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A "Time of Clothes": The Angolan Rubber Boom, 1886-1902

Jeremy Ball

In 1992, the Municipal Government of Bailundu, in the center of the Angolan Highlands, declared "Bailundu Day" to commemorate the ascension of a nineteenth century Umbundu king, Ekwikwi II, on July 25, 1876. Ekwikwi, who reigned until 1893, is remembered in Umbundu¹ oral tradition as one of the great leaders of pre-colonial Angola. He is accredited for ending internecine fighting, and, through skillful diplomacy, checking Portuguese military and political encroachment.² Ekwikwi is perhaps best known, however, as ruling during a period of unprecedented economic prosperity. As late as 1956, Ovimbundu remembered the 1880s and 1890s as a time when they had more "clothes" than they did at any time since.³ The source of the prosperity was rubber, and specifically "second class" root rubber. Ovimbundu traders bought rubber from their neighbors, primarily Ganguelas, who lived in the savannas to the east and south of the highland. They then carried the rubber to the coast, along the old slave road, and traded with dozens of Portuguese merchant houses in Benguela and Catumbela. Ovimbundu traders realized the lion's share of rubber profits—more than either Portuguese traders or peasant producers.

The Umbundu experience in the rubber trade contrasts sharply with tales of European greed and violence perpetrated against African collectors in neighboring Congo. In Congo, European concession companies and Leopold, King of the Belgians, exploited rubber resources on the backs of forced African laborers.⁴ In Congo, the vast majority of Africans realized little or no profit from the rubber trade. The situation in Angola was very different for two reasons: first, Africans controlled the trade in a free trade zone independent of European colonial rule; and second, scarcity of labor and a surging demand in Europe and North America meant high commodity prices. In short, in Congo, concession companies and King Leopold realized huge profits from rubber; in the Umbundu Highlands, Umbundu kings and individual traders realized the lion's share of profit. In this paper, I will explain the context of Ovimbundu

trade in the late nineteenth-century, and specifically describe the process of rubber extraction, rubber's value at the coast, and its effects on Ovimbundu economy.

The Land and People

The Bantu-speaking ancestors of the Ovimbundu began settling the Ovimbundu highland by the twelfth century CE. The Bantu-speaking farmers settled among earlier inhabitants who hunted and gathered and spoke languages ancestral to those of the modern Khoi and San herders and hunters of the Kalahari.⁵ Over time Bantu-speaking communities absorbed the hunters and gatherers and learned their hunting and gathering techniques, which were used to supplement the millets and sorghums of the farmers. As the Bantu-speakers moved further south out of the rainforest belt and into the drier savannas of modern-day Angola, they settled primarily in river valleys. River valleys provided the best-watered lands and it was here that people built permanent communities, exploited natural resources, and developed unique linguistic and cultural attributes. Peoples living in the highland, where reliable rain (60 inches per year) and livestock led to relatively high population density, spoke related languages and became known as Ovimbundu.

By the end of the seventeenth-century a series of kingdoms had been established, including Mbailundu and Huambo, and later Viye, on the central plateau. The kingdoms traded and raided for slaves and over time developed a collective identity as Ovimbundu. They competed among one another, with Matamba and Kasanje to the north, and with Portuguese Angola on the coast after 1600. The slave trade provided the focus of the economy and the power of the leaders.⁶ People assembled around warlords who could protect them from slave raiders. The *ombalas* (capitals) of Umbundu *somas* (kings) were heavily fortified against the depredations of raiders. Ovimbundu were both victims and perpetrators of the slave trade. Historian Joseph Miller estimates that during the 1780s and 1790s 8,000 slaves left the highland annually for slave ships docked at Benguela. The first four decades of the nineteenth century, according to Miller, saw these numbers climb to 30,000 per year, as Ovimbundu raiders rounded up slaves further inland and traded them to Portuguese and Luso-African traders.⁷ One of the markets, or *feiras*, where slave dealers bartered manufactured goods for slaves

with Ovimbundu political authorities was at Ecovongo, the *ombala* of Viye.

