963. In Kenya and Tanzania, the Nile perch were introduced just prior to independence. In Uganda, however, they were introduced from 1954 through 1963, a year after Uganda officially achieved independence, though at the time the Uganda Fish and Game Department was still under the direction of its European staff. For more on the Nile perch introductions see: Pringle, “The Origins of the Nile Perch in Lake Victoria.”

83 John S. Balirwa, “Ecological, Environmental and Socioeconomic Aspects of the Lake Victoria's Introduced Nile Perch Fishery in Relation to the Native Fisheries and the Species Culture Potential: Lessons to Learn,” *African Journal of Ecology* 45, no. 2 (June 2007): 120–29; M. Njiru et al., “An Overview of the Current Status of Lake Victoria Fishery: Opportunities, Challenges and Management Strategies,” *Lakes & Reservoirs: Research & Management* 13, no. 1 (2008): 1–12.

institutions, and fisheries management plans. In the process, historically and already existing forms of feminine agency and authority are submerged.

Contemporary popular accounts of Lake Victoria's fisheries tend to begin as if Nile perch have always been in the lake. One otherwise careful political historian of pre-colonial Buganda recently noted, “widely eaten fish included lungfish, barbels, catfish and the type known to Europeans as Nile perch.”⁸⁴ While Nile perch was indeed indigenous to the northern lakes and most of the Nile River, it was not present in either Lakes Kyoga or Victoria until the mid-1950s.⁸⁵ That the Nile perch was eaten in Buganda, let alone widely, in pre-colonial times, is highly unlikely. That women are mere victims of African patriarchy and international development initiatives seems unlikely, too. Thus, in the chapters that follow and their elaboration the multiple bodies of water that I encountered throughout my ethnographic and historical research, I privilege the accounts and practices of women who work, and have long worked, with species and forms of fish that have largely been overlooked in previous studies of Buganda's social history and Lake Victoria's contemporary fisheries.

In 2010, I conducted a content analysis of one hundred and twenty online news articles about Nile perch with the help of two undergraduate students at the University of Michigan.⁸⁶ All articles examined were in English, though the large majority came from eastern African presses. Of the total sample, less than ten percent mentioned that Nile perch were introduced into the lake. Although almost half of all articles samples mentioned illegal fishing none of

84 Richard Reid, *Political Power in Pre-Colonial Buganda: Economy, Society & Welfare in the Nineteenth Century*, Eastern African Studies (Athens: Ohio University Press, 2002), 65.

85 Nile perch fossils have been found on Rusinga Island in Miocene deposits (from some time between twenty-three and 5 million years ago). P. H. Greenwood, “Fish Remains from Miocene Deposits of Rusinga Island and Kavirondo Province, Kenya,” *Journal of Natural History* 4, no. 48 (1951): 1192–1201.

86 Many thanks due to Allegra Wrocklodge and Jennifer Lee for this assistance with this analysis.

them addressed local demand for fish. It was as if the numerical figures collected for the export industry – namely, catches, production of fillets, and factory earnings – were all that counted because they could be counted.

Lake Victoria is one of the most frequently studied lakes in the world.⁸⁷ The magnitude of available research findings, however, has thus far failed to “save” Lake Victoria from an imagined future of death and collapse popularized in Uganda’s national news media and international film and sportfishing adventure television alike.⁸⁸ Scientific and managerial accounts of Lake Victoria’s fisheries may stress the ecological, economic, and social impacts of the Nile perch introductions from about the 1980s onwards. Whether tracking the growth of commercial fish production or the decline in aquatic species diversity, these accounts foreground the role of an introduced predator – the Nile perch – and the beneficence of the former colonial state in shaping the nature of fish abundance and the culture of commercial fisheries production there.⁸⁹ Most recommend strict enforcement of fisheries regulations in

⁸⁷ A Google Scholar search for “Lake Erie” returns approximately 143,000 results. “Lake Victoria” returns approximately 772,000. For bibliographies of ecological and socio-economic literatures on Lake Victoria see: “Lake Victoria R.C.M. Crul et al., A Bibliography of Lake Victoria, East Africa, Technical Documents in Hydrology, IHP-IV Project M-5.1 (Paris: UNESCO, 1995); Kim Geheb, Overview and Bibliography of the Literature of Socio-Economic Relevance to the Fisheries of Lake Victoria - Aquatic Commons, Socio-Economics Data Working Group (SEDAWOG) of the Lake Victoria Fisheries Research Project, In: Lake Victoria Fisheries Research Project (Jinja, Uganda, 1999).

⁸⁸ See for example the yearly “Save Lake Victoria” series of articles featuring in Uganda’s New Vision newspaper each May at “Save Lake Victoria,” The New Vision, accessed September 15, 2014, <http://www.newvision.co.ug/section/53-471-save-lake-victoria.html>, Hubert Sauper’s documentary film Darwin’s Nightmare, and Animal Planet, “River Monsters: How to Catch a Nile Perch”: Video: Animal Planet,” May 24, 2010, <http://animal.discovery.com/videos/river-monsters-how-to-catch-a-nile-perch.html>. Sauper, Darwin’s Nightmare.

⁸⁹ See for example: Richard Ogutu-Ohwayo, “The Decline of the Native Fishes of Lakes Victoria and Kyoga (East Africa) and the Impact of Introduced Species, Especially the Nile Perch, *Lates niloticus*, and the Nile Tilapia, *Oreochromis niloticus*,” *Environmental Biology of Fishes* 27, no. 2 (1990): 81–96; Richard Ogutu-Ohwayo et al., “Human Impacts on the African Great Lakes,” *Environmental Biology of Fishes* 50, no. 2 (October 1, 1997): 117–31; P. C. Goudswaard, F. Witte, and E. F. B. Katunzi, “The Invasion of an Introduced Predator, Nile Perch (*Lates niloticus*, L.) in Lake Victoria (East Africa): Chronology and Causes,” *Environmental Biology of Fishes* 81, no. 2 (December 2006): 127–39; Balirwa, “Ecological, Environmental and Socioeconomic Aspects of the Lake

order to ensure the sustainability of Lake Victoria's fisheries into the future.⁹⁰ Other studies of fishing communities, concerned more with the spread of HIV/AIDS than the health of fish stocks, stress the importance of women's access to fish as key for their “empowerment,” though the enactments of these goals are often at odds with each other.⁹¹

For the contemporary fisheries of Lake Victoria, I argue that the failures of fisheries management there stem from the privileging of expert and managerial logics and practices over those of residents who actually live and work with fish there. The methodological tools and epistemological frameworks applied to manage Lake Victoria do not account for the possibility that valuable fisheries existed long before and will continue to exist long after Lake Victoria's fishing industry was developed.

Recent efforts to ‘co-manage’ Lake Victoria's fisheries are considered a failure because many fishworkers are unable, or unwilling, to govern their activities under the terms defined for them by a multi-national cadre of well-intentioned fisheries experts. I argue, however, that these co-management efforts are succeeding to do something very different. Rather than simply compromising an already unprofitable export industry, fishworkers are managing to sustain vital local and regional fisheries economies that nourish the bodies of eastern and central Africans, as well as the economic development of the region more broadly.

