

Colonial Moral Economy and the Discipline of Development: The Gezira Scheme and “Modern” Sudan

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[T]he government . . . decided to reorganize their lands into a large agricultural project which the government itself, with all its power and authority would supervise. Suddenly they found their village alive with land surveyors, engineers, and inspectors.

—Tayeb Salih, *The Wedding of Zein*

While Evans-Pritchard was conducting his now-famous studies of the Azande and the Nuer in southern Sudan, changes were taking place in the great plains between the two Niles south of Khartoum that would forever alter the course of Sudanese history. In partnership with multinational capital, the British were turning millions of acres inhabited by farmers and pastoralists into a vast irrigation project dedicated to the production of cotton. The Gezira Scheme, which ultimately became the largest centrally-managed irrigation project in the world, started operations in 1925 and continues to operate today under the management of the Sudanese government.

Although countless studies have focused on the economic organization and policies of the Gezira Scheme, this article yields a new understanding of the Gezira Scheme, and perhaps of development projects in general, by shifting attention to the symbolic dimensions of such monumental projects. If, following Mitchell (1988), one views the mission of colonialism as that of literally and figuratively creating a world order and ordering the world, the Gezira Scheme is a stunning exemplar. Its miles and miles of irrigation canals and uniform fields stretched out in a huge grid dominate space, its rigid schedules for agricultural operations command time, and above all, its hierarchy of inspectors and bureaucrats supervising, documenting, and disciplining strive to control the people of the Gezira. In Foucault's terms, the Gezira Scheme must be understood as a “disciplinary institution” (1979:139). For this and its implications to become clear, however, requires us to decenter the ostensible economic purpose

of the scheme and to attend to its cultural qualities, viewing economic interaction as merely one medium through which complex social relations are enacted and negotiated. Recognizing the agricultural project as a disciplinary institution reveals the role of the Gezira Scheme in inscribing colonial social relations, most particularly relations between rulers and ruled.¹ In this sense, the Gezira Scheme formed part of the larger colonial effort to establish a political order and constitute relations of authority. My interest here is not so much in the role the Gezira played in the colonization of Sudan, however, but rather how such a project—apparently concerned with specific economic goals—is suffused with noneconomic values and cultural meanings.

Studies of peasant moral economy have drawn attention to the meanings and values inherent in the economic behavior of peasants. Their behavior is often implicitly contrasted with Western economic behavior, which is assumed to be guided by rational calculation and narrowly economic goals (Oroussoff 1993; Scott 1976). Such assumptions are evident in colonial statements about the Gezira Scheme and much of what has subsequently been written about it. Attention to the cultural meanings expressed by the British through and about the Gezira Scheme suggests, however, that such projects embody far more than the simple economic interests of a ruling power. They can be seen as expressions of what might be called a “colonial moral economy.”² Rationality and calculation, moreover, are revealed to function not as the principles governing colonial actions, but rather as tropes through which the colonizers represented Western culture and distinguished themselves from those they colonized. Colonial discourse on agricultural development can be read as cultural assertions having as much to do with the social relations of empire as with the cultivation of crops. Furthermore, while the Gezira Scheme was not very successful in terms of economic performance, it succeeded in the colonial era as a monument to economic modernization and the values of rationality, discipline, and order, and has continued to function as a potent symbol of progress and state power until today.

Central to my investigation of the colonial moral economy of the Gezira Scheme is Arthur Gaitskell, who began work in the Gezira in 1923 and managed the Scheme from 1945 until his retirement in 1952.³ Gaitskell’s 357-page book, *Gezira: A Story of Development in the Sudan*, was published in 1959 shortly after Sudan achieved independence and draws on Gaitskell’s own experience, as well as on other colonial sources. If for no other reason, the case of the Gezira Scheme presents an interesting site to explore colonial moral economy because one of the key actors wrote so voluminously about it. Indeed, the very fact that Gaitskell believed that the Gezira Scheme merited such a book is telling. The Gezira Scheme was not just business; it was a monument of great material and symbolic proportions. In the preface to his book, Gaitskell states that the fundamental theme of his account is the question, “What does the western world stand for?” (1959:22).

Although the Gezira Scheme has been the subject of much research (several books [Barnett 1977; Barnett and Abdelkarim 1991, Gaitskell 1959], numerous articles [for example, Barnett 1981; Ebrahim 1983; Taha 1973; Versluys 1953;

Voll 1980], and countless theses), the questions explored have been relatively narrow in scope (see Bernal 1990 for one critique). Gaitskell's book is widely cited as a reference on the Gezira, yet scholars extract tidbits of information from it without any critical analysis of the text or its premises. Much of the contemporary social science literature on the Gezira has been dominated by debates over the class position of tenants and by neo-Marxist concerns with relations of production and exploitation (Abdelkarim 1985; Al-Arifi 1975; Barnett 1977; O'Brien 1984; Tait 1978). The concern with the culture of power that is addressed obliquely in this literature is taken as a central focus here.

The analysis presented here takes Gaitskell's text as a product of colonial culture and draws on it, along with other sources, to explore both the symbolic meaning of the Gezira Scheme for the colonizers and the ways in which the Gezira inscribed the social and political relations of colonialism. While colonial accounts accord little attention to Sudanese perceptions of the cotton scheme,⁴ we are nonetheless able to gain some sense of the conflict between the colonial order and its Sudanese subjects from these texts. Further insights into how Sudanese experienced such schemes are drawn from oral histories of farmers in the village of Wad al Abbas, where I conducted fieldwork in the 1980s. Wad al Abbas is located across the Blue Nile from the Gezira and was incorporated into a cotton scheme patterned after the Gezira in 1954. The case of the Gezira Scheme suggests that development projects are not solely nor even primarily economic in nature, but disciplinary institutions that establish authority, encode moralities, and order social relations. The Gezira Scheme shares these characteristics with many postcolonial development projects.