Bulk Commodity Trade

The Atlantic slave trade from Angola declined after 1850,⁸ and was superseded by trade in beeswax and ivory. The system of extending credit to Portuguese and Luso-African traders begun during the slave trade was extended to the new trade. Traders, who were Portuguese or more often Luso-Africans, obtained credit with merchant houses along the coast. Prior to the 1880s a majority of these firms were branches of Lisbon-based firms. With their credit traders bought manufactured goods, including in order of importance, cloth, rum, and firearms, to trade in the interior. These traders, known locally as *sertanejos*, employed Africans to carry the goods inland in large trading caravans. Caravans traded for months at a time, stopping at local *feiras* in the interior. The *feira* at Ecovongo was a four-week march from Benguela, and was considered "the key to central African commerce" by nineteenth-century slave and ivory trader Silva Porto.⁹

Trade caravans are important to understand Ovimbundu success during the rubber boom because it was during the 1840s-1870s that Ovimbundu gained experience and capital through working as porters for *sertanejos* and increasingly for Ovimbundu-owned caravans. Three kinds of Ovimbundu-owned trade caravans operated during the nineteenth-century. The most important were the *omaka* caravans owned by Umbundu kings. *Omaka* caravans operated, at least in part, with slave labor. In the 1870s, before the rubber boom, *omaka* caravans arrived two times per year in Benguela. These caravans were as large as 3,000 persons, about half of who carried merchandise as there were no pack animals.¹⁰ According to nineteenth-century trader Lázló Magyar, a Hungarian who spent thirty years in Viye, African porters were noted for their professionalism.¹¹ Each carrier transported a cargo of approximately 64 pounds, and for those who transported their own food, arms, cooking utensils and mat for sleeping, the cargo increased to 90-95 pounds. Many of the traders, however, were accompanied on the march by a family member or slave who carried their food and personal belongings.¹² Merchandise that was too large to fit into the bundle on the back of a porter, was strapped to shafts and carried between two people, who received

salary and a half.¹³ Travel time between the coast and Viye took approximately 25 days.¹⁴

Hired carriers were paid in cloth, which served as a unit of currency along the coast and in the hinterland.¹⁵ Cloth came in the standard size of a yard and was called a *panno*. The traders then had the option to either bring the cloth to the stores in town, where they were exchanged for merchandise such as rum, guns and blankets, or could keep them to exchange in the interior.¹⁶ Many carriers invested their earnings in *peças*, or slaves, to work for them in trade. This form of capital accumulation would be important during the rubber boom.

Magyar reported a hierarchy in the salaries earned by porters based on the merchandise they carried. The first and best-paid category consisted of those who transported a bundle of assorted goods called a *kupa*, along with carriers of porcelain and glass. The *kupa* consisted of 10 *covados* ("bundle") of fine cloth; 10 *covados* of coarse cloth; two jugs of rum; and cloth for the purchase of food. The second category consisted of those who transported rum, gunpowder and weapons. Rum was transported in small wooden barrels containing about 25 liters, and gunpowder was transported in barrels carrying 20 liters. Three of these barrels constituted a load. Eight guns tied together constituted a load.¹⁷ The third category of porters carried salt. Salt was a commodity of much less value and with less danger attached, presumably because of its lower value, so that carriers of salt received about half the salary as compared to carriers of *kupa*.¹⁸ Magyar reported that personal items and food were almost always transported by slaves of the owner.

At the head of a caravan was the *kissongo*. The *kissongo* decided when and where to make camp, conducted negotiations with local leaders, and generally served as the guarantor of the caravan. Magyar quotes a toast made by relatives upon a *kissongo's* departure: "See here our son (or brother); to leave now, he belongs to you and you belong to him," and the *kissongo* swore fidelity to the owner of the caravan: "If I abandon the caravan out of cowardice...shoot me in the chest."¹⁹ After the solemn reception cementing the relationship between the *kissongo* and the owner of the caravan, the *kissongo* received new clothes, a gun, and a full box of cartridges. After this, the *kissongo* was in the exclusive service of the owner. If the *kissongo* should die in the service of the owner, then the boss was obliged to give the family of the *kissongo* compensation that con-

sisted of at least two cows, a barrel of rum, a barrel of gunpowder, and six to eight slaves of either sex, or merchandise of an equivalent value as the slaves.

