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### Technology and Change: The Incorporation of Synthetic Dye Techniques in Abeokuta, Southwestern Nigeria

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In the oriki (appellations) of an 18th century oba (king) in Okuku,

references to cloth and indigo were included in the verses that attested to the oba's wealth and greatness,

Abioye, my father, Olugbola, one who takes the image and all its children to dance The beauty of cloth dyed in indigo does not fade Adewale, the indigo is what gives the cloth its worth<sup>1</sup>

The references suggestively point to the aesthetic as well as commercial value of indigo in Yoruba society. Scholars and travelers have long noted the importance of indigo dyed cloth in Yoruba society, and Yoruba women, the principal dyers in Yoruba society, are considered among the premier indigo dyers in West Africa. They are particularly renowned for their indigo resist dyed cloth, adire.

Nineteenth and twentieth century writers have described in detail the process women used to derive what Robert Campbell called the "beautiful blue" from the indigo plant indigenous to western Nigeria.<sup>2</sup> Yet, Claire Polakoff noted in her 1981 volume, <u>African Textiles and Dyeing Techniques</u>,

<sup>&</sup>lt;sup>1</sup>Karin Barber, "Oriki and the Changing Perception of Greatness in Nineteenth-Century Yorubaland" in Toyin Falola, ed. <u>Yoruba Histiography</u> (Wisconsin: University of Wisconsin, Madison, 1991), p. 35.

<sup>&</sup>lt;sup>2</sup>Robert Campbell, <u>A Pilgrimage to My Motherland - An Account of A Journey Among</u> the Egbas and Yorubas of Central Africa In 1859-60 (London: W.J. Johnson, 1860), 51.

"Regrettably, today... synthetic indigo has largely replaced the natural."<sup>3</sup> While some dyers continue to use natural indigo, Polakoff's assessment is nevertheless accurate.<sup>4</sup> Since the 1930s, Yoruba dyers began incorporating synthetic dyes, and most dyeing today in the major dyeing centers of Abeokuta, Lagos and Ibadan is done with synthetic dyes.<sup>5</sup>

Few authors have sought to explore why this change occurred even though it reflected a significant development within the dyeing industry. Dyers had to learn and perfect a new line of ingredients with different qualities. In Abeokuta, the Yoruba town on which paper focuses, the shift to synthetic dyes occurred rather quickly, within a ten year period between the 1920s and 30s. This paper highlights one of the factors that contributed to this shift away from natural to synthetic indigo, specifically the shortage of natural indigo.

Dyers operated in an economic universe shared with agricultural producers and other craftspeople, yet we tend to look at them in isolation. One consequence of this practice is that developments whose epicenters are located elsewhere are either noted in passing, overlooked or unexplained. Historians share some responsibility for this because as Philip Shea argues, we have skirted the history of production of African textiles.<sup>6</sup> General debates rage about the impact of the world economy on African textile producers for example, but empirical research exploring access to resources, capital or credit is still limited. More detailed examination of the economics of production,

<sup>&</sup>lt;sup>3</sup>Claire, Polakoff. <u>African Textiles and Dyeing Techniques</u>, (London: Routledge & Kegan Paul, 1980), 30.

<sup>&</sup>lt;sup>4</sup>Dyers in Oshogbo, for example, continue to use natural indigo, and one can commission a cloth dyed in a natural indigo dyebath. Personal communication, Ohioma Pogoson, Institute of African Studies, University of Ibadan.

<sup>&</sup>lt;sup>5</sup>See Judith Byfield, Women Economy and the State: A Study of the Adire Industry in Abeokuta (Western Nigeria), 1890-1939 (Ph.D. Thesis, Columbia University, 1993).

<sup>&</sup>lt;sup>6</sup>Philip J. Shea. The Development of An Export Oriented Dyed Cloth Industry in Kano Emirate in the Nineteenth Century, Ph.D. Thesis, University of Wisconsin-Madison, 1975.

the processes involved as well as the social relations of production will allow us to refine our understanding of how larger economic developments shaped the world of cloth producers and how those changes were reflected in the production process and the final product.