Imperialism, (Agri)culture, and Modernity

The opening page of Gaitskell's book is a map. This is not an ordinary map, however, but one that shows key features of the Gezira region set within the map of England (see Figure 1). On this map, the Blue Nile runs from the Sennar Dam at London to meet the White Nile, some distance east of Liverpool, at Khartoum. While the ostensible function of the map is to acquaint British readers with the vast scale of the Gezira, this is not all it accomplishes. By relocating the Gezira in England, the map simultaneously claims the Gezira for Britain and removes it from any larger Sudanese context. In this respect, the map illustrates something about the way the Gezira plain and its inhabitants were treated by colonial policy makers. While British colonial discourse about the development of irrigated cotton production in the Sudan represents agricultural development as a scientific and economic matter, the product of purely rational calculations, British plans for the Sudan were intricately bound up with colonial assumptions about world order and Britain's right to order the world. In this context, science and rationality were key elements of a discourse through which the British represented themselves as progressive and modern, and by doing so, set themselves above what they considered to be the inferior "traditional" world of the Sudanese.

Gaitskell's narrative begins by likening Sudan in the early 20th century to "childhood impressions of the Old Testament" (1959:28–29). He mentions the

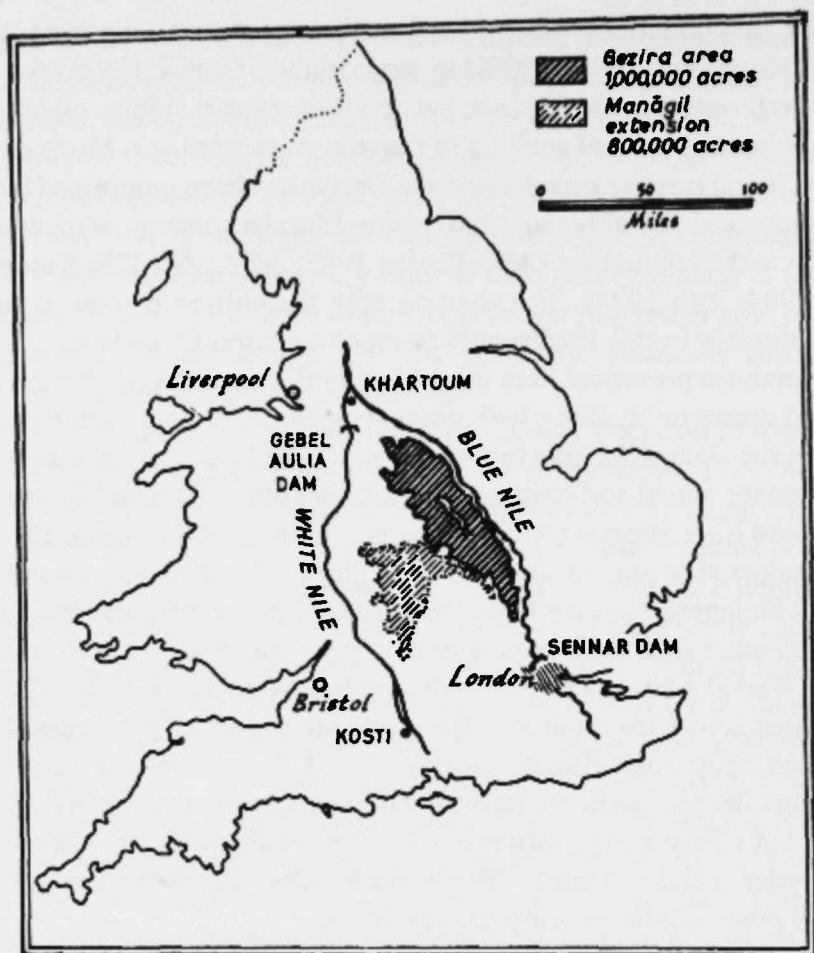


Figure 1

Gaitskell's map showing the Gezira Scheme superimposed on the map of England.
Reproduced courtesy of Faber and Faber, London.

"poor man's goat, the rich man's herd of camels, the patriarchal dignity of elders," and the "sense of immemorial custom repeated and fate accepted." Gaitskell then declares, "It was upon this setting that a uniquely new system of agriculture was to descend" (1959:29). His biblical references and use of the word *descend* almost lead one to believe that the irrigated cotton schemes fell to Sudan from heaven rather than from the drawing board of British colonial officials, engineers, and assorted businessmen. Gaitskell, in fact, constructs a manifest destiny for the Gezira region as divinely intended for an irrigated megaproject. The Gezira plain, he writes, "seemed predestined by nature for the purpose [of irrigation]" and "the country seemed especially suited by nature for cotton production" (Gaitskell 1959:39–56). That Sudan's economy at the time was organized around the production of grain and livestock was, apparently, of no particular significance.

The origins of the Gezira Scheme and the imposition of a new productive regime upon rural Sudanese are naturalized by Gaitskell's account, in which the

forces of nature and destiny take the place of human agency. In much the same way, other colonialists of the period, such as Major Lee Stack, write of "the interests of the Sudan" as if the territory itself demanded to be acted upon in certain ways (quoted in Gaitskell 1959:64). The people of Sudan as agents of their own destiny are noticeably absent from phrases like "poverty-stricken Sudan, searching to raise its standard of living" (Gaitskell 1959:58). Phrases such as these invest the anthropomorphized country with the human capacities denied its people.

In fact, if Sudan-the-country was to realize its manifest destiny, the people of Sudan, who appeared unaware of nature's or God's grand design for their territory, posed something of an obstacle from the British standpoint. Ignorance, superstition, and fanaticism are common themes in colonial descriptions of the Sudanese, suggesting a contrast to the rationality of "civilized" man. As a British journalist expressed it in 1904, "The chief difficulty [facing the British in Sudan] is the universal ignorance and superstition that prevail" (Peel 1969[1904]:271–272). Government reports on the people of the Gezira describe them as apathetic, lazy, and fanatical (Gaitskell 1959:89).