By the 1870s Ovimbundu-owned caravans dominated trade between the interior and the coast. Ovimbundu established trade relationships with Portuguese firms on the coast and, in effect, cut out the Portuguese and Luso-African middlemen. During the 1870s Umbundu caravans began buying rubber from the Cokwe, in the lands to the east of the plateau. By the mid-1870s the vine rubber collected by the Cokwe had been exhausted in the nearby river valleys, thus the time required to collect a full load of rubber took about eight months, as collectors had to go further into the interior to find fresh supplies.²⁰ For a decade rubber was but one of many commodities traded by the Ovimbundu—less important than ivory and wax.²¹ Then in 1886 an Umbundu caravan arrived at the port of Catumbela with so-called “second class” root rubber traded with Ganguelas in the nearby savannas just south and east of the highland. A full load of the root rubber took only three months to procure. The new source came about during a period of heightened rubber speculation on the world market, and almost immediately root rubber was being exported in record amounts and was by 1887 Angola’s leading export.²² By 1889, the peak year for rubber exports, rubber would constitute four-fifths of Angolan exports.²³

Rubber: The “Miracle Crop”

Before we discuss the rubber boom in more depth, let us briefly discuss the crop itself. Rubber is the milk-like fluid of many tropical plants. Our earliest descriptions of the plant come from Pietro Martyre d’Anghiera, chaplain to the court of Ferdinand and Isabella, who in his *De Orbo Novo*, published in 1530, describes an Aztec game played with balls “made of the juice of a certain herbe...[which] being stricken upon the ground but softly” rebounded “incredibly into the ayer.” Other early references are contained in the work of Antonio de Herrera y Tordesillas, historian to Philip II, who told how Columbus on his second voyage to the New World in 1493-1496 saw balls “made of the gum of a tree” being used by the Indians of Haiti. The first mention of rubber being used for purposes other than sport was made by F. Juan de Torquemada in 1615. He related how the Indians, having gathered the milk from incisions

made in the various trees, brushed it onto their cloaks, and obtained crude footwear and bottles by coating earthen moulds and allowing them to dry.²⁴

In the early decades of the nineteenth century the Amazon Basin of Brazil exported several tons of raw rubber and rubber shoes to Europe and North America. Rubber, however, had problems. Its texture and elasticity changed with temperature and it became hard and brittle in the cold, and soft and malleable in the heat.²⁵ In 1839 a New Haven-based inventor named Charles Goodyear heated a solution of rubber, lead, and sulfur. The combination stabilized rubber so that it retained its elasticity and strength, while being temperature-resistant and waterproof. This process was called "vulcanization" and it revolutionized rubber as a product. Vulcanized rubber became useful in industrial and consumer goods including: protective layering around telegraph and telephone cables; in factories, rubber was installed on assembly lines and floors because it provided a safe, non-slick, and electrically insulated surface; on buggy and bicycle wheels it softened the ride and protected rims; rubber boots and rain slickers. As industrialization increased towards the end of the century, world demand for rubber pushed prices upward. The Amazon basin was recognized as the world's primary source of "first class" Pará rubber, and accounted for roughly 50 percent of world production during the world rubber boom, 1860-1910.

Between 1870 and 1912 Africa was second only to Brazil in total tons of exported rubber. The continent reached its maximum export in 1906 with shipments amounting to over 20,000 tons, from 25 separate colonies. About 3,000 tons of the total came from Angola. In the first 15 years of the international rubber boom, the bulk of Angola's rubber came from the *landolphia*²⁶ vine, which grows in tropical and semi-tropical woodlands. In Angola *landolphia* vines grew in the gallery forests of the north and eastern river valleys. In 1875 explorer Joachim Monteiro described the *Landolphia* vine-growing in the interior of Ambriz, near the Congo River:

The plant that produces it [rubber] is the giant tree-creeper covering the highest trees, and growing principally on those near rivers or streams. Its stem is sometimes as thick as a man's thigh, and in the dense woods at Quiballa I have seen a considerable extent of forest festooned down to the ground, from tree to tree, in all directions with its thick

stems, like great hawsers; above, the trees were nearly hidden by its large, bright, dark-green leaves, and studded with beautiful bunches of pure white star-like flowers, most sweetly scented. Its fruit is the size of a large orange, of a yellow colour when ripe, and perfectly round, with a hard brittle shell; inside it is full of a soft reddish pulp in which the seeds are contained...Every part of this creeper exudes a milky juice when cut or wounded, but unlike the india-rubber tree of America, this milky sap will not run into a vessel placed to receive it, as it dries so quickly as to form a ridge on the wound or cut, which stops its further flow. The blacks collect it, therefore, by making long cuts in the bark with a knife, and as the milky juice gushes out, it is wiped off continually with their fingers, and smeared on their arms, shoulders, and breast until a thick covering is formed; this is peeled off their bodies and cut into small squares, which are then said to be boiled in water.²⁷