Victoria's Introduced Nile Perch Fishery in Relation to the Native Fisheries and the Species Culture Potential: Lessons to Learn.”

90 M. J. Ntiba, W. M. Kudoja, and C. T. Mukasa, “Management Issues in the Lake Victoria Watershed,” *Lakes & Reservoirs: Research & Management* 6, no. 3 (2001): 211–16; Njiru et al., “An Overview of the Current Status of Lake Victoria Fishery: Opportunities, Challenges and Management Strategies.”

91 Marion Pratt, “Women Who Eat Men's Money: Ecology, Culture, Gender Relations, and the Fishing Economy on the Western Shore of Lake Victoria” (State University of New York at Binghamton, Department of Anthropology, 1996); Christophe Bene, “When Fishery Rhymes with Poverty: A First Step Beyond the Old Paradigm on Poverty in Small-Scale Fisheries,” *World Development* 31, no. 6 (June 2003): 949–75; Modesta Medard, “Relations between People, Relations about Things: Gendered Investment and the Case of the Lake Victoria Fishery, Tanzania,” *Signs* 37, no. 3 (2012): 555–66.

The Submerged History of a Sustainable Fishery

As historian David Schoenbrun reminds us, “struggles for control of discourse about the African past are still shackled in an essentially European-derived conceptual framework.”⁹² In this framework, anthropologist Stephan Helmreich elaborates, “water as nature appears as both potentiality of form and uncontainable flux; it moves faster than culture, with culture often imagined in a land-based idiom grounded in the culture concept's origins in European practices and theories of agriculture and cultivation.”⁹³

The Food and Agricultural Organization of the United Nations (FAO), the global institution tasked with assembling and disseminating expert fisheries knowledge, states that “sustainable' fisheries are those where fishers can generate, through their work, sufficient resources to cover, at the very least, all the basic needs for food, health and education, while adopting ecologically sustainable exploitation practices,” where “government creates the enabling environment (according to context) for this to happen.”⁹⁴ Trust, transparency, and a vision shared by stakeholders, government, and “society at large,” is crucial, so say these experts, for ensuring sustainable fisheries into the future.

Under these arguably well-intentioned terms, it is unclear whether Lake Victoria's fishing industry has ever been, or ever will become sustainable. The state of the fisheries in the late 1990s and early 2000s, for example, tends to serve as the contemporary goal for managers in terms of fish catches and profits from exported Nile perch – a period during which fish

⁹² David Lee Schoenbrun, “A Past Whose Time Has Come: Historical Context and History in Eastern Africa’s Great Lakes,” *History and Theory*, 1993, 55.

⁹³ Stefan Helmreich, “Nature/Culture/Seawater,” *American Anthropologist* 113, no. 1 (2011): 132.

⁹⁴ *State of World Fisheries and Aquaculture 2014* (Food and Agriculture Organization of the United Nations, 2014), 209.

catches and profits from fishing were at their highest. By eliminating forms of fishing practice deemed illegal and unsustainable, such as the use of certain sizes and types of fishing nets, the fishing industry is thought to be able to produce similarly high catches of and profit margins from exported Nile perch. In addition to the sensible speculation that fish catches around the ideal late 1990- and early 2000-period were simply too high to sustain Nile perch populations, other significant concerns abound. Although many fishworkers made a great deal of money during this period, more than enough to meet their “basic needs,” the consolidation of fish production towards the industrial processing and export industry did not universally make fishworkers, or eastern African fish consumers, better off. As prices for all fish, except *mukenne*, and especially for Nile perch, increased dramatically at every stage of the local and regional supply chains, some would-be local and regional consumers were increasingly unable to afford to eat their preferred forms of fish – particularly Nile perch. Most of the Nile perch that does make it to local and regional markets is considered formally illegal simply because scientists and managers believe that they are of sizes too small to sustain Lake Victoria’s fishing industry.

Difficulties establishing trust, transparency, and a shared vision for the future sustainability of Lake Victoria are significant barriers to achieving sustainability there according to the definition offered by the FAO. This is not only because some Ugandans have a difficult time trusting their government, because the government has a difficult time being transparent with its citizens, or because there are not shared futures toward which stakeholders, government, and society at large aspire. As this study demonstrates, fishworkers and fisheries experts experience, think about, and work to shape very different fisheries. This brings multiple bodies of water into being with which to reflect on the possibilities of their

shared future.

Contemporary researchers and policy makers concerned with sustainability seek to identify policy solutions agreeable to all “relevant stakeholder groups.” In the case of Lake Victoria, these are said to include fisheries scientists, managers, politicians, industry representatives (of fish factories), donors, and the occasional academic. Despite the language of participation undergirding most recent efforts to sustain natural resources and would-be natural resource users into the future, these are conversations that continuously defer to the expert logics and practices of managers themselves. Backed with “stock assessments” and “frame surveys,” dressed up in the latest global fashions in managerial theory, it is difficult for contemporary policy-makers to move beyond the values and priorities that threaten their visions of Lake Victoria and the bodies fish and people they are paid, however moderately, to manage. There is much talk about “sensitizing fishers” about their own needs so that they might conduct their activities in “the right way,” the needs for better sanitation and hygiene at fishing sites, and the “lack of a savings culture” in fishing communities.

As traditional, indigenous, or local forms of ecological knowledge are increasingly, but selectively incorporated into managerial infrastructures of knowledge and practice, and women continue to obtain increasingly visible positions at the helms of fisheries research and management institutions, past concerns about political representation in resource management seemed to have faded. When all stakeholders are at last at the table, there is little need to ask whether everyone is comfortable, or to offer anyone else a seat.

There is, however, one significant group of fishworkers consistently left out of these vital conversations about Lake Victoria's sustainable future – women, and to a lesser degree

men, who purchase, process, and trade fish for growing local and regional markets. As carefully expressed in the words of one woman fish processor whom I had the good fortune of meeting during a late 2011 meeting on small-scale fisheries guidelines sponsored by the FAO and the International Federation of Fish Workers:

You people [the conveners of the meeting] keep saying that you speak for us. Only once has any one of you come to see where I smoke my fish. One said he would come sometime back, but he has never shown his face again. I keep inviting you to come and see what we do and how we do it, and the problems we face. Every time you complain it is too far, the journey is too difficult, or that the place smells.

[Pausing]

You know, I left my home two days ago to be sure I would arrive here on time.

I don't think I will waste my time here again. For what? I am fed up with your briefcases. If you want my opinion, you will have to come get it.

When she finished speaking, this woman, the only artisanal fish processor I had ever observed attending a national, let alone an international policy meeting like this one, then literally stepped away from her seat at the table.⁹⁵ Her baby boy previously secured silently and snugly on her back began to fuss. Perhaps he sensed the tension in the room. She reached her arms around her back and gently patted his bottom, still swaddled in the cloth that bound them together. Turning her head to him she made a subtle if stern sound indicating that this was not the time, nor the place for little boys to act up. Later, she told me that being amongst adults is the best way for children to learn how to behave.