In 1900, Sir Reginald Wingate, governor-general of Sudan, saw the Gezira plain covered with sorghum and wrote, "If a system of irrigation were feasible in the Gezireh, it would become a huge granary capable of supplying not only the whole Soudan but other countries as well" (quoted in Gaitskell 1959:36). Sudan was in fact exporting grain at the beginning of this century (Daly 1986). But if, in the British view, manifest destiny demanded the irrigation of the Gezira, the capital-intensive irrigation plans (which called for damming the Blue Nile at Sennar) could only be justified economically by the production of a lucrative cash crop. Through this circuitous reasoning, irrigated cotton production emerged as the only "rational" use of the Gezira plain. Cotton production made economic sense because of an active world market in the crop and because of its use by British industry. However, there was little consideration of any alternative, even after cotton proved to be more difficult to produce under Sudanese conditions than expected and world market prices fell far below those used in the original calculations of profitability.

Despite the rational planning and technical expertise involved in designing the Gezira Scheme, this megaproject had a powerful lure for colonials quite apart from what it could produce. Indeed, the Gezira project captured British imaginations, being compared to the Panama Canal (Himsbury 1923) and even to the pyramids, in an article in the *Manchester Guardian* (Ransome 1925). The Gezira Scheme represented the triumph of modern civilization over nature and ignorant tradition, which in practice meant the imposition of colonial order on the Sudanese landscape and society. Colonial officials could hardly describe the Gezira project without some reference to its "rational," "scientific," and "modern" qualities. For example, Sir Geoffrey Archer, governor-general of the Sudan in the 1920s, described the Gezira Scheme as the application of "western science to native economic conditions" (quoted in Gaitskell 1959:91). Gaitskell himself wrote,

By establishing control over the land use and insisting on terms of tenancy related to an *economic unit on a sound agricultural rotation* the Government introduced to a peasant society advantages normally available only to large-scale estate management, for on to such a base could be grafted *efficiently* the instruments of *modern agriculture*. [1959:86, emphasis added]

Science, rationality, and efficiency were present more in spirit than in substance, however; indeed, one might say they were invoked like Western deities whose names alone could confer blessings on the endeavor. Colonial calculations of both the cost of capital works and the value of the cotton the Gezira Scheme could produce were far off the mark and had to be revised repeatedly. F. T Hopkinson, an engineer sent from England to report on the construction of the scheme, found rampant mismanagement, overstaffing, and inefficiency (Daly 1986). According to Hopkinson, official estimates bore “no relation to the actual cost” of the scheme’s construction (quoted in Daly 1986:424).⁵ He called the statistical data “voluminous, but unconvincing” and accounting procedures “hopelessly bad” (quoted in Daly 1986:423). Cranes stood idle while human labor was used to move tons of stone. Twenty-five thousand men were hired, when 7,000 would have sufficed (Hopkinson, quoted in Daly 1986:441).

The cotton produced on the Gezira ultimately benefited the British textile industry, but for the colonials involved in administering Sudan or the Gezira Scheme itself, the realization and perpetuation of this mammoth project were goals in their own right. The overall profitability of the scheme was never clear in strict economic terms. Every time the actual cost of the Sennar Dam and associated major works appeared out of proportion to what the scheme might be expected to yield, the proposed size of the irrigated area was increased, thus reducing the relative cost of the dam and making balance sheets appear more favorable (Daly 1986; Gaitskell 1959). What is more, as it turned out, the colonial government ran a loss on the Gezira Scheme nearly one out of every two years from the Gezira’s inception in 1925 up to 1946, when there was a world market boom in cotton prices (Gaitskell 1959:268).⁶

Understanding the Gezira Scheme as, among other things, a means of constituting and expressing power relations, goes a long way in explaining the perpetuation and expansion of the Gezira and similar schemes under colonial rule and after it, despite their checkered records of economic performance.⁷

Erasures and Inscriptions: Establishing the Gezira Scheme

Its aim was to establish presences and absences, to know where and how to locate individuals, to set up useful communications, to interrupt others, to be able at each moment to supervise the conduct of each individual, to assess it, to judge it, to calculate its qualities or merits.

—Michel Foucault, *Discipline and Punish*

The establishment of the Gezira Scheme was both an expression and an extension of British power. One distinctive feature of the Gezira (and of the smaller schemes that preceded and prefigured it) is the extent to which the British ignored

preexisting patterns of land use and social organization. If knowledge is power, so too is the more insidious power to remain ignorant that is the privilege of rulers. The Gezira Scheme represented an attempt not simply to remake or reform rural Sudanese society, but to *create* a (colonial) Sudanese society: a homogeneous society of hardworking and disciplined peasants. The British did not try to transform local practices so much as obliterate them, starting literally from the ground up, with new systems of production and productive relations of their own design. The schemes were enclaves where colonial control permeated the very conditions of people's daily lives to an extent the colonizers were unable to achieve elsewhere.

The first colonial cotton scheme in Sudan was started in 1906 by a U.S. industrialist, Leigh Hunt, who was granted a land concession at Zeidab by the colonial state. Hunt formed a private company, the Sudan Plantations Syndicate, which, in partnership with the colonial government, developed irrigated cotton schemes in Sudan, including the Gezira.⁸ After various failures, including Hunt's proposal that "skilled negroes" from the United States be encouraged to immigrate to Sudan as "technical demonstrators" for Sudanese peasants, a tenancy system was adopted at Zeidab. (Unfortunately, we learn nothing more about Hunt's fantastic plan from Gaitskell than that "Only one batch of negro emigrants was tried" [1959:52].) The tenancy system, however, was not an immediate success. Sudanese farmers refused to participate, and the initial tenancies were given to Egyptian peasants instead.⁹ But in 1908, the Zeidab Scheme gained Sudanese tenants by incorporating land that local farmers had been irrigating by *sagia* (animal-driven waterwheel). According to Gaitskell (1959:53), having seen the scheme in operation, these farmers now welcomed the prospect of pumped water. But farmers got much more than simply a new water supply.