Exhaustion of *landolphia* vines by the mid-1880s in the north and east of Angola led producers to search for alternative means of obtaining the valuable latex. In the eastern savannas (stretching from the Zambezi basin in the east to the Cubango River in the west) the Ganguela adapted a method of macerating the rhizomes (stems) of a low-lying shrub member of the *landolphia* family to obtain latex. Naturalist Cuthbert Christy explained the process in 1911:

To obtain the rubber which coagulates in situ in the bark, the bundles of stems are macerated in water, and exposed to the sun until quite dry. They are then cut into short lengths and the pieces beaten to loosen the bark, which is stripped off and hammered with sticks or stones until most of the woody particles are got rid of. The mass is boiled and again beaten until at last the lump is considered fit for sale. By this crude native method much sand and bark necessarily remains with the rubber, lessening its value.²⁸

The presence of sand and bark explains root-rubber's designation as "second class." According to Canadian missionary Walter Currie, trade for rubber occurred during the dry season (April-September).²⁹ When in the pastoral-agricultural cycle the collection and process-

ing of rubber-producing rhizomes occurred is not known for certain. Due to the requirement that stems had to dry in the sun, it seems safe to surmise that processing occurred after the end of the rains in April and May. The Ganguela raised millet and cattle for their own subsistence.³⁰

Ovimbundu dominated the trade caravans that brought the rubber to market on the coast at Catumbela and Benguela. Rubber collecting was a family affair. Women and children could "...tap and kill vines and tubers as well as men."³¹ Henry W. Nevinson, in his report on the *serviçães* trade between Angola and the cocoa growing island of São Tomé, described rubber profits in these terms: "For the moment rubber has become almost as lucrative as man."³²

Without Portuguese or Luso-African middlemen, the Ovimbundu realized the full mark-up profit between the coast and interior. The international rubber market was highly competitive.³³ Rubber was traded freely in the major markets of Europe and the U.S. The rubber trade in Angola reflected the competition of the world market. Between 1886 and 1900 thirty-one trading firms were established in Benguela alone.³⁴ These firms (most were branches of Lisbon-based firms) set up shop specifically to profit from the rubber boom. A new group of local entrepreneurs, known as *permutadores* (derived from the verb *permutar*, to barter or exchange), increased the competition of the Angolan market.³⁵

Ovimbundu traders had more choice as to which trader to conduct his business. A system of trade known as *cambulação* arose. This term came from the word *cambulhada* meaning a collection of things strung together or *decambuhlado* meaning helter-skelter. Firms employed *cambuladores*, or agents, to meet heads of caravans as far as three day's journey from the coastal market. The caravan leader would be offered gifts in exchange for bringing the caravan to one or the other firm.³⁶ Angolan novelist Pepetela captures the energy of the booming trade in his novel *Yaka*:

The caravans arrived, always lively and filling the roads. The shouts of the *cambuladores*, the arguments...Trade prospered, every boat brought more settlers to Bié, Huambo and Benguela. New shops were opened in low adobe houses limewashed in yellow. There was competition, especially in the latest guns arriving from Europe...A shop that stocked them attracted caravans, which left most of their rubber and beeswax there.³⁷

Portuguese merchants complained about *cambulação* and in 1894 the provincial government appointed a commission in Luanda to review the commercial code of Angola. The commission condemned *cambulação*, calling it one of the "evils that most afflict trade in this part of Africa."³⁸ The commission created a price regulatory board in order to restrict competition and thus insure higher profits to the Portuguese traders. Historian Linda Heywood quotes the Governor of Benguela, who, in a report to his boss in Luanda in 1886 concludes, "the merchants lose a lot in their trading with the Africans—some because they want their firm to have a better standing vis-a-vis the African suppliers and others because they wished to satisfy commitments they have made with their Lisbon partners."³⁹ Of course, Portuguese merchants made profits on the goods they imported from Europe and traded to Africans.