The woman quoted above spoke in Lusoga, one of several vernacular languages in use at this particular meeting. The word “briefcase” however was in English – a phrase used

⁹⁵ I have attended at least five high-level national and international meetings like the one described here.

colloquially to refer to organizations that seem to have no physical home, but rather exist by shuffling papers from place to place and from one meeting to another. Because people who specialize in making their living with fish are uniquely mobile, readers familiar with fisheries elsewhere in eastern, central, and southern Africa may find certain vernacular terms and the things and the concepts to which they refer to be familiar, which is primarily in Luganda – or in the slightly different language of “the people of the lake.” Both are Bantu-based languages that incorporate aspects of Nilotic languages to varying degrees. Readers for whom these places, people, terms, and concepts are unfamiliar, even esoteric, are encouraged to read generously. I have avoided using vernacular terms when an appropriate word in English is available. Vernacular concepts do not always translate, and because this is a study in part about how various interpretations bring multiple material realities into existence, even readers familiar with Luganda may find my use of certain Luganda terms strange, as they are part of a living, ever-changing, convivial language of littoral practice.

Chapter Two details primary research sites, methods and modes of analysis, as well as two particularly key informants that made the littoral accessible to me and this project possible.

Chapter Three examines vernacular, scientific, and managerial forms of a type of fish known as *enkejje*, haplochromine cichlids, and “trash,” respectively and offers important conceptual and empirical evidence for reexaminations of littoral encounters with missionaries, administrators, and researchers in subsequent chapters. It considers why *enkejje* and women’s work with these fish have thus far been excluded from the historiography of the region, reconstructs historical littoral experiences with these fish, including the production, use and gendering of fishwork and fishing gear.

Chapter Four situates the figure of Mukasa, the ancestral guardian of the Nyanja, to reexamine colonial histories of contact and knowledge production. Although contemporary littoral residents remember Mukasa as always being a man, when early travellers and missionaries encountered Mukasa in the late 1800s, they met the still-strong body of a post-menopausal woman who appeared to wield a great deal of authority over residents of and visitors to the lakeshore, as well as over the male King himself. The chapter's analysis of the submersion of Mukasa's femininity calls for a rethinking of some of the most basic social units that historians have used to reconstruct this region's past.

Chapter Five builds on Chapter Three's discussion of fishing gear and Chapter Four's discussion of the needs of the newly emerging colonial state to reexamine Uganda's sleeping sickness epidemic in the earliest years of the 20th Century and the roll it played in creating Lake Victoria's fishing industry. This Chapter extends James Giblin's insights into an outbreak of animal sleeping sickness on mainland Tanzania to Uganda's littoral to argue that prior to efforts to establish colonial rule in Uganda, fishworkers and littoral residents more broadly successfully created conditions that reduced available habitat for tsetse flies and the sleeping sickness they could carry. A densely settled littoral was, however, a threat to the newly emerging colonial government. Sleeping sickness provided the justification for large-scale relocations of littoral residents into sleeping sickness concentration camps inland where most eventually died, as well as the formal declaration that all fishing from the littoral was illegal. Though most fishing was rendered illegal, fish was still needed to fuel the colonial economy, so new kinds of fishing practices and gears were introduced that could more easily be monitored by the emerging colonial government – Lake Victoria's fishing industry was born.

Chapter Six reexamines a Baganda ritual known as the *okurwalula abaana*, or “hatching the children.” Building on Chapter Three’s discussion of *enkejje* reproduction, this chapter considers how *enkejje* offered a material and symbolic repertoire for innovating and solidifying social groups along the littoral so long ago. This chapter argues that other scholars have concluded that *okurwalula abaana* offers yet another example of patrilineality and patriarchal control in Buganda because they have focused their analytic attention on land and more specifically the intensification of banana farming (under misleading assumptions about gender discussed in Chapter Four). This chapter’s focus on the materiality, meanings, and key actors involved in “hatching the children” reveals that it was grandmothers and not male patriarchs who ultimately granted access to legitimate membership in littoral communities and the land and assistance this afforded members.

Chapter Seven jumps forward in time to the contemporary littoral. Having detailed the multiple ways that fishworkers, scientists, and managers experience fish (in Chapter Three), reopened questions about women’s historical role in littoral fisheries and communities (in Chapters Four and Six), and traced the birth of Lake Victoria’s fishing industry to efforts to understand and manage the outbreak of sleeping sickness in the earliest years of the 20th Century (in Chapter Five), this chapter offers a very different reading of Uganda’s contemporary fisheries crisis than commonly found in scholarly and popular accounts of Lake Victoria’s fisheries. In Chapter Seven, we see how efforts to sustainably manage Lake Victoria’s Nile perch fishery both exclude and enable women to work with species and forms of fish that many Ugandans prefer to consume – fish that are whole, freshly prepared, and affordable. However, rather than rather than working with Nile perch in Lake Victoria, this chapter argues

they are working with *emputa* from Nyanja.

This dissertation then concludes with a brief epilogue, addressing the new kinds of questions that scientists and managers are asking themselves and each about the future of Lake Victoria's fisheries to ask: what might the future look like if fishworkers were not the only ones concerned with the sustainability of Nyanja's fisheries.

Chapter Two **[Field]work at the Littoral: Design, Methods, and Commitments**

The research process that informed this study did not bracket fishworkers, or even fish, as objects to be studied by me, the researcher. Rather this is a study with – with men and women who work with fish, but also with men and women who seek to manage fisheries. My experiences working those who make their living from fishing and fisheries-interrelated activities, including fisheries science and management, as well as the broader environmental and social history of this region required me to re-theorize fishing in in this lake.

This study both describes and deploys the concept of littoral politics, rejecting dominant narratives about Lake Victoria such as Hubert Sauper's *Darwin's Nightmare* that romanticize the fishing profession as a last resort survival strategy, constrained by the export trade, subject to state efforts to manage fisheries, and rendered risky by high HIV seroprevalence rates. Instead, I study fishing as a shifting and internally varied set of practices that those living at the littoral intentionally engage and innovate. In so doing, fishworkers provide vital sources of sustenance, economic opportunity, and leisure at and between the region's littoral, both challenging and bolstering contemporary and historical political regimes and export-oriented development in this historically volatile Great Lakes Region of Africa.

More specifically, as a critical ethnohistory of the fishery, research for this project comprised three facets. First, archival research elaborated the economic, ecological, and social frames overlaid on Lake Victoria through Colonial-era and post-independence development interventions in this fishery, and oral histories and a reading of written sources against the

grain revealed alternative ways of living well with this body of water. Second, ethnographic data revealed a shifting set of vernacular fishing practices that implicate women as well as men, and elaborated ways of coping and even thriving amongst dramatic social and ecological change in the region. Third, I chronicled ecological and technical aspects of contemporary fishing practices as they articulate with efforts to sustain fishing as a viable and vital economic activity in the region. The contemporary work of fishermen and women who process and trade fish belie narratives of contemporary fishing as either a failure, or a fix for Lake Victoria and instead reveal the ways in which contemporary fishwork make life in and around Nyanja possible.