In 1911, another scheme was established at Tayiba in the Gezira plains jointly by the British government and the Sudan Plantations Syndicate. Other pump stations in the Gezira, under the same British-Syndicate management, followed: in 1914 at Barakat, in 1921 at Hag Abdulla, and in 1923 at Wadi al Nau. While the early pump schemes were relatively small, leaving local inhabitants with viable resources outside their bounds, the Gezira Scheme claimed thousands of hectares previously inhabited and exploited by Sudanese peasants and pastoralists. When the Sennar Dam finally was completed in 1925 and the Gezira Scheme opened, the scheme covered an area of about 240,000 *feddans*, or 100,800 hectares (ILO 1976). Local inhabitants lost control of their land, receiving tenancies as compensation. By appropriating land and instituting a new agrarian system, the British essentially destroyed indigenous farming systems and disrupted pastoral systems. This did not mean, however, the definitive triumph of colonial discipline. In fact, new forms of social relations and economic diversity were developed by the Sudanese in and around the cotton schemes (Bernal 1991, 1995).

Research on the Gezira plain prior to the scheme, unfortunately, is scanty. Even rather basic facts are in dispute.¹⁰ It is evident, however, that the Gezira plain was part of a complex and diverse economy. In contrast to the colonial vision

of a self-contained society of cotton-producing peasants stretching for miles and miles of monotonous and precise irrigation canals, Sudanese used the Gezira plains in a variety of ways, and the region was part of a larger system of social and economic relations. While the British regarded Sudanese farmers as ignorant, the few accounts that we have of indigenous agriculture in the Gezira (Randell 1958) and neighboring areas such as Wad al Abbas (Bernal 1991) indicate that local farmers had developed a rather complex system. Riverain farmers took advantage of three different seasonal and ecological zones: rainlands, riverbank floodlands, and island land that emerged from the Blue Nile when the water level dropped. Nomads used the Gezira as seasonal pasture. Trade routes traversed the Gezira, connecting it to Omdurman and parts north and to Ethiopia to the southeast, as well as to the Red Sea in the northeast (Bernal 1991; Randell 1958). The Gezira also lay on the overland pilgrims' route from West Africa to Mecca. The movement of nomads, traders, and pilgrims connected the Gezira to a much wider area and made it a multiethnic crossroads of sorts (Barnett 1977). The area participated in an active trade in the sorghum and livestock it produced, and gave rise to local market centers (Shaw 1987).

The British, however, treated the Gezira plain as a *tabula rasa* on which they could inscribe their vision of a society of yeoman farmers organized around the central function of cotton cultivation. The Gezira Land Ordinance of 1921 essentially abrogated existing landrights and reallocated land as irrigated tenancies for cotton production. Under the terms of the Ordinance, land was compulsorily rented from its original owners by the scheme (at the rate of 10 *piastras* per feddan); in return, landowners were entitled to irrigated tenancies. In Gait-skell's view, "the Ordinance provided an ingenious way of establishing control over land without outraging the traditional right of proprietorship" (1959:85). Sudanese scholars see it somewhat differently: Khalafalla argues that land tenure regulations of the Gezira Scheme "amount to nationalization of land by the colonial administration" (1981:67). And Saeed writes, "The Gezira Scheme marked the beginning of the alienation of a large number of Sudanese peasants (cultivators and herdsman) from the means of production they hitherto owned" (1982:88). A Wad al Abbas villager I spoke with in 1981 recalled the establishment of the scheme there with what might be termed "outraged proprietorship": "They didn't buy the land. They said it belonged to the government. No one talked to them; they just came and took the land. People said, 'Give us money for the land,' but they said, 'No, we will give you tenancies.'"¹¹

The effect of the Gezira Land Ordinance was not to create a landless population but a highly controlled peasantry. Standard tenancies of 30 feddans (12.6 hectares) were allotted to Gezira natives and others, including West African immigrants. Within each tenancy, 10 feddans were to be under cotton, 10 fallow, 5 under sorghum, and 5 under *lubia*, a fodder crop, in yearly rotation.¹² Scheme regulations required tenants to cultivate cotton and permitted the cultivation of the other crops. Irrigation, plowing, and other inputs were supplied by the scheme, which controlled the ginning, grading, and marketing of cotton (Barnett 1977).

Gaitskell himself wonders at how colonial authorities were able to take over the land of the Gezira and establish the scheme without direct violence. He speculates that the inhabitants “accepted the fact that the land had been conquered in war and was being administered with equity in peace” (Gaitskell 1959:90).¹³ This one line of Gaitskell’s entire 357-page account situates the imposition of the Gezira Scheme in the context of brute military force. It is one of the great artifices of the Gezira that it could simultaneously make British power manifest, yet invisible. Barnett’s description of the Gezira scene in the 1970s is worth reading here for the sense it conveys of a man-made order so totalizing that it becomes natural:

As an environment, the Gezira is an area which is entirely dominated by the use to which man has turned it. It is so as much as any of the grimy Lancashire cities whose needs [for cotton] brought it into being. As the mill loomed over the artisans’ mean dwellings in Manchester or Bolton, so the technology of production is an ever present feature of the scene in the Gezira—so omnipresent as to become almost invisible and unnoticed. After a while one has to remind oneself that the geometry of the irrigation channels is a symbol of man’s ordering of his environment, rather than a natural part of that flat expanse of clay. [1977:28]

British power was physically represented by the vast gridwork of Gezira canals and miles of ordered fields. Moreover, through the daily operation of the scheme, the relations between rulers and ruled were hidden in the routines of irrigation cycles, farming schedules, and accounting practices.

Accounting and the Colonization of Tradition

While treating the Gezira region in practice as a cultural and agricultural tabula rasa, the British selectively drew on local “tradition” as a rationale for colonial policy. Even as they represented the Gezira Scheme as “modern, scientific” agriculture, colonial authorities sought to legitimate some of their policies by locating their origin in Sudanese “tradition.” The creation of tradition by colonial authorities was common in Africa (Ranger 1983) and is well documented in British India as well (Cohn 1983). “Tradition” was useful to the colonial architects of the Gezira Scheme because it could conceal (from themselves and perhaps, they hoped, from the Sudanese) the essentially *arbitrary* nature of the economic arrangements regarding cotton production, which ultimately were premised on nothing but the power of the colonizers to impose their terms on Sudanese farmers. The realities of economic and social life in the Gezira region prior to the irrigation scheme were not well documented. Thus colonial actors could alternatively ignore or invent the local past and Sudanese “tradition” as it suited them. This “tradition” was, however, entirely a part of the colonial order. Divorced from its context, distorted, and rigidly fixed as part of a vast bureaucracy, such “tradition” represented imperialist understandings of social and economic relationships rather than Sudanese ones.