Profit attracted Ovimbundu to trade. By the late 1880s rubber trading had become the most important occupation among the Ovimbundu. Travelers and missionaries complained about how difficult it was to hire porters. Travelers Capello and Ivens described the hiring of porters as "the very gravest question that has to be grappled with at the outset of an African journey."⁴⁰ In 1889 American missionary Annie Faye described the process through which a trader made his start:

The chief occupation of the men is trading, and in this they manifest a great deal of shrewdness. A man will start off with two pieces of cloth of 16 yards each...with which he buys a load of rubber of twenty pounds...after a rest, he traded this rubber for more cloth at the coast, and after one or two more trips in the interior, he has enough capital to buy a horn of ivory and a slave to carry it to the coast. He then makes double profit by selling the slave. Or perhaps he may keep him for future use.⁴¹

The Canadian missionary Currie wrote that about 500 people had left his mission station in Chissamba for the interior. He wrote in 1889:

the partial failure of the supply (in rubber) from Brazil and the steadily increasing demand for bicycle tires and other

articles...led to the greatest rush to the Nganguelas last dry season that we have yet seen in the country. Every man with any energy left...was eager to go while old men no longer able to travel were spurring on the younger men, boys and even girls.⁴²

Currie's statement says that trading occurred during the dry season (April-September) and makes the important point that "even girls" accompanied the traders.

By 1891 rubber exports from Benguela were worth more than eight times as much as wax and ivory combined, and had grown in value more than ten times in just five years. The amount of rubber exported from Benguela nearly tripled from 953,829 kilos⁴³ in 1890 to 1,600,000 kilos in 1896.⁴⁴ In the same period Luanda went from rubber exports of 409,493 kilos to 704,582. Benguela was clearly Angola's preeminent port for rubber exports. By the late 1890s the rubber exported from Benguela accounted for nearly four-fifths of the value of Angola's total export trade.⁴⁵ In 1898 the government journal *Portugal Em Africa*, cites the Independent Republic of Congo as an example for how much rubber could do for development and calls on for the construction of a railroad to maintain "the most thriving branch of Angolan commerce."⁴⁶ Rubber continued to account for more than sixty percent of total exports as late as 1908, in spite of a slump in world rubber prices and increasing domination of the market by Malaysian rubber.⁴⁷

Table 1: Angolan Exports

<u>Product</u>	<u>1886</u>	<u>1888</u>	<u>1889</u>	<u>1891</u>
Rubber	65,210*	664,786	665,746	1,042,112
Wax	187,483	109,734	133,436	123,645
Ivory	37,692	29,997	31,701	45,392 ⁴⁸

*currency is the milreis; at the time equivalent to just over USD \$1; 1 milreis is worth 1000 reis.

Throughout the rubber boom Africans controlled gathering, transport of product, and marketing at the coast.⁴⁹ Control allowed traders (as distinct from producers) to make the lion's share of profit.

For example, in 1893 in Luba, in the far east of modern Angola, traders could buy a pound of rubber (100 balls of vine rubber) for a *panno* (yard of cloth). On the coast one pound of rubber could be sold for 300 *reis*, which could buy two yards of cloth.⁵⁰ If the same caravans could buy a thousand pounds of rubber, the profit on the coast would be 1000 *pannos*. In the interior and on the coast cloth was the chief currency of trade.⁵¹

It is difficult to calculate whether producers in the interior considered the price paid for rubber to be good or bad. Producers' response to the market suggests that prices were high enough to make production worth the effort. Historian W. G. Clarence-Smith argues that producers in the interior did not share much of the profit.⁵² Clarence-Smith cites rubber prices from a report by a British colonial official based in Rhodesia: "In 1900, a pound of rubber fetched about 3p in eastern Angola and 15p on the coast...The greatest profits seem to have been made between the interior and the coast, for in 1900 again, a pound of Angola rubber would fetch a maximum of only 17 and a half pence on the London market."⁵³ Based on the set of prices quoted from missionary F. S. Arnot and colonial official Harding, Ovimbundu traders realized the greatest share of rubber profits.