This first half of this chapter discusses research sites, sampling and recruitment techniques, as well as the data collection and analysis that informed this study. The second half of this chapter reflects on my research process with two individuals -- Akello Florence and Bakaaki Robert -- without whom this study would have been impossible.

Research Sites

Because fish, people, and ideas about fish and people frequently move between natural and political borders, the over twenty-months of ethnographic and historical research that informed this study was situated within island-mainland complexes - a series of islands linked to one or more mainland fishing sites. The first such site, centered on the Kome group of Islands and the Entebbe Peninsula, is cosmopolitan by most accounts. The second, centered on the Buvuma group of islands linked as they are to a historically and contemporarily active mainland fish-landing site. This second island-mainland complex is often described as classically rural, but nevertheless, is cosmopolitan as I define the term for Uganda's littoral -

residents are from diverse locations within and outside of Uganda, speak multiple languages, frequently consume regional and global culture, settle in densely populated villages, participate in regional and global fishing-related economies, and travel frequently between littoral and non-littoral sites.



Figure 2-1: General Location of Key Fieldsites in Uganda. Ssese, Kome, Buvuma are all groups of many islands. On the mainland littoral, Masaka, Entebbe, Kampala and Jinja are all major cities. Inland, the Nile river flowing north near Buvuma separates the contemporary boundaries of the Buganda and Busoga, administrative districts and assumed cultural territories in the Colonial period. It is important to not that prior to the 1900 Uganda Agreement, all three archipelagos were not included within Buganda. The Buvuma group in particular was known to be hostile to Buganda and Busoga on the mainland. Still, following the 1900 Agreement, these islands became administratively a part of Buganda.

Home to Uganda's only international airport and the former seat of pre- colonial and colonial authority in the region, Entebbe's littoral hosts several formally gazetted fish- landing sites, and as many formally illegal, but still active non-gazetted fishing sites all of which are closely linked to fisheries-related commerce in the nation's capital of Kampala. It is also linked

to several commercially and culturally important islands, where fish destined for local, regional and intercontinental markets are landed, and shrines to important fishing-related ancestors are still active. Entebbe also hosts an increasingly vibrant evening and weekend leisure culture, where the region's students and working professionals come to relax, socialize, listen to music, and eat fish.

These groups of sites have very different settlement and governance histories and are integrated into similar but different local, regional, and intercontinental fish supply chains. Because of this I was able to analyze multiple forms and histories of fishing practice and politics that occur in different kinds of littoral communities, and the degree to which other possible variables (gender 'balance,' age, national citizenship, length of residence, ethnic identity, property ownership, friendships, long-term partners, place of birth, family fishing history, religious influences), feature in the movements, meanings, and material forms of fish that circulate through vernacular fisheries practices.

Data Collection and Analysis

This project follows people, fish and ideas about fish and people, while carefully detailing the movements, meaning and material forms they generate. I accomplished this by participating in and observing contemporary everyday and eventful moments at the littoral and in formal managerial settings, and by conducting in-depth interviews with a purposeful sample of littoral residents and resident managers, which I then placed in dialogue with 'received wisdoms' recounted in scholarly, professional, and media sources collected in this and previous phases of research. I also tracked similar and divergent phenomena and events across time and location through oral history interviews with littoral residents and archival research focused

most closely on seven previously unavailable collections of once confidential documents dating from the mid-1890's to the mid-1970's that I helped to catalogue in the summer of 2011 with a team of Ugandan archivists and academicians and University of Michigan graduate students. Further, I tracked when vernacular and managerial terms are used to reference the lake, fish and authorities in various forms of speech and settings, and between various individuals. This revealed important differences between littoral and managerial ontologies, and how, when and where the two may mix.

I carefully meted out my time between fish-landing sites, markets, institutions and archives, and in littoral and inland sites important to my key informants including their homes, favorite eating and leisure places, family shrines and villages upcountry, and practiced the art of meticulous note taking as I collected and analyze my data. I kept a field log that organized my research schedule, took daily field jottings in field journals, and wrote up detailed methodological, descriptive, and analytic notes at least every three days, and particularly during intense periods of participant observation and archival research.

Sampling and Recruitment Techniques

The major comparisons in this study are between different littoral sites (including island, mainland, gazetted, and non-gazetted landing sites and management institutions), and different fisheries-related economies (local, regional, and intercontinental) to examine how fish, people, and ideas about fish and people have changed over the long 20th Century. Because this study sought to achieve a holistic, primarily qualitative understanding of vernacular fishing practices and littoral politics, I employed non-probability sampling techniques, including both

purposive sampling and key informant sampling methods. Building on previous phases of fieldwork (in the summers of 2007 and 2008), purposive sampling during extended fieldwork (from July 2011-December 2012) produced data from relatively similar numbers of people situated differently with respect to the study situation, providing multiple perspectives required for this study. Key informants, in addition to those cultivated across previous field seasons, were selected amongst those recruited via purposive sampling, based upon availability and willingness to provide more in-depth information about their personal lives, over a longer period of time and in more informal settings. Purposive sampling involved recruitment of four subpopulations within each site: 1) women who process and trade fish; 2) women who reside permanently or temporarily in fishing sites, but do not specialize in fisheries work (including shop, restaurant, hotel and bar owners and staff); 3) male and female elders in fishing sites, regardless of direct engagement in the fishing industry; and 4) male and female members of BMUs. Recruitment occurred via two channels: a) by the co-PI herself at key littoral sites; and b) by key interlocutors from past phases of fieldwork who represent each sub-population. During recruitment for interviews, I provided detailed information about the study, and obtained informed oral consent prior to each interview.

Archival Research

Because fish, people and ideas about fishing have long moved above and below political boundaries in the region, I conducted archival research in British archives and in Uganda's National Archives in Entebbe to compare how and when narratives provided in oral history and archival sources converged and diverged. Throughout the summer of 2010, I read and collected digital copies of historical documents related the colonial-era construction of the

fisheries of Lake Victoria at the British National Archives at Kew, the Bodleian Library of Commonwealth and African Studies at Rhodes House at the University of Oxford, and the Natural History Museum in London. Analysis of these historical materials revealed individuals and institutions that advanced managerial technologies – from steamships, railroads and gillnets, to fisheries surveys and attempted licensing schemes – that continue to perpetuate a discourse of social and ecological crisis as well as inspiring hope for the proposed success of managerial interventions in Lake Victoria.

From 2011-2012 and briefly in 2014, I expanded this database of historical materials, and tracked how fish, littoral people, and fisheries are discussed in relation to broader colonial governance efforts in Uganda's National Archives. While in fishing sites, I documented place, individual, and group names to inform ethnographic and oral history research phases. Anchoring half of this study in Entebbe allowed me to work with newly available archival sources as needed, while in the same day spending considerable time at the littoral. The historiography of disruptive labor migrations and state-imposed 'environmental control' that gave women both the cause and situated authority to rebel against formal regulations in Africa, however overt, or concealed their resistance required that I read these archival materials for historical narratives that shape contemporary managerial practice, and compare these sources with accounts provided in oral history interviews.