One example of how Sudanese tradition was invented to support colonial authority is the policy on paying farmers for cotton.¹⁴ Initially, tenants at Tayiba

(the pump station in the Gezira that preceded the large-scale scheme) were charged a flat rental rate for land and water and received the rest of the cotton profits. However, the Inspector of Agriculture, W. A. Davie, who ran the Tayiba project, proposed to colonial authorities that rent be abandoned in favor of a “share partnership” (Gaitskell 1959). The character of this “partnership” is illustrated by the fact that Sudanese tenants were not consulted about this change; it was simply imposed while cotton cultivation was underway.

The profit-sharing system first introduced at Tayiba is no small matter because it remained in effect on the Gezira without significant alteration until the early 1980s and was adopted on other colonial and postcolonial schemes (Ali 1983). According to Davie, profit-sharing on cotton was based on a traditional crop-sharing agreement that governed sagia (cattle or camel-driven water-wheel) cultivation. “Local sheikhs” at a place called Fedassi described this to Davie as follows: landowner one-tenth, owner of sagia one-tenth, owner of cattle two-tenths, supplier of fodder two-thirtieths, supplier of seed and implements four-thirtieths, and farmer four-tenths of the harvest (Gaitskell 1959:69). Sudanese tenants, like the farmer, would receive 40 percent of the profit from the cotton they produced, while the British Government and the Syndicate would receive the remaining 60 percent, which they further divided into shares of 35 percent and 25 percent respectively. (This was later modified to give the government 40 percent and the Syndicate 20 percent [Daly 1986:425].)

Sagia cultivation was, however, only a small element of the Gezira economy, and the relations governing sagia cultivation were thus not those under which the majority of Gezira farmers operated.¹⁵ Moreover, the division of cotton profits on the schemes, while seeming to conform to “tradition,” departed from it significantly. For one thing, the sagia agreement dealt with the division of *crops*, not profits. The sharing of profits introduced several new elements, the effect of which was to alter the practical meaning of share partnership profoundly. One new element was the great risk (absent from the crop-sharing arrangement) of the uncontrollable fluctuation of world market cotton prices. Furthermore, while the division of a crop into shares is a fairly simple matter, the calculation of production costs and sales profits is not. The accounting system to determine these costs and profits was designed and controlled by colonial authorities, and the importance of accounting in this “profit-sharing” system gave colonials a power over tenants’ cotton returns that no party to the sagia arrangement could possibly have had.¹⁶ We learn something about how Sudanese experienced “profit-sharing” from Gaitskell, who reports that some Gezira tenants had the “impression that the proceeds were some external mystery managed by others for whom they did the work” (1959:188).¹⁷ A 1937 article in a Sudanese-owned newspaper describes the tenant as submerged by doubt “when he sees that the Syndicate’s 20 per cent share results in palaces and luxury while he suffers from the greatest penury in spite of his 40 per cent” (*Al Nil* 1937, quoted in Barnett 1977:121).¹⁸

With the highly variable yields that characterize Sudanese irrigated cotton production, arrangements for the sharing of risk are as important as those for the

sharing of profit. Davie does not mention how risk was shared under the sagia agreement. I suspect it was borne equally by all parties, as it is today in sharecropping arrangements in Wad al Abbas. There, whether large or small, the yield is simply divided, and if the crop fails entirely, landowner and sharecropper both endure the loss; no debts are incurred. Under the colonial system, however, a farmer could end up in debt to management after a year of laboring on cotton, if the sale value of the cotton failed to cover the cost of inputs supplied by the scheme. Debt was, in fact, quite common among tenants even from the early days of the Zeidab Scheme. Furthermore, on the scheme, the individual tenant was assigned a disproportionate share of risk. Under the accounting system created by the British, instead of tenants receiving 40 percent of the profit from their own cotton, the Syndicate was permitted to deduct *any* debts owed by tenants from *any* money due tenants. This meant that the cotton profits of the most productive tenants were taken to cover the cost of scheme-supplied inputs to the less successful or more resistant farmers. (The debts were, nonetheless, still liable to collection from future profits of the individual debtors [Gaitskell 1959:147,157].) Among other things, this artificial construction of all tenants as a community whose profits and losses are pooled stands in contradiction to the economic individualism the British saw themselves as fostering.

The British, moreover, outlawed the Sudanese system of agricultural credit, a crop-mortgage practice called *shayl* (Shaw 1966a); but they did not eliminate the problem of peasant debt so much as centralize it under their own control, setting up colonial bureaucracy in place of the local moneylender. Unlike a farmer's relation to the local moneylender, the relationship between tenants and scheme administration was not governed by shared membership in a community but was unilaterally defined by the British. This they did in strict legal terms that were spelled out in a contract comprised of two documents, the "Tenancy Agreement" and "Standard Conditions of Tenancy," that each individual tenant had to sign or, in most cases, mark. The rigid, unilateral definition of economic obligations by colonialists contrasted markedly with indigenous economic practices that, through flexibility and ambiguity, acknowledged the wider context of relationships in which economic activities were embedded. Given this cultural difference, Barnett points out that the profit-sharing arrangement on the Gezira Scheme certainly departed from tradition, since "in whatever way the traditional sharing arrangement had operated, one thing is certain. Rights and obligations within it would have been diffuse" (1977:93).