Table 2: Cost of Rubber in 1900

Quantity	Price in London	Price on the Coast	Price in the Interior
1 pound	17 pence	15 pence	3 pence

The actual producers of root rubber lived between the Cuando and Cubango Rivers. The people were known as the Ganguelas. They raised beans and maize and raised cattle. In July 1889 Arthur de Paiva "conquered" the region and the Portuguese designated a new military zone of the "Ganguelas and Ambuelas" and incorporated it into the district of Benguela. In 1890 the government sent at least one scientific expedition to study the source of rubber. Portuguese presence on the ground was practically non-existent, and the Portuguese did not control trade. The Governor of Benguela, Francisco Paula Cid, criticized Ganguela methods of extracting latex, which he argued (not inaccurately) cost the Crown profits.⁵⁴ A commission meeting in Lisbon under the auspices of the government recommended: direct control over the latex-producing zones, the mechanization of the extraction process, and edu-

cation campaigns in the regions of production, in conjunction with missionaries, traders, and vassal chiefs, to convince the Ganguelas of these methods and to propagate latex-producing plants.⁵⁵ Seven years later another government commissioned report, "The Question of Rubber,"⁵⁶ re-identified the source of root rubber. By 1896 the Colonial Minister was still asking missionaries and travelers to identify the regional sources and best varieties of rubber-yielding plants.⁵⁷ The recommendations of the 1890 commission came to naught due to the chronically underfunded and corrupt colonial government.⁵⁸

Rubber exports peaked in the 1898-99, and then entered a prolonged decline until the trade ended in 1916. The decline resulted from the emergence of Malaysian-grown plantation rubber, which effectively took over the world rubber market. Root rubber from Angola could not compete. In 1902 the Portuguese destroyed the autonomy of the Ovimbundu traders in the 1902 Bailundu War. For six months in 1902 Ovimbundu, led by the war leader of Mbailundu, expelled all Portuguese traders and government officials from Mbailundu and Huambo. The Portuguese eventually succeeded after two years of skirmishes to defeat the Ovimbundu. The war and the declining rubber trade brought an end to Ovimbundu economic prosperity.⁵⁹

Conclusion

The Ovimbundu rubber trade in Angola differed significantly from rubber extraction in neighboring Congo. In Angola between 1886 and 1902 African producers and traders participated freely in the world trade of rubber at a time of high rubber prices. The tremendous growth in the volume and value of Angola rubber exports between 1886 and 1891 reflect Ovimbundu and Ganguela responses to high rubber prices. Profits were invested in trade goods, primarily cloth, and in slaves. The Umbundu rubber trade did share with the systems of forced extraction the eventuality of rubber exhaustion. The producers and traders in Angola made no efforts to conserve or re-plant sources of raw rubber. The rubber trade followed an historic pattern in Angola of extractive commodity export until the point of exhaustion.⁶⁰ In the case of rubber, however, Portuguese colonialism cut into Ovimbundu profits and presided over trade as production on rubber plantations in Malaysia took off and the world

price of rubber declined. Ovimbundu memory privileges the rubber boom years as "a time of clothes," a prosperous time, the likes of which they have not seen since.

Notes

¹"Ocimbundu" means a single person; "Ovimbundu" means more than one person; and "Umbundu" is an adjective.

²Maria da Conceição Neto "Comércio, Religião e Política no Sertão de Benguela: O Bailundo de Ekwikwi II (1876-1893) in *Journal of Angolan Archives*

³Adrian C. Edwards *The Ovimbundu Under Two Sovereignties* (Oxford, 1962), p. 5, n. 27. *Portugal em Africa*, IX, no. 99 (March 1902), p. 192 A.

⁴See the extensive documentation in E. D. Morel *King Leopold's Rule in Africa* (London: William Heinemann, 1904); *Red Rubber: The Story of the Rubber Slave Trade Which Flourished on the Congo for Twenty Years, 1890-1910* (Manchester: National Labour Press, 1919); and Adam Hochschild *King Leopold's Ghost A Story of Greed, Terror, and Heroism in Colonial Africa* (Boston: Houghton Mifflin Company, 1998).

⁵Joseph C. Miller "Worlds Apart: Africans' Encounters and Africa's Encounters with the Atlantic in Angola, Before 1800" *Econtro de Povos e Culturas em Angola* (Luanda, Angola: Ministério da Cultura de Angola, 1997), p. 229.

⁶Joseph C. Miller "Slaves, Slavers and Social Change in Nineteenth Century Kasanje" Franz-Wilhem Heimer, ed., *Social Change in Angola* (München: Weltforum Verlag, 1973), p. 12; and Gladwyn Murray Childs *Umbundu Kinship and Character* (Oxford: Oxford University Press, 1949), pp. 164-181.

⁷Miller, "Worlds Apart", p. 277.

⁸The Decree of December 10, 1836, prohibited the exportation of

slaves from Angola. The trade continued illegally, but decreased after 1850 due to patrols by British, American, and Portuguese ships along the Angolan coast.