Participant Observation at the Littoral

I joined in, documented, and reflected on everyday and eventful moments at the littoral. Building on a strong longitudinal database and set of informants from previous phases of my research in 2007 and 2008, these contacts and methods help me understand and elaborate forms

of mobility, meaning, and materiality that have sustained littoral economies, despite continued accounts of collapse. I closely followed people and fish as they moved together and observed and participated in the range of activities littoral life provides, from fetching water, discussing current events and helping bring boats to shore, to hosting documentary film-makers, student groups, and sharing information on how not have one's fish seized by authorities of various kinds. Further, I joined in movements between islands, between islands and the mainland, and between littoral sites and large and small fish marketing areas.

More specifically, this included: *vernacular fisheries work*; I pulled beach seines and boats to shore, and bought technically illegal fresh fish at night. I smoked, fried and sold fish, observed fish-related transactions at the beach and in markets, asked a lot of questions, and when appropriate, paid tribute to the *jjajja's* (ancestors) at important spiritual sites; *properly hosting interested outsiders*; I helped welcome and entertain a Belgian documentary film-maker shooting footage at a landing site for the Uganda Fish Processing Association while he waiting for a filming opportunity that was staged, but thwarted due to rain, and helped host primary and secondary school geography classes while they toured a landing site where I regularly work; *meeting with friends and family*; I regularly met with a diverse ensemble of key contacts as friends to share a meal, visit family and neighbors, or to take a trip to the market, or the beach. This has proved crucial in gaining trust, sustaining relationships, and gaining information not always provided in more formal interview settings; *participating in littoral politics*; I have walked tens of kilometers with hundreds of littoral residents in support of a local MP who's seat was recently contested by the ruling party – he won his by-election while quadrupling his original margin. At first I was wary of the attention this garnered (my image, though not my specific

identity, appeared in national print and TV news sources), but quickly found it incredibly useful in gaining trusted friendships, and interviews with littoral residents, including the MP who won the seat himself.

Institutional Ethnography

In addition to attending five high-level national and international workshops on Lake Victoria's fisheries, I attended several local-level BMU meetings and conducted regular in-depth interviews with BMU members. I focused data collection and analysis in this phase on how diverse fisheries actors were represented and how they represented themselves and their positions in various institutional settings, and how BMU members ideas about sustainability in the lake. I asked: How do 'civil society stakeholders' speaking for fishworkers speak of fishing practices and fishing people? Do women who process and sell fish, and men who do the work of fishing have different concerns? Are their concerns given equal consideration? In BMUs I asked and observed: How, when and where do BMUs meet? Does the work of the BMU extend outside of formal meeting places, in informal conversations, or at the beach? What is discussed at these meetings? Do discussions change depending on who is present? Do women provide different accounts within different contexts of what is important to them? How are women participating in enforcement efforts through their positions in the BMUs? Do BMUs where women are represented function differently; have different priorities, or enforcement strategies? What influences do BMU have on actual fisheries practices?

In-Depth Interviews

In-depth interviews with a variety of fisheries actors from managers to littoral residents were crucial to understanding diverse vernacular fisheries practices and the politics of

sustaining and controlling these trades, as well as how littoral residents are understood by managers outside the littoral, and by littoral-resident managers. Records of these interviews took the form of audio recordings and detailed handwritten notes that I then transcribed and typed up. Formal interviews with national-level fisheries scientists and managers (n=17) were largely completed in my 2007 and 2008 field seasons, though I continued more informal conversations with fisheries scientists and managers throughout my 2011-2012 fieldwork. Indeed, these early interviews were crucial to gaining access to the high-level national and international policy meetings that I attended in 2011 and 2012. In-depth interviews with female fishworkers, elders, healers, and littoral residents who do not work with fish were thus the focus of my 2012-2013 fieldwork.

Many of these interviews were iterative. That is, I conducted formal interviews with over 135 informants and continued a subset of these conversations with key informants throughout my extended fieldwork. This process allowed me to reflect on the content of interviews and identify new questions and lines of inquiry to pursue in future conversations. It also was crucial to building levels of trust required to receive accurate information about the practices, priorities, and histories of fishworkers that would have been difficult, perhaps even impossible to obtain otherwise. Thus, the specific numbers of data collected below refer to the numbers of different informants interviewed, rather than the numbers of interviews conducted.

Oral Work Histories with Fishworkers

These interviews focused on the work histories of women currently involved in fish processing and trading (n= 60), as well as the provision of services for fishermen, such as accommodation, food, and entertainment (n=30), and with male and female BMU members

(n=20). I asked: How did women become involved in fishwork? How, where and when do they work with other women, men? Are their activities seasonal? How has their work changed? Are fish ever traded for other goods or services rather than for cash? What difficulties do they face in their work. These interviews highlighted the importance of women's collaborative work, but also rivalries. Social connections formed through kinship ties, the sharing of a common languages and/or residential histories neighborhoods are key for gaining knowledge about how and where to buy fish, how to process fish, locating buyers for wholesale trade, and how and when to avoid fisheries enforcement officials. They are also crucial for knowing how to behave when purchasing fish in the early evenings or early mornings, when it is dark, and sometimes dangerous. Contemporary female fish workers are innovating new ways to access fish, though in my experience, this is much more likely to include a gift of mobile phone airtime, and some mild flirting with a fisherman, or a man who runs the net, than it would a sex-for- fish transaction as is reported in academic, professional, and media accounts. Part of my time in the field consisted of travel with key informants to visit and interview several women who have been crucial to sharing fish processing and trading knowledge, but have since retired to villages inland. These women taught their daughters and friends what they know, and many of them are still working together, though, the conditions of their work, particularly the likelihood of having one's catch seized at the beach, or even at home, have changed.

Oral History Interviews with Elders and Healers

I conducted oral history interviews with male and female littoral resident elders (n=20) and healers (n=8), whether or not they have worked in fisheries. In these interviews I tailored questions to the experiences and information provided by each elder interviewed. In each

interview I provided prompts towards work and family histories, and how fish have or have not featured within them, as well as “traditional norms” and “cultural norms.” I asked all participants what women do in fisheries and fisheries related work, and at the shoreline. If participants say “nothing” I suggested a few things that others have suggested to me, like making materials to be woven into fishing nets, making fishing baskets, and providing food and shelter for fishermen. I paid special attention to references to proper behavior at the littoral, perceptions of those involved in fishing activities, and to varied uses for diverse species. These interviews usually began with discussions of place of birth, work, and residence histories, as well as those of their parents.

Data Analysis

I collected complex, varied, and multimedia data across overlapping and iterative research phases, including fieldwork on the export trade in 2007, on the local fish trade in 2008, in British archives in 2010, and at the littoral in 2011-2012 and in May and June of 2014. I compiled and managed a digital database of materials including a log of my daily activities, field jottings in small notebooks, extended fieldnotes from these jottings on a computer, and audio, video, and written transcripts of interviews and oral histories, photos, news articles, pdfs of archival files, and maps. To do this, I used DevonThink, a multimedia data organizing and content analysis software. This program allowed me to compile, search, arrange and analyze these multiple data formats in cross-cutting ways, by specifying codes, themes, dates collected and analyzed, cross references to other data, and even specifying GPS coordinates of where data was collected, and/or where data collected referred.