The contingent and negotiable character of indigenous economic relationships is evident in the practice of *shayl*, which reportedly entailed "an intricate social relationship between the moneylender and the cultivator. [The lender] is in constant touch with the farmer and is a built-in feature of village society. [T]here develops a kind of moral obligation on the part of the lender to help out in times of need" (Shaw 1966a:D58). By contrast, tenants on the Gezira Scheme received credit *only* for expenses of cotton production. The credit was, furthermore, limited to fixed amounts for particular agricultural operations, and payable only *after* cotton fields had passed an inspection certifying that the operation

had been satisfactorily performed. (Despite these restrictions, Wad al Abbas farmers managed to divert credit to consumption expenses and other pressing needs. It is likely that some Gezira farmers did likewise.)

Despite their selective references to “tradition,” the British imposed a new system of economic and social relations upon Sudanese farmers, one that in key respects was at odds with Sudanese practices and understandings. It would be wrong to construe this, however, as a case of simple opposition between the moral economy of the colonized and the “rational” economy of the Western colonizers. The British objected to Sudanese ways on moral grounds as well as on grounds of efficiency. The British saw the flexibility and the personal relations of dependence and authority that characterized Sudanese society as *inherently* inferior and corrupt. Thus, for example, a District Commissioner in the Blue Nile Province declared that the institutions fostered by indirect rule were inefficient “because they are based on the hereditary system and suffer from the disease of nepotism” (quoted in Gaitskell 1959:215). A British journalist, comparing the tax policies of past regimes with that of the British in Sudan, asserts,

The uncertainty of the amount [of tax] to be paid had, however, an attraction for the Oriental. It varied with the circumstances of the year. The Government wished to get all they could, and in a good year they exacted a most excessive amount; but in a bad year they took little or nothing at all. According to the Western system a fixed moderate amount has to be paid every year, and a whole or partial failure of the crop is not considered any excuse. The latter system is, of course, far the most just and economically sound. [Peel 1969(1904):248–249]

While it is easy to see how the rigid, legalistic *form* of scheme regulations was derived from British colonial culture, the *content* of those regulations cannot be derived solely from the dictates of efficiency or profit maximization. However definitive once in place, scheme regulations were somewhat arbitrary and, as in the case of Davie’s suggestion of “share partnership,” seemingly implemented with little forethought. Nor were scheme procedures subject to the regular review and revision that efficiency would seem to demand; on the contrary, scheme regulations codified an unquestionable authority. (Indeed, it is striking how little reform the schemes have undergone to this day.) The administrative structure and policies of the Gezira Scheme were not so much governed by some pure economic rationality as they were governed by a different *moral* principle: that of British supremacy over Sudanese.

The imposition of colonial authority, whether cloaked in “tradition” or not, was contested by Sudanese farmers in various ways. Farmers at Zeidab initially declined tenancies. And when (prior to the introduction of profit-sharing) the cotton crop at Zeidab failed, farmers were so adamant in their refusal to pay rent that the Sudan Plantations Syndicate resorted to cutting off irrigation to some farmers and suing others in court (Gaitskell 1959:68). Gaitskell also reports that “to get tenants at all rents had to be low, for the idea of a fixed rent, regardless of the crop yields attained, was strange to the local cultivators, accustomed as they were to the considerable fluctuation in yield from natural hazards, locusts

and variations in the river" (1959:68).¹⁹ When the first pump scheme was set up in the Gezira in 1911 as a precursor to the Gezira Scheme, once again not a single local farmer accepted a tenancy. While Gaitskell attributes this to locals being "quite averse to change," he nonetheless reports a quick reversal after a drought made tenancies look appealing (1959:59).

Counter to colonial assumptions that Sudanese farmers were bound by tradition, tenants' awareness of their self-interest was evidenced by their vehement *opposition* to the introduction of profit-sharing at Tayiba in 1913. Far from finding comfort in "tradition," tenants protested the shift to profit-sharing, which by one estimate would reduce tenant returns by 70 percent (Gaitskell 1959:71). Tenants submitted a petition of protest and caused a "disturbance" of enough magnitude that the provincial governor, Major Dickinson, was moved to investigate. In his report, Dickinson quotes a local farmer as saying, "We don't know what may be done next. We may be handcuffed and marched off to prison for all we know" (Dickinson, quoted in Gaitskell 1959:71). Tenants in fact felt imprisoned by the scheme itself, as expressed in a saying Gaitskell recorded, which goes:

The man on the East Bank [of the Blue Nile
across from the Gezira Scheme]
is free like a nomad,
The man on the West Bank [that is, on the Gezira Scheme]
is like a soldier in a camp. [quoted in Gaitskell 1959:156]

Since we have little record of how Sudanese experienced the imposition of the Gezira Scheme, these fragments have great value. Further insight into Sudanese perceptions can be gleaned from a memorandum by W P Clarke, who in 1920 was the first colonial commissioner to contact local people about the introduction of the Gezira Scheme. Clarke paraphrased opposition to the scheme this way:

"The Sheikhs will be nobodies, the Syndicate inspectors will be kings of the country." "I now own and control large areas of rain land, under the new scheme I shall have only 30 feddans just the same as my slave." "We hate these straight lines, we would rather be hungry once every few years, with freedom to range with our cattle unconfined, than have full bellies and be fined if we stray outside these horrid little squares."²⁰ "Our children and our slaves will become swollen headed and no longer regard our authority." [Clarke, quoted in Gaitskell 1959:202]

From these various sources, it is clear that while the colonizers justified the scheme primarily in terms of economic rationality and secondarily in terms of "tradition," Sudanese farmers consistently perceived the scheme as a new system of *political* and *social* relations. Prior to the scheme, Gezira inhabitants of some stature (such as the *shaykhs* and slaveowners quoted by Clarke) feared its impact upon their authority. We do not know how less powerful Sudanese such as slaves and women perceived the scheme, because the sources privilege elite

voices. Once the scheme was established, tenants all stood in much the same subordinate relation to scheme officials, and tenants experienced the scheme as a *system of domination*. The tenants quoted by Dickinson and Gaitskell above, for example, clearly were not simply complaining about the arrangements for determining cotton profits, but were critiquing the unequal power relations at the heart of the scheme. Whether represented in the guise of modernity or of tradition, the colonial order of the cotton schemes had the same meaning for the Sudanese: subjugation to British authority.