⁹Maria Emília Madeira Santos, ed., *Viagens e Apontamentos de um Portuense em África Diário de António Francisco Ferriera da Silva Porto Coimbra*: Biblioteca Geral da Universidade de Coimbra, 1986, p. 34. Silva Porto left detailed descriptions of Angolan trading systems in his edited, twelve volume journal. The complete journal is at the Municipal Library in Porto, Portugal.

¹⁰Lázló Magyar *Reisen in Süd Afrika* (Pest, 1859, reprinted New York, 1973), p. 23.

¹¹"gámbá" in Umbundu and "carregadore" in Portuguese.

¹²Magyar, p. 24.

¹³*Ibid.*, p. 24.

¹⁴Linda Heywood "Porters, Trade, and Power: The Politics of Labor in the Central Highlands of Angola, 1850-1914" in Coquery-Vidrovitch and Lovejoy, eds. *The Workers of African Trade* (Sage Publications, 1985), p. 245.

¹⁵For an account of the bartering system north of the Congo River see, Joachim John Monteiro, *Angola and the River Congo* (London: MacMillan and Co., 1875), pp. 106-110.

¹⁶Magyar, p. 25.

¹⁷*Ibid.*, p. 25.

¹⁸The salt trade had existed in Angola for hundreds of years, and according to David Birmingham, was a source of wealth of the Ndongo Kingdom. David Birmingham "Early African Trade in Angola and its Hinterland" in Birmingham and Gray, eds. *Pre-Colonial African Trade* (New York: Oxford University Press, 1970), pp. 164-165.

¹⁹Magyar, p. 25.

²⁰Childs, *Umbundu Kinship*, p. 208 and J. C. Miller "Cokwe Trade and Conquest in the Nineteenth Century" in Birmingham and Gray, pp. 186-187.

²¹The Ovimbundu never ceased to trade in slaves for the domestic market. Slavery was officially abolished in Angola in 1875, but the ban was not enforced. In the 1890s, the Portuguese created the legal designation "serviçal" for forced labor being sent to the Portuguese colony of São Tomé to work on cocoa plantations. The trade was essentially a continuation of the slave trade and caused international condemnation of Portuguese colonial policies. See Henry W. Nevins *A Modern Slavery* (New York: Schocken, 1968 [1906]) and James Duffy *A Question of Slavery* (Cambridge, Mass.: Harvard University Press, 1967).

²²Childs, *Umbundu Kinship*, p. 208.

²³R. J. Hammond *Portugal and Africa 1815-1910: A Study in Uneconomic Imperialism* (Stanford, California: Stanford University Press, 1966), p. 303. For a comparison of rubber export from Ghana see Raymond Dumett "The Rubber Trade of the Gold Coast and Asante in the Nineteenth Century: African Innovation and Market Responsiveness" *Journal of African History*, XII, I (1979), pp. 79-101; for Tanzania see Jamie Monson "From Commerce to Colonization: A History of the Rubber Trade in the Kilombero Valley of Tanzania, 1890-1914" *African Economic History*, 21 (1993), pp. 113-130; and for an overview of the African rubber trade see Robert Harms "The End of Red Rubber: A Reassessment" *Journal of African History*, XVI, I (1975), pp. 73-88.

²⁴William Woodruff *The British Rubber Industry During the Nineteenth Century* (Liverpool: Liverpool University Press, 1958), pp. 1-2.

²⁵Michael Edward Stanfield *Red Rubber, Bleeding Trees* (University of New Mexico Press, 1998), p. 20.

²⁶In 1805 the French botanist Palisot de Beauvois classified a West

African vine as a member of the *Apocynaceae* family and christened the new genus "Landolphia" in honor of Captain J. F. Landolphe, a privateer who had participated in the French expeditions in West Africa.

²⁷John Monteiro *Angola and the River Congo* (London: MacMillan and Co., 1875), p. 137.

²⁸Cuthbert Christy *The African Rubber Industry and Funtumia elastica* (London: John Bale, Sons & Danielsson, 1911), p.29. See also Colonel Colin Harding *In Remotest Barotseland* (London: Hurst and Blackett, 1904), p. 212.

²⁹CCFMS (Canadian Congregational Foreign Missionary Society), Report for 1898, quoted in Linda Heywood "Production, Trade and Power — The Political Economy of Central Angola 1850-1930" (Ph.D. dissertation, Columbia University, 1984) , p. 181.