Specifically, I ascribed these qualitative data with semi-hierarchical codes in relation to

broad themes including, *vernacular practices* (fishing gears—beach seine, gill net, hook-and-line, long line, monofilament net and lantern; fishing practices - times and seasons of fishing, payment arrangements, distribution of catches, changing practices, coping with enforcement, paying tribute at shrines) *sites* (fishing sites-mainland, island, gazetted, non-gazetted, distance from major road, city), *other littoral sites* (management institutions, leisure beaches, processing sites, homes, restaurants, hotels, offices, BMUs), *species and forms of fish* (vernacular names of species and size, when/where/how vernacular/managerial names are used, preferences, seasonal variations, how processed, where traded, purchased, consumed, where traded, prices), *gender and self-identified position of informant(s)* (fishermen, restaurant owner, trader, processor, owner of gears, other occupations, length of littoral residence, more than second generation resident, more than first generation fisheries worker, place of birth, birth order), *fisheries control efforts* (caning, bribes, seizure of gear, seizure of fish – which species and form, fire, sale to factory, sale on shore, free distribution, warnings, surprised effort, known effort, other non-managerial event with enforcement outcomes, etc.). This allowed me to draw connections between variables and examples when thinking and writing about my work.

Research Permissions

This project received required approval from the University of Michigan Institutional Review Board under the study ID HUM00051364. In Uganda I was affiliated with the Center for Basic Research, and received formal research clearance and approval from the Uganda National Council of Science and Technology and the Office of the President.

Two Individuals Who Put the “Key” in “Key Informant”

The research design and methodology outlined above would have been impossible to

develop and execute without the generous assistance of two individuals – Bakaaki Robert and Akello Florence (and the communities within which they are positioned and were able to grant me access to). The discussion that follows attempts to honor these relationships and unique abilities of these individuals by reflecting on the nature our research together over the years. The tone with which I write about our shared work differs from the more scholarly account just provided, and more accurately reflects the interpersonal and intercultural competencies required to conduct this research.

I first met Bakaaki Robert one afternoon in July of 2008 at the landing site where he manages several fishing boats. Because Robert was the Vice-Chairman of the landing site’s Beach Management Unit, and fluent in English, he introduced himself to me when I arrived at the site seeking more information about the Nile perch trade. Robert was keen to help, not least because he feels an affinity for the United States, where I am from. During our first meetings, I overheard several people referring to “The American,” and thought they were talking about me. Fortunately, Robert soon informed me that “The American” is one of his nicknames, and had nothing to do with my presence. Our shared fluency in the English language as well as the languages and logics of management soon led to conversations that challenged us both to think in new ways about our interconnected economies, systems of knowledge production, and domains for future inquiry.

That summer, Robert and several other fishworkers and managers around Nyanja helped me understand that fish and fishing were not simply legal or illegal, as most managerially oriented literatures had led me to believe. Through informal conversations and sometimes semi-structured formal interviews about the practices of fishing and managing fish,

a third category of fish and fishing practice emerged, which I first called ‘[il]legal,’ though later came to call ‘reasonable’ during my conversations with Robert. I met Robert again briefly in November of 2008, though could only stay in touch via periodic phone calls until I returned to Uganda several years later.

By the time we met again in July of 2011, Robert had become the Chairman of Beach Management Units for all of Uganda, giving him unique access to managerial discourses, and the challenges of mediating between the concerns of his fishing colleagues and neighbors and those of the state and fisheries experts. I was aware of and able to attend high-level management meetings because these were meetings to which Robert had already been invited.



Figure 2-2: Left: Bakaaki Robert and Jennifer Johnson at a November 2011 Workshop on Sustainability Guidelines for Small-Scale Fisheries. Right: Donning "Tradition Dress" in July 2012 at an event celebrating the 19th Anniversary of the current King of Buganda, Ronald Muwenda Mutebi II at Aero Beach in Entebbe

We rekindled our relationship over a number of shared fish lunches, a trip to revisit the nearby island where Robert grew up, and more than a few beers. Shortly after, we began conducting oral history interviews together with elders living near the lake, career histories with women who process fish, and visiting active shrines that still exist to keep the ancestors of

the island and mainland littoral active in the lives of contemporary residents. As we began translating and transcribing these interviews from the Luganda into English, we could not help but pause frequently to discuss and analyze the data we had collected.

We opted to do most of our transcription work at the landing site itself, so Robert could continue to do the work of managing boats while we also worked on our interviews. This also suited my desire to have a good excuse to hangout for extended periods of time at the landing site where outsiders are welcome, but rarely stay for long. As we encountered points of clarification that I required from our interviews, and pointed out interesting moments in the daily rhythms of life at the landing site, we ended up spending most of our time informally discussing what I elaborate in the chapters that follow as the vernacular domain, rather than doggedly keeping our ears and eyes on our interviews. At first it was challenging for us to find mutually satisfying words to capture what we were trying to describe, so we made up a few of our own, for example, “reasonably-sized fish.” In the process we have become more than colleagues and friends, we have become family. We have shared everyday concerns over bodily safety and job security, and more difficult, but not less useful, discussions about the social work of mediating between multiple individuals, institutions, and circumstances in our respective and shared projects.

In our daily work straddling managerial and vernacular domains, we could not help but experience and reflect upon how the professionalization of fisheries knowledge in Lake Victoria has calculated and criminalized the skills, preferences and obligations of our colleagues who actually work with and eat fish in *Nyanja*. Fisheries experts with diverse disciplinary and professional backgrounds, in Robert’s words, “all seem to sing a common chorus of the need to

sustainably develop Lake Victoria's fishing industry for the benefit of present and future generations." Their focus may be different depending on the priorities of the organizations they work for, for example 'enhancing food security and food sovereignty,' (Food and Agricultural Organization of the United Nations), 'coordinating research and management for a healthy lake ecosystem,' (Lake Victoria Fisheries Organization) and 'alleviating poverty and enhancing food sovereignty,' (donor agencies including USAID, the EU, NORAD and SIDA). However harmonious, humanitarian, and erudite their voices may sound, the reality remains that 'sustainably utilizing Lake Victoria's fisheries resources' requires that species and forms of fish preferred by *Nyanja's* residents rarely touch their lips. To 'increase household income' for the 'marginalized, impoverished, and malnourished,' fish must literally be confiscated from the very people responsible for securing household income by provisioning uniquely nutritious food to local markets. Like many who live or have lived at the littoral, Robert and I find this to be unacceptable. Unlike many fisheries researchers and managers, Robert believes that appropriate vernacular fisheries already exist in Uganda, though they do compete with 'Lake Victoria's fishing industry' – a complicated position to take, given that Robert is engaged with both the vernacular and industrial fisheries economies.