Emancipation and the Construction of Colonial Authority

[The scheme] provided him [the tenant] with seed, fertilizer, spraying, and supervision.

—Arthur Gaitskell, *Gezira: A Story of Development in the Sudan*

The colonial vision for the Gezira was that of a stable, economically homogeneous society of yeoman farmers. Sudanese farmers, rather than colonial planters, were to be the backbone of the Sudanese economy, for, as Lord Edward Cecil put it, “The Sudan is not, and never will be, a country suitable for permanent European habitation” (quoted in Gaitskell 1959:46). In 1904, the governor-general reported that the majority of British officials in Sudan favored “creating a peasant proprietary class” (Gaitskell 1959:43, emphasis added). And as J. A. Gillan, civil secretary in the 1930s, expressed it, “The Sudan (thank God) can never be a *naturally* industrial country” (quoted in Sanderson 1985:115, emphasis in original). Just as the British considered Sudan especially suited for cotton production, they considered the rightful occupation and status of the Sudanese to be those of a peasant, regarding any Sudanese of stature with suspicion.

Colonial officials generally disdained “traditional authorities” and were even more contemptuous of Sudanese who, through education, urban living, or other means, acquired Western-style knowledge or sophistication (Collins 1984; Daly 1986). Towns were regarded as “nurseries of ‘corruption,’ subversion, and a ‘bastard’ Westernization that was culturally and morally damaging to Sudanese” (Sanderson 1985:115). The British specifically sought to avoid creating an “effendi class” of indigenous administrators (Daly 1986:362). Indirect rule was used to limit the need for educating Sudanese and to isolate educated Sudanese from political power (Daly 1991). In British terms, schools produced not educated Sudanese, but “half-educated natives” (Daly 1986:379). Implicit in this expression is a racist notion that, in effect, there is no such thing as an “educated native,” since regardless of training a native is always a native, and therefore always less than a (Western) person. The British likewise considered well-to-do Sudanese, such as merchants and landlords, to be thoroughly reprehensible. Local elites were seen as backwards and lacking in integrity. British leadership was thus necessary to set Sudan on the path to progress (Fuller 1984). While the British debated among themselves about the form their leadership should take (the role of private capital versus government and the role of

Sudanese—particularly educated Sudanese—in administration were key issues), Sudan's "need" for British rule was unquestioned.²¹

The Gezira Scheme can be regarded as an important material representation of the kind of "modern" society the British wished to create in Sudan. In some respects, it contrasts with British policies toward areas not targeted for development, where efforts were made to strengthen or even create "traditional" systems (a project for which indirect rule was especially suited). Gaitskell, in fact, derides some colonial officials for interpreting their function as that of "game wardens in a Garden of Eden" (1959:203). As a paramount colonial creation, the Gezira Scheme brings colonial social relations into relief, revealing the contradictions between the drive to incorporate subjects yet distance them (Thomas 1994), and the need to transform the economy, yet keep social and political change in check.

From the 1920s on, the British followed a policy of indirect rule in Sudan under the rubric of "native administration." Sudanese were kept out of all but the lowest level of colonial administration, with Egyptians filling the positions not held by British administrators (Daly 1991). Although the colonial state had granted land for pumping stations to prominent Sudanese in the White Nile Province, this policy, in Gaitskell's view, "had an affinity with the oil and land sheikdoms of the Middle East and it carried the great danger of *corrupting traditional authority* rather than revitalizing it, producing *pashas in Packards* rather than a *progressive peasantry*" (1959:203, emphasis added).

On the Gezira Scheme, an even stricter policy was pursued than elsewhere in Sudan, one that reserved all positions of authority for British colonialists. In colonial discourse, this was justified in terms of equality and individual freedom.²² The Gezira Scheme was praised for emancipating the Sudanese from "traditional" bonds of subordination. An anonymous colonial document states, "Before the Gezira Scheme was started the type of native life gave very little opportunity to individual enterprise. The people were very much under paternal authority, the father holding the whole property of the family, often even after the marriage of his sons" (quoted in Barnett 1977:90). The colonial architects of the scheme sought to reduce all tenants to similar circumstances and avoided creating any positions of authority among tenants. In Gaitskell's words, the administration of the Gezira Scheme was "a direct administration consciously *emancipating*, by the *opportunity of economic independence*, the individual tenants from the control of masters and fathers to whom otherwise they would still have been subservient" (1959:199, emphasis added). The high value the British placed on equality *among* Sudanese, however, proved to be quite compatible with great inequalities *between* the colonizers and the colonized; in fact, the one reinforced the other.

Moreover, despite British discourse on the emancipation of the individual, the Gezira Scheme was premised on a model of the peasant household as that of a male landowner whose wife and children worked the land with him. Women generally were denied tenancies when the Gezira was established, even if they owned rainland. Among British complaints about tenants was the refrain that

"their women" did too little field work and that their sons sought occupations away from the land (Gaitskell 1959).

The efforts of the British to impede the rise of inequality among the Sudanese resulted in one of the most hierarchical agrarian structures imaginable. The official structure of the Gezira Scheme was a rigid bureaucracy, with the tenant at the lowest level. A 1937 article in *Al Nil* describes the relations between management and tenants as one of "absolute despotism" (*Al Nil* 1937, quoted in Barnett 1977:121). While the massive infrastructure and capital investment required to establish the Gezira Scheme and set up its irrigation system may have required central planning, the regulation of water was not the main function of the authoritarian administrative structure instituted by the British. This structure had much more to do with control over Sudanese farmers than with control over water. On the Gezira Scheme, decision making was highly centralized, and peasants were permitted very little scope within which to operate their farms. Tenants were told which crops to grow, how much to plant, and when to carry out the various agricultural operations. Farmers had no say over the purchase of inputs to cotton production such as plowing and insecticide-spraying. Scheme regulations and officials told farmers what to do and when to do it, and inspectors checked the fields to insure the timely and correct completion of the various tasks involved in cotton production. Tenants had no voice in how or where their cotton was ginned and graded, or when and for what price it was sold. Decisions were either taken directly by management or severely curtailed through rigid land use regulations, agricultural schedules, and inspections.