³⁰Carlos Estermann *The Ethnography of Southwestern Angola* (New York: Africana Publishing Company, 1976) and Alvin Urquhart "Pattern of Settlement and Subsistence in Southwestern Angola" (Washington, D. C.: National Academy of Sciences, 1963), provide detailed ethnographic descriptions of culture and economy among the Ganguela's Ambo neighbors, but say little about the Ganguela.

³¹F. S. Arnot, *Bihé and Garenganze* (London, 1893), p. 32.

³²Henry W. Nevinson *A Modern Slavery* (New York: Schocken Books, 1968 [1906]), p.122. A *serviçal* (*serviçais* pl.) was a legal term for an indentured laborer brought from Angola to São Tomé after the abolition of slavery in Angola in 1875. Critics of the system described it as nothing more than a modern slave trade, see Nevinson and James Duffy *A Question of Slavery* (Cambridge, Mass.: Harvard University Press, 1967).

³³Radford Barham and Oliver Coomes "Wild Rubber: Industrial Organisation and the Microeconomics of Extraction During the Amazon Rubber Boom (1860-1920)" *Journal of Latin American Studies* 26, p. 41.

³⁴Rosa Cruz e Silva "O Impacto da Borracha de "Segunda" no Comercial—Catumbela Benguela—1890-1910" *Fontes e Estudos*, Vol. 1, 1994, p. 67.

³⁵Heywood (1984), p. 160.

³⁶*Ibid.*, p. 161.

³⁷Pepetela *Yaka* (Oxford: Heinemann, 1984), p. 18.

³⁸Heywood (1984), p. 163.

³⁹*Ibid.*, p. 165.

⁴⁰H. Capello and R. Ivens *From Benguella to the Territory of Yacca: Description of a Journey into Central and West Africa* (New York: Negro Universities Press, 1882), p. 3.

⁴¹ABCFM, Vol. 23a, doc. 99, 6 June 1889, Fay to Friends.

⁴²Heywood (1984), p. 181.

⁴³One kilogram equals 2.2046 pounds.

⁴⁴*Portugal Em Africa*, (Lisboa: Companhia Nacional Editora, 1898), p. 11.

⁴⁵Hammond, p. 303.

⁴⁶*Portugal Em Africa*, p. 11-13.

⁴⁷Hammond, p. 303.

⁴⁸Childs *Umbundu Kinship*, p. 208.

⁴⁹Wheeler, p. 57.

⁵⁰Heywood (1984), p. 149.

⁵¹F. S. Arnot *Garenganze; or Seven Years' Pioneer Mission Work in Central Africa* (New York: Fleming H. Revell, no date), p. 131.

⁵²W. G. Clarence-Smith *Slaves, peasants and capitalists in southern Angola 1840-1926* (London: Cambridge University Press, 1979), p. 67.

⁵³*Ibid.*, p. 68. Rubber prices come from the *Harding Report 4/7/1900* on the *serviçães* trade.

⁵⁴Rosa Cruz e Silva "O Impacto da Barracha de 'Segunda' No Nó Comercial - Catumbela Benguela - 1890-1910" *Fontes e Estudos*, Vol. 1, 1994, p. 69.

⁵⁵*Ibid.*, pp. 70-71.

⁵⁶"A Questão da Barracha" (Lisboa: Documentos Oficiais, 1897).

⁵⁷Portugal *Em Africa* (Liboa: A. E. Barata, 1896), p. 309.

⁵⁸See Hammond *Portugal and Africa*.

⁵⁹For a detailed primary account of Portuguese military actions in Mbailundo see Francisco Cabral de Moncada *A Campanha do Bailundo em 1902* (Lisboa: Livraria Ferin, 1903). For a terrific analysis see Douglas Wheeler and C. Diane Christensen "To Rise with One Mind: The Bailundo War of 1902" in Franz-Wilhelm Heimer, ed., *Social Change in Angola* (München: Weltforum Verlag, 1973), pp. 53-92.

⁶⁰On Cokwe rubber extraction see Joseph C. Miller "Cokwe Trade and Conquest in the Nineteenth Century" in Gray and Birmingham, eds., *Pre-Colonial African Trade Essays on Trade in Central and Eastern Africa before 1900* (London: Oxford University Press, 1970), pp. 186-187.