Littoral residents have long worked to shape outsiders perspectives of them to advance their own needs and desires. I was recently reminded of this during a short visit to Uganda in May and June of 2014. Akello, one of my closest and most conscientious research assistants and I were looking at old photographs of our work together since 2008. We came upon a photo of Akello taken in the summer of 2008, during our third meeting, when we spent the day together processing fish for sale. From the early morning through the late afternoon, Akello taught me

the basics of sourcing, cleaning, and processing fish. The photo was taken during one of several breaks in the process -- our fish were de-scaled, de-gutted, and well positioned on the clay-brick kiln that Akello's mother had built outside their Entebbe home, the fire under the fish had been lit. Our main task then was to keep the fire steadily hot – but not too hot – until it was time to flip the fish over and smoke the other side. So, we sat down. Akello brought out her family photo album and I brought out my camera. The photo, reproduced below, was of Akello, showing me a photo of her mother taken in the early 1990s with two large baskets of smoked fish.



Figure 2-3: Akello Pointing to a Photo of Her Mother's Bounty in 2008 (Her mother, as of August 2014, is still very much alive.) Akello on Buvuma Island in 2012.

In 2014, after laughing together about the tears the hot smoke generated in my eyes so long ago, I asked Akello if she remembered whispering to me when we first met six years ago that her real mother had died of AIDS a few years back, and that the woman at her home was her stepmother, not her real mother. “Ah...Jenny....you never forget! You know we talked about that some time back,” Akello demurred, “We didn't really know each other at first.”

“True,” I said, nodding. “I hardly knew myself here then.”

I was still young.” Akello continued, “I thought if I told this white lady – you – that I was an orphan and needed help that you would help me with money for school fees.”

She was right. It worked. Under the circumstances it was completely practical for Akello to tell such a powerful lie. She was buying, smoking, and selling fish in her school uniform, while her older brothers were sitting in classrooms staring at chalk boards in theirs. She sensibly wanted to go back to school, more specifically a boarding school where she would be able to focus only on her studies and not be required to do household chores when class was dismissed for the day. More than that, she had no reason to believe that she would ever see this white lady (me) again. It couldn't hurt to ask for help, or distort the truth.

I on the other hand was willing to help Akello partially out of recognition for my own comparative privilege. I grew up in suburban Ohio. We had excellent public schools. It was never a question to my parents or me whether I would finish high school. However, more selfishly, I intuited then that maintaining connections with Akello would be incredibly helpful when I returned to Uganda for my extended dissertation research. Although I don't think I ever confessed this in so few words to Akello, I helped her then so she would help me in the future.

Later, when it became apparent that I had known her “real mother” all along, I was not angry. I was humbled by the possibility that all the “facts” I had already accumulated and would continue to collect in the future might be similarly distorted versions of the truth. How would I know what was real?

Remembering this, we laughed, not uncomfortably, but in shared recognition of how far

our relationship had come. We had made a lot of friends together in our travels to islands, fishing beaches, markets, and the homes of women we met in Entebbe. We had met each other's "real mothers" and shared many mornings, meals, and adventures. *Remember the time at the Shrine in Burwaya when Ssenga would not stop giving us roasted goat? Then Mama would call us to come and eat lukombo? I thought we would explode! Remember our first time on the speedboat? Remember finding that herb, on Buvuma – ayayana – the one that can make anyone fall in love with you? And how beautiful Annie refused to put it down, saying she really needed it? Remember Nalongo, Kizito, Senoga, Odihambo, Mama Jen, Jessica, Nakwoga, Mama Nakwoga, Mama Salongo, Betty Nakawa, Betty Kitoro, Betty Buvuma, Paska, Mama Night, Mama Sharon, Harriet, Ghetto Presido, Berna, Mama Jessica, Peace, Mama Nankabito, Gabda, Salongo, Raymond, Shalila, Nelly, Reste, Tabby, Mama Tabby, Kinene, Joel, Tata Shalila...remember that drunk Mzee who used to shake our hands hard and say 'welcome to Ssese, Kalangala. Kalangala District - even though we were on Kome Island, in Mukono District? Remember when we saw the King? Tutambula Bulungi!* We have travelled well!

Before I returned to Uganda in 2011, Akello and I unfortunately lost touch with each other. She had met a young man while still studying and became pregnant. Fearing her family's reaction, she went in secret to live and deliver her child at the homestead of her future son's father. Her Auntie even emailed me to try and find out where Akello might be. I had absolutely no idea. Eventually, Akello ran into an old neighbor from Entebbe who saw her suffering there; thin, hair a mess, and digging sweet potatoes with her young son. He convinced her to return to her mother and father in Entebbe, which she reluctantly did. Neither she nor her son has seen the father since.

Fortunately, when I returned to Entebbe in 2011, Akello was back too. She was again buying fish, but also working full time as a cleaner inside an almost completed new office and laboratory for Government Geological Department. Our mutual friend Bakaaki, collaborator in so much of my fieldwork and co-author of Chapter Three spotted Akello buying fish one weekend at the fish landing site where he lived and work two months after I arrived for my extended fieldwork. Bakaaki told Akello I was looking for her and gave her my number, she called me right away. I immediately recognized her voice.

Soon, Akello and I started buying [“illegal”] fish together at night, and making plans to visit and interview women that we met at these fishing places on the weekends— many of whom Akello had already known for some time. Akello's contract with “Geological” expired in late December 2011, so we were able to ramp up our work and travel together. We smoked fish and took them to markets in Kampala, Uganda’s the capital city, where we met women who remembered us from 2008, and new women from far away island and mainland fishing sites where we would eventually travel together. We visited large fish landing sites outside of Kampala and made friends with chairmen and women of local councils and beach management units, fishermen, fish traders, fish smokers, fish fryers, and others who were willing to welcome us back again and again. There too, we met women from far away island and mainland fishing sites who were willing to host us or travel with us to their current homes, where we met more women who introduced us to more places. My intuitions were correct; it might have been impossible to do this research without Akello.



Figure 2-4: Productive Research. Akello seated in the background, enjoying her dinner. The fish being smoked here are all Nkolongo (*Synodontis*) and are not technically illegal to buy, process, or sell. Though because of the nets required to catch these fish, it is illegal to fish for Nkolongo.

Establishing productive relationships with women who process fish was my primary ethnographic research method – productive in the sense that we were actually producing fish, while also beginning long-term conversations about the complex nature of doing just that. Often in the earliest stages of my conversations with women working in the “illegal trade,” I would be asked a variation of: 'so what are you here to teach us?' My response was always the same: “I am not here to teach you anything, I'm here hoping that you will be my teacher.” Soon after, the questions transformed to: 'so...what's in it for me?' Women and men who work with fish are busy women, and rarely have time, or the desire to talk to researchers, especially those who may accuse them of illegal fisheries activities.

Akello, was my closest colleague in these fish-processing endeavors and would help explain my position in one of at least five vernacular languages that she could speak more eloquently and appropriately than I ever could: “Ah! Madame, Jenny is just a student! She doesn't have capital to give or loan. She doesn't even have a real job! *Kakaati*, mama, let's talk freely. Sometimes she goes to meetings with 'Fisheries' [the vernacular shorthand for fisheries managers of all kinds]. You know she is not against illegal fishing. If you want, she can tell them the problems we face.”