#### **Indigo Production**

One of the most striking things in trying to write this paper was the difficulty in obtaining information on indigo production in Nigeria, in general, and Yorubaland specifically. Sources on indigo production are scattered and fragmentary, unlike information on cocoa, kola and groundnuts which were desired by European markets.<sup>7</sup> The British did have some interest in exporting dyes from West Africa, but they were primarily interested in logwood and camwood rather than indigo.<sup>8</sup> A nineteenth century observer, W.H. Clarke, who spent several years in Yorubaland noted,

At the present time there is no demand for any articles which might be exported in considerable quantities, such as corn, yams indigo, hides and shea-butter.<sup>9</sup>

Clarke clearly felt that indigo was produced in sufficient quantity to make it a viable export product if the European market required it. He also called attention to Iseyin, a town 55 miles north of Ibadan, which appeared to specialize in the production of indigo.<sup>10</sup> Iseyin's reputation as a major weaving center in Yorubaland may have contributed to its large production of

<sup>&</sup>lt;sup>7</sup>My efforts to obtain more information in Nigeria this summer were hampered by the political crisis which led to the closure of the National Archives in Ibadan.

<sup>&</sup>lt;sup>8</sup>Allan McPhee, <u>The Economic Revolution in British West Africa</u>, Second Edition (2nd ed.; London: Frank Cass, 1971), 29.

<sup>&</sup>lt;sup>9</sup>W.H. Clarke, <u>Travels & Explorations in Yorubaland</u> (1854-1858), J.A. Atanda, ed. (Ibadan: Ibadan University Press, 1972), 264.

<sup>&</sup>lt;sup>10</sup>Ibid., 263.

indigo, but geography also played a role.<sup>11</sup> Iseyin is located toward the savanna region where indigo especially thrives.<sup>12</sup> Although the northern areas of Yorubaland provided a nurturing growing environment for indigo, it was also found in the more southern parts of the region, such as Abeokuta.

The indigo that is indigenous to Yorubaland, *lonchorapus cyanescens*, grew wild, but was also cultivated for its commercial value. In Abeokuta, indigo was primarily cultivated on the farm land of Kemta, Itoko and Ijemo townships to the north and northwest just outside the borders of the town.<sup>13</sup> It was usually planted near cassava which shaded the young indigo plants. When the plants were approximately two years old the leaves were plucked, pounded, molded into balls, dried and then sold. Dyers purchased the indigo balls from rural women.

The sale of indigo was at one time lucrative. It was argued that the regions which had indigo plantations made a lot of money out of the crop.<sup>14</sup> The leader of the trade guild in one Egba township, the Olori Parakoyi of Ilugun, in describing indigo production as he remembered it in his youth reported

My father was an Itoko man and I was born there. He was engaged in the business of preparing indigo for sale. We were then thirty-four hands working for our father and solely engaged in the production

<sup>&</sup>lt;sup>11</sup>Jennifer Bray, "The Organization of Traditional Weaving in Iseyin, Nigeria," <u>Africa</u>, 38 (3)1968, 271. Bray argues that weaving in Iseyin received a considerable impetus during the first two decades of the nineteenth century, when refugees fled to the town from settlements destroyed by Ilorin raiders. Many of the refugees were weavers and they taught the local ;people their traditional techniques.

<sup>&</sup>lt;sup>12</sup>O.A. Badejogbim, "The Relationship Between Environment and Culture: The Adire Industry in Southern Nigeria as a Case-study." (B.A. Honors Essay, Department of Archaeology, University of Ibadan, 1983), 28. Badejogbim reported that it was widely cultivated in Iseyin, Okeko, Igboho and Shaki.

<sup>&</sup>lt;sup>13</sup>Proceedings of the Adire Cloth Committee, Appendix 1, Abe Prof 4- D29, p.1. Informants also included Iporo as one of the regions that had indigo plantations.

<sup>&</sup>lt;sup>14</sup>Ibid., 20.

of indigo. At times for three consecutive months we would do no work other than that of preparing indigo for our father.<sup>15</sup>

This connection between indigo and wealth was also reflected in religious practice. In an early study of Yoruba religion, J.O. Lucas argued the deity Aje Salug, the god of wealth, was worshipped by farmers and traders in dyes and farm products. He was not worshipped as a farm god, but as the god of wealth and good luck, who could bless them with the good fortune of realizing substantial profits from the sale of their wares.<sup>16</sup>

By the 1930s, however, indigo was being imported from Dahomey and local farmers claimed that it was unprofitable. The price had fallen significantly. An informant during a 1936 Commission of Inquiry into the Adire (tie-dyeing) industry reported that in the late 1920s they sold 21 indigo balls for as much as 1/6, but the same quantity was sold for 3d - 4d in 1936. At that price, indigo was unprofitable. Farmers argued that indigo had become unprofitable because dyers stopped using the natural plant and consequently they stopped cultivating it.<sup>17</sup> Dyers, on the other hand, argued that they adopted caustic soda and then synthetic dyes because of the poor quality of the indigo that was available. In addition, as early as 1927 dyers complained that they were sold adulterated indigo balls which often spoiled the dye bath.<sup>18</sup> In essence, the dyers and the farmers were blaming each other for the decline in indigo production and use.

