Edda L. Fields-Black — ORIAS Summer Institute 2014

"Rice and Rice Farmers in West Africa's Upper Guinea Coast"
Edda L. Fields-Black, Associate Professor, History Department,
Carnegie Mellon University
Summarized by Stephen Pitcher

Professor Fields-Black began with a photograph of her and her 100-year-old great-grandmother—an image representing both the motive for Fields-Black's scholarly pursuit and the reason for her passionate sense of connection to it. Her father's family hails from Colleton County, South Carolina, an area where, said Fields-Black, "there are rice fields as far as you can see." At the time of the photograph, her great-grandmother, who suffered from dementia, was given to repeating a certain mysterious action all day—the cause of some consternation for her kin, as it involved leaning down and making as if to press three fingers into the ground, and they feared her toppling over. Having just been in West Africa, and sown rice with the women there, Fields-Black recognized the gesture at once: her great-grandmother was planting rice. It was then that she began to understand why the topic of rice was "so deep in her bones," why she'd spent over a year in frequently unpleasant circumstances involving rain, mosquitoes, and leeches, learning about rice cultivation: it's what her family did; and being the descendant of enslaved rice farmers remains a source of great pride to her.

Archaeologists tell us that rice was domesticated in the Niger River region of Mali between 300 BCE and 300 CE, after which its cultivation spread west to the Gambia River and down to present-day Liberia. Depending on what "landscape gradient" they inhabited, African farmers learned how to grow rice in forty or fifty different ways, experimenting with irrigation systems and ways of adapting the crop to various microclimates, such that when the Portuguese arrived in the mid-1400s they found fully developed systems of rice cultivation in place. According to the Trans-Atlantic Slave Trade Database, more than 40 percent of the captives taken to colonial South Carolina and Georgia came from the Gambia River–Sierra Leone Estuary region; and the mangrove rice cultivation practiced in this region, while it was only one of numerous irrigation systems practiced in Africa, was replicated nearly exactly in the tidal rice cultivation of South Carolina.

A picture of a rice field under cultivation using this technique showed raised mounds at the perimeter of the fields, which served not only to mark the boundary between holdings but to trap fresh water. In earlier times the same effect would have been achieved with uprooted mangroves forming a border that blocked out the tides for years until—signaled by the appearance of certain weeds—the water became "sweet" and ready to plant. Similarly, weeds can be allowed to decompose and mashed into a soil embankment which both traps the fresh water and, as it rots, provides a green fertilizer. The picture of a father and his son working such a field, and the next one, of young men turning the earth with transparent verve, illustrated a point Fields-Black iterated over the course of her talk: that a profound, organic distinction exists between subsistence agriculture performed for one's family and one's village, and enforced labor performed for a slave

master, even when the crops and the methods involved are similar or the same. Throughout Fields-Black's presentation the extent to which African subsistence rice cultivation reinforced the spiritually nourishing cycles of family and village life, and the ways in which it served as a vehicle for camaraderie, competition, displays of physical virtuosity, and opportunities to strut one's stuff for the opposite sex, were repeatedly and effortlessly emphasized. No great mental exertion was required to see how starkly this contrasted with the hideous scenario of slave labor.

In the village where Fields-Black worked, all the men turn the earth, and a definite competition exists to see who among the young men can turn it with the best style and attract the most female attention while doing so. Men are born into "lineage groups"—roughly same-age cadres based on standing within the family unit—and inherit from their fathers, a fact with almost endless repercussions throughout their lives. They work for their fathers and the senior men until such time, when they are in their late twenties, as the lineage group above them approves their worth as workers and potential parents, grants them their land, and allows them to marry. These lineage, or age-grade, groups grow up together, undergoing the various initiations and milestones of maturation at the same time. Women leave and become part of the age grade in their husband's village. But both female and male members of society are socialized into womanhood or manhood by working together.