Similarly, the regulations ostensibly governing *land* on the schemes (the "Tenancy Agreement" and "Standard Conditions of Tenancy") were very much about the control of Sudanese farmers, stipulating that cotton production was to be done under the direction and supervision of scheme authorities. This was a contract very much about status. With agricultural decision making concentrated in the hands of colonial authorities, farmers' official role was reduced to that of supplying labor to cotton production.²³ The degree of regimentation led some observers to liken Gezira farmers to workers on an assembly line (Beer 1955:49). Farmers who were deemed negligent in cotton production were penalized financially (by being charged for cultivation of their land by wage-labor under scheme direction) and could even face eviction.

The centralized structure of decision making and the rigid schedules imposed by the colonizers stand in stark contrast to the flexible, individual, and diverse agricultural strategies of Sudanese households prior to the schemes and in areas outside the schemes (Bernal 1991; H. Ibrahim 1979). Before the schemes, farmers in the Gezira (and at Wad al Abbas) timed their sowing with the onset of the rains and the receding flood waters of the Blue Nile, each farmer assessing and responding to conditions according to his or her situation and judgment. As tenants on the scheme, however, the Sudanese were required to farm according to a growing season determined by the availability of irrigation water (which was controlled by management) and to perform specific agricultural operations according to a preset calendar. Among other things, the colonial order thus imposed

a new sense of time on Sudanese farmers: a yearly agricultural timetable divorced from farmers' intimate knowledge of their environment and its seasonal changes. The official agricultural calendar of the schemes was both a symbolic and material expression of relations of power; through ordering time (instituting a schedule), colonial authority exercised control over Sudanese labor.²⁴

In the understanding of the British, "modern" farming was characterized not only by certain inputs but by its very form, schedules and discipline (Cooper 1992). Even as the British saw themselves as "helping" Sudanese farmers, the colonial mission was actually more about *creating* "good farmers" by *directing* their activities. The very nature of this project meant that a "good farmer" by definition was one who would carry out British orders. The imposition of the colonial order in this respect was about disciplining a rural population to accept not only the rigors of irrigated cotton production but also British authority. Thus, the "Standard Conditions of Tenancy" required not only that the tenant cultivate the requisite feddans of cotton, but that the tenant do so "to the satisfaction of the Syndicate and in all things obey the reasonable orders of the Syndicate's officials" (quoted in Gaitskell 1959:340).

While the colonizers methodically created a subordinate and dependent population of farmers, the colonizers also represented and treated farmers as if they were free agents for certain purposes. Thus, in the official discourse of colonial authorities, tenants were "partners" of the colonial government and the Sudan Plantations Syndicate. Sir Geoffrey Archer, governor-general of Sudan in 1925 when the Gezira Scheme opened, described the scheme as "a *partnership* in which the native, the Government, and the Company managing the concern on behalf of the Government, each take an *agreed* percentage of profits" (quoted in Gaitskell 1959:91, emphasis added). The ritual signing of the "Tenancy Agreement" by each individual tenant, moreover, suggests that Sudanese farmers and colonial authorities were merely parties to a legal contract, ignoring the larger political context of the compulsory conditions under which the British established the scheme and unilaterally set the official conditions of tenancy.²⁵ The idea of Gezira tenants as independent parties to the tenancy "agreement" and as "partners" of the colonizers operated as a central legal fiction of the scheme, perhaps reflecting in microcosm the colonial fantasy that the Sudanese population (and other colonized peoples) as a whole willingly consented to British rule.

In order to maintain the idea of a give-and-take between partners, colonial representations of the Gezira Scheme also sought to deny the degree to which the scheme disrupted life in the Gezira and subjugated Sudanese farmers to colonial authority. Governor-General Archer continued,

The native cultivates land which is his own property. *The social system to which he is accustomed remains undisturbed.* In fact just as we endeavour to improve existing native institutions by the addition of consistent elements from more civilised countries, so have we endeavoured in the Gezira project *to improve native cultivation with the aid of scientific methods without alteration of the normal social development of the community.* [quoted in Gaitskell 1959:91, emphasis added]

While in colonial discourse the British mission in the Gezira was about “instructing” the Sudanese to be good farmers, most of the British agricultural inspectors who staffed the Gezira Scheme lacked agricultural qualifications (Fuller 1984:142). In fact, the head of Sudan’s Department of Agriculture during the planning of the Gezira Scheme was a military man, Colonel Wilkinson, who apparently brought little knowledge of agriculture to his post beyond that of “keen gardener” (Gaitskell 1959:63). Like the “half-educated natives,” Sudanese farmers, it seemed, were inferior *by definition*, while British colonials were assumed to possess expertise.

In contrast to the discourse on improving local farming through extending the benefits of “scientific methods,” the actual structure of the scheme indicates that colonial authorities did not trust Sudanese farmers to exercise sound judgment or even to carry out agricultural operations as they were ordered to do without strict British control. Colonial authorities in fact regarded Sudanese farmers with disdain. Among other things, the British compared the Sudanese unfavorably with Egyptian *fellahiin* (peasants), apparently because the latter were more accustomed to the drudgery of intensive agriculture (Gaitskell 1959). A 1929 governor-general’s report on the Gezira Scheme refers to “the somewhat scanty initiative of a simple and fatalistic people” (quoted in Gaitskell 1959:146). Gaitskell himself describes “the character” of Gezira tenants in the following terms: “They were not naturally attracted by a steady routine. Delighting in ostentatious show and despising the miser they were impatient of all arguments in favour of thrift. And in the end they were lazy, as was to be expected in such a climate” (1959:225). Gaitskell’s representation is particularly interesting because it casts Gezira farmers as virtual opposites of the disciplined, thrifty, and hard-working peasant that was the