Each charge had kernels of truth. During inquires into the adulteration of indigo balls farmers admitted to the practice. Indigo balls included leaves

<sup>&</sup>lt;sup>15</sup>Minutes of Council Meeting, Thursday, 30 April 1936. ECR 1/1/74, vol. I.

<sup>&</sup>lt;sup>16</sup>J.Olumide Lucas. <u>The Religion of the Yorubas (Lagos: CMS Bookshop, 1948), 155</u>. <sup>17</sup>Proceedings of the Adire Cloth Committee, Abe prof 4-D29, National Archives,

Ibadan, 36-39. <sup>18</sup>Report of the Public Meeting of the Adire Women Held in the New Council Hall on the Dyeing Trade in Abeokuta, Friday, 25th July, 1927, <u>Egba Administration Bulletin</u>, August 31, 1927.

from other plants. The fact that producers of indigo balls were adulterating their product suggests that the supply of natural indigo was already in decline by the late 1920s. Dyers, on the other hand, initially used caustic soda because it brought out more dye from the indigo leaves. As synthetic dye came on the market, dyers used it alone or in conjunction with natural indigo which still resulted in lower demand for natural indigo. Invariable one has to question how changes in the agricultural landscape affected indigo production.

Testimony taken during moments of inquiry into the adire industry associated indigo production with food production. Indigo was interplanted with food crops, specifically cassava. Cassava production is often associated with soil depletion. Cassava supplanted yam production in those areas where the crop rotation cycle of yam-maize-beans had broken down and the soil became increasingly infertile. Cassava was an ideal replacement crop because it grew well in poor soil, it did not require constant weeding like yam, and it could be left in the ground for two to three years until farmers had the time and labor to harvest it or it became profitable.<sup>19</sup> Labor and time saved from planting cassava could be invested in more lucrative crops such as cocoa and kola. Being able to reserve labor for cash crops was especially important in Abeokuta because the town had become one of the main centers of cocoa production in Nigeria by the beginning of the twentieth century, as well as an important center for kola nut production by the end of the first world war.

The changing agricultural landscape would have affected indigo production in two distinct ways. First, the spread of tree crops suggests that increasing amounts of land was turned over to crops which were not conducive to the spread of indigo. Second, indigo was increasing being raised

<sup>&</sup>lt;sup>19</sup>A.L. Mabogunje and M.B. Gleave. "Changing Agricultural Landscape in Southern Nigeria - The Example of Egba Division, 1850-1950" <u>The Nigerian Geographical Journal</u>, 7(1):1964, 7-8.

on poor, depleted soils. These two scenarios lend support to the dyers' contention that the quality of the indigo had deteriorated and help explain the decline in the supply of indigo. More research is needed on the production of indigo in southern Yorubaland, but there is no doubt that there was a ripple effect from changes taking place in agriculture as Yoruba farmers aggressively pursued the opportunities presented by cash crops.

#### Conclusion

The significance of the shift to synthetic dyes was not isolated to the dyeing industry; it also pointed to important developments in the region's agricultural history. The shortage of indigo undoubtedly contributed to dyers openness to caustic soda and synthetic dye. Yet, it would be remiss to suggest that the inadequate supply of good indigo alone accounted for the shift. The timing was critical; it occurred during the depression. This moment of world-wide economic crisis highlighted the interconnected relationship between dyers and the agricultural sector. Farmers not only produced indigo, the revenue they accumulated from cash crops supported the dyeing industry. As cash crop prices fell, particularly cocoa, consumer buying power also fell. Thus, both the production and consumption sides of the dyers' universe were affected by the economic changes that wound their way through the agricultural sector. Caustic soda and synthetic dyes were a part of the dyeing industry's response to these changes. They minimized dyers' dependence on farmers for natural indigo and allowed them to lower the cost of production so that they could continue to sell cloth and hopefully remain solvent during In this instance, locating dyers in their larger economic the depression years. universe is crucial for understanding how and why synthetic dyes eventually superseded natural indigo in Abeokuta.