The "wooden fulcrum shovel," as anthropologists call it, or *makumbau* (one of its many African names) arises as a particularly potent symbol of virile accomplishment in this society. "Once men can handle their shovels, so to speak," said Fields-Black, their fathers are willing to accord them their inheritance. Competition regarding the usage and dimensions of the shovel seems to be rampant. It is a serious piece of equipment: Fields-Black has seen, out by the edge of the sea, where tides can be high, shoveled embankments erected that stand twice the height of a man. The height of a man is also the customary height of the shovel, though its proportions—length, width, and concavity—vary according to the depth of the water, the weight of the soil, the density of the vegetation involved, and other factors. Young men tend to use larger, heavier shovels. Some shovels are iron-footed (a feature dating back to circa 1500 CE, useful in dislodging red mangroves, which are tougher than the white mangroves rice cultivation had previously confronted). Linguistic evidence for the use of the shovel goes back to about 1000 CE, and the apparatus has been steadily in use, and constantly adapted to changing demands, ever since.

Work in the village Fields-Black inhabited is distributed according to gender and age. Elder men are responsible for the work of their sons, training them until such point as they could turn the land over into their hands. A typical scenario features an older father, retired from the field, who spends his days convivially with his peers; a man in the "sandwich generation," still training his young adult sons while responsible to his father; and the younger set, the "mouthy boys" as Fields-Black termed them, who perform backbreaking labor day in and day out but try to make sure it is colorfully celebrated, in their own voices and hopefully those of their female peers. The older men speak of the ways in which everything is done improperly nowadays, and make free with the

gullibility of researchers, with specific reference to the length of the shovels they wielded in their day, and how thoroughly their shovels outmatched those of any of the young men now. Fields-Black confessed that it took her a while to "realize they weren't talking about shovels," and even asked them to draw pictures in order that she could understand the mechanics of the shoveling being discussed.

The women sow the rice in the fields the men prepare. Rice is a versatile but demanding crop; it adapts to many different environments, but requires extremely careful tending in all of them. There are two varieties of rice, one domesticated in Asia and one in West Africa. The West African farmers started growing Asian rice around 1500 because of its high yields and ease of processing; in order to diversify cultivation, both varieties are currently grown in West Africa. Delicate varieties of rice are germinated in a "nursery," dry environment before being put in the water. After fifty days, the rice plants are gently pulled up and the root dirt gently shaken off—an act requiring extreme finesse, and not one to be consigned to "boy-mad teenage daughters," as the plants can be fatally harmed, and a crop lost, if they are carelessly handled. Yet much of the work of rice cultivation is decidedly the province of the young: a woman can maintain a bent-over posture, in water and in rain, for six hours a day, sowing or transplanting or harvesting rice, for decades, if she is trained to the skill; but when she reaches forty she is definitely ready for the younger generation to take over.

Rice has a complex relationship to water. It requires inundation at times and growth in a relatively dry medium at other times, and the timing of these periods is critical to the health of the crop. Bringing the crop to harvest requires intense cooperation on the part of the entire community. Older women can walk atop the bun—the raised or terraced planting ground that is the defining element of "bun agriculture"—to soften the earth for planting, sort seedlings into bundles, and perform similar less-strenuous labor. Associations of "mouthy boys" can be hired for a few days to prepare a field for sowing, with girls being hired after to plant the seed. Everybody pitches in. A day's labor by an association or family group is rewarded by a communal meal prepared and served by young women, who bear the food often miles from the village in pots carried atop their heads—another opportunity for the marriageable young to display their domestic skills: report of a young woman's touch in the kitchen can carry to adjacent villages.

The planting of the rice is followed by a time of hunger and difficulty. Stores of rice from the previous year's harvest have been exhausted, rain is frequent, and the rice fields have to be guarded day and night against predators. But when harvest time comes around things pick up again. Younger children bustle into the fields, their energetic attentions no longer able to harm the sturdy mature crop. A slide was shown of young women bearing heavy pots of plant bundles on their heads across streams over narrow, fragile bridges while swaying their hips as alluringly as possible (a combination of activities, commented Fields-Black, that "could only come together for a teenager"; an Institute participant added, "There's an Olympic gold medal here.")