Everyone should be fortunate enough to have an Akello in his or her lives. Some women were skeptical, and never seemed to let their guards down or get too close when we were around. Still, we were almost always told, 'That is good. Fisheries need to hear about us. Tell her to study hard and maybe someday when she gets a job, she'll help us.' Other women welcomed us into their homes on multiple occasions for weeks at a time, sharing meals, and letting us share in chores once we became something closer to friends and family than strictly guests. This transition from “visitor” to “friend or family” did not happen overnight, or over one visit. It required repeated stays on multiple islands and fish landing sites, regular visits for Sunday tea, or frequent stops at the fish market in the morning to chat with women who brought their fish for sale there. At the simplest level, we kept making plans with women and keeping them. Through this, trust was built. When we brought gifts of sugar, bread, biscuits, and tea (like “good daughters should”) to our hosts when appropriate, we returned home with our arms full of fruits, sweet potatoes, and fish. One particularly wealthy woman on a distant island always sent me home on her transport boat with pocket money, a cold beer (when Akello joined me there, she preferred a cold Mountain Dew), a large fresh Nile perch, and once even an

umbrella to shade my skin from the sun (as is the practice on the water regardless of skin tone). According to her own daughter, it would have been rude for us to refuse any of these gifts, and even if we really tried to protest, her mother would insist. The appropriate thing for us to do was to be humble and genuinely thankful.

Lake Victoria is one of the most frequently studied lakes in the world; however, it continues to be studied as a system in constant crisis. My experiences at the littoral with Akello, Bakaaki and many others have taught me that the crisis narratives that circulate about fisheries here are largely the result of a methodological choice. Most studies of Lake Victoria's fisheries are conducted through large-n research designs using statistical survey methodologies, and may be funded by international donors driven by the need to sustainably manage Lake Victoria's Nile perch export fishery. Researchers arrive at fishing sites in boats and vehicles that often mark them as working for "Fisheries," those understood by littoral residents to be actively trying to stop their work with fish. Armed with clipboards, pens, and paper, these researchers have a difficult time talking to men and women who frequently work with fish, because active fishworkers are simply too busy, or otherwise unwilling, to make themselves available as research subjects. In most cases, researchers have already decided the number and range of individuals they ought to interview (for the purposes of obtaining statistical validity), what questions to ask, and indeed, the range of possible responses. There is useful "data" on the social lives of fishworkers that cannot be obtained by ticking off boxes on pieces of paper, entering this data into spreadsheets, and importing these into statistical software packages for analysis. This imposes a way of knowing the world that fishworkers may be able to relate to, but nevertheless do not generally experience themselves.

Most individuals that researchers manage to interview are either members of the littoral elite (who are wealthy enough not to be too busy working at the time), or the littoral's most marginal – women and men who are newcomers, or otherwise not interested in or connected enough to spend their days (and nights) working with fish. More than simply a case of “research subjects” telling researchers what they think they want to hear, littoral residents often tell researchers what they think will get them what they want. This is most clear in the literatures addressing HIV/AIDS and “sex-for-fish” in fishing communities. Despite their best intentions, researchers have a difficult time understanding the intimate exchanges of fish, fluids, children, and cash between men and women as anything more than commercial transactions. Women are glossed as sexworkers even when they sleep with men they consider to be their husbands.¹

Slowly, Akello and I developed a relationships built on trust and mutual respect with each other and with those we met together. We became implicated in others' lives to varying degrees. We were invited to important functions, visiting new children soon after they were born, attending baptisms, and joining close friends in mourning the deaths of family members, friends, and colleagues – because that is simply what is expected of trusted friends. We were asked to contribute to wedding funds, and to help defray costs of treatment for sick children. We couldn't always be as generous as we would have liked. This all was time consuming and

1 Allison and Seeley, “HIV and AIDS among Fisherfolk: A Threat to ‘responsible Fisheries?’”; Bene and Merten, “Women and Fish-for-Sex: Transactional Sex, HIV/AIDS and Gender in African Fisheries”; Z A Kwena et al., “Prevalence and Risk Factors for Sexually Transmitted Infections in a High-Risk Occupational Group: The Case of Fishermen along Lake Victoria in Kisumu, Kenya,” *Int J STD AIDS* 21, no. 10 (October 1, 2010): 708–13; Shari L. Dworkin et al., “Property Rights Violations as a Structural Driver of Women’s HIV Risks: A Qualitative Study in Nyanza and Western Provinces, Kenya,” *Archives of Sexual Behavior*, November 22, 2012; Z. A. Kwena et al., “Short-Term Mobility and the Risk of HIV Infection among Married Couples in the Fishing Communities along Lake Victoria, Kenya,” *PLOS ONE* 8, no. 1 (2013): e54523.

sometimes as exhausting as it was exhilarating to navigate.

This study of Lake Victoria is unique precisely because of this methodology. By forming long-term relationships with fishworkers and littoral residents, and participating in the practice and concerns associated with working with fish, other bodies of water began coming into being for us. Women and men who have worked with fish for some time have often lived near several fishing sites, if not on several fishing islands. Akello and I were able to travel so widely and so well because we travelled with “sons and daughters of the place,” and sometimes even became “daughters of the place” ourselves, rather than with those who tried to *regulate* their behaviors. This has shaped the kinds and quality of data collected for this study, as well interpretations of it in profound ways.

I have collected a wide range of information for this study with the help of Akello, Robert and through the generosity of many others – from fragments of conversations overheard in public transportation to detailed transcriptions of formal interviews, from reflections on day-to-day experiences with the women and men and fish we met and came to know in fieldnotes to collections of print and television news media, policy documents, and historical archival materials.

I have never been to a fish-landing site when there is a “Fisheries” operation ongoing, though I have witnessed small-time fisheries officers extorting big money from women traveling to town to sell their fish. Like most fishworkers, I tried to stay as far away from “Fisheries” at landing sites, lest I be mistakenly associated as “working for them,” or would have my activities stopped by them. After all, most of the fish I learned to work with there were also “illegal.” The stories I have collected referencing the “brutality” and “inhumanity” of these

efforts to enforce fisheries regulations – stories of women being smacked on the face with fishing paddles, women and men made to assemble in a circle and sit for hours while their covers (smoking kilns) and fish were destroyed, their boats broken and their fishing nets burned – have come from multiple sources. Fishworkers, employees of consulting groups and NGOs, government employees, and so on have all shared stories of their involvements with Fisheries enforcement efforts. While I have not seen these with my own eyes, the accounts of fishworkers on these sets of issues match up with the accounts of enforcers, who perhaps are more likely to downplay the violence associated with enforcement efforts to a researcher like me, transparently more sympathetic to the concerns of littoral residents over those who seek to regulate their actions.

Although most of my time in Uganda was spent with fishworkers, this study would have been impossible without the advice, insights, and hospitality of many talented and dedicated fisheries scientists and managers in Uganda, but also in Kenya and Tanzania. Because I have also worked to develop relationships with “Fisheries” outside of fishing sites since 2007, I was able to invite myself to relevant conferences, workshops, and meetings of various kinds where Lake Victoria’s fisheries were discussed, debated, and planned for. This project has benefitted a great deal from their difficult questions and almost dogged insistence that I consider “the good side” of the Nile perch fishery as well as “the bad.