The rice is dried until it is no longer green, then laid out on a clean surface and beaten with rods to separate the hull from the stalk—work done by younger men racing against

time to process each night's gleaning to minimize the danger of the crop's rotting if it gets wet. It is then put into a huge mortar and beaten by women with pestles the height of a woman and so heavy that Fields-Black—then younger and capable of doing two hundred push-ups a day and walking for miles—could barely lift it; yet the teenage girls performed the task singing, *and* keeping time to the music with their pestles. The little, delicate rice kernel is thus the product of enormously heavy labor, sometimes performed three times a day (once for each meal). Ordinarily, the rice is just partially hulled, but it's polished for sale. The Asian variety is easier to hull, and is therefore preferred by women, who do the hulling. Throughout the rice-cultivating year of this village in Western Africa, all hands play an assigned role, and all mouths benefit.

Fields-Black contrasted this with rice cultivation on our side of the Atlantic, terming the American version "totally denatured"—the work of the hand appropriated and exploited, stripped of pride; the worker deprived of any benefit from her labor, diseased, or even killed, by her work. Where the physical and spiritual health and cohesion of the family were strengthened by subsistence rice-growing in West Africa, it was annihilated by slave-based agriculture in South Carolina. Human labor was deemed expendable, replaceable, and infant/child mortality rates reflect this inhuman apathy with chilling accuracy: two-thirds of the enslaved children born on rice plantations in South Carolina died before the age of fifteen; at a conservative estimate, over 40 percent died in their first year. Rates were much higher along pockets of the Savannah River, where children up to the age of fifteen suffered a 98 percent death rate due to the plantation owners' strategy of housing the slaves as close to the river as possible, so that they would be just a step away from the rice fields; the owners themselves, originally drawn to the riverside, had been settling elsewhere since the early 1700s, having learned how foul and disease-laden the waters of the Savannah were.

The Transatlantic Slave Trade induced domicile strategies in the West Africans as well. During the centuries of the slave trade many of the coastal communities in West Africa recognized that a dwelling next to a large, conspicuous rice field was likely to be noticed, and raided, by slavers. Fields-Black hypothesized that they may, in response to this threat, have situated their homesteads at a distance of a mile or more from the fields—a far more inefficient and laborious arrangement, but a far safer one.
Women in the South Carolina rice plantations were returned to back-breaking labor in the fields five days after giving birth—just one more example of how direly the conditions of commercial rice farming in America compare to subsistence cultivation of rice in West Africa. There were similarities between the two rice-cultivating cultures: tools and techniques were transferred, and the parboiling method of rice cooking is "straight out of Africa." But South Carolina planters never grew rice without slaves: when slavery ended, rice growing stopped. Some African Americans grew rice for themselves; but (in Fields-Black's words) "they were NOT going back to those fields."

Professor Fields-Black concluded by honoring the rice workers of South Carolina for their labor and their skill, and recognizing their immense suffering and the involuntary services they provided.

Q&A:

Participant: Did women live into their 70's and 80's, like these men [in the photographs]?
Fields-Black: In the villages where I worked there were not that many old women, and even old women didn't have the time to sit around and joke and tell stories like the men did. In [her] villages there were just not as many. I don't know the cause, and don't know if it's representative.

Participant: Didn't rice lend itself to sharecropping? Also, regarding rice prices vs. slave prices: it was always possible to buy new slaves, so slaves were expendable.
Fields-Black: At one point rice was the most lucrative crop in the South, even more than sugar, so that tells me that yes, it was cheaper to replace the slaves. As to sharecropping, rice was not apt, no, but land is. People did sharecrop on that land and grew other kinds of crops. People even grew rice, for themselves, in a subsistence way, without massive irrigation systems, but NOT going back into the fields, which [in any case] the 1890s hurricane destroyed.

Rice was grown in China and elsewhere in Asia, but not in salt water. Fields-Black's region was the only place where rice was grown in a tidal area, and in South Carolina it was grown on the edge of a tidal reach, on the edge of fresh water. West Africa is the only other place where that technology exists. There is no *direct* evidence of technology transfer; there is direct evidence only that the exact same methods existed in two places. The Asian rice could have come from any of a number of places, but the technology was specific to West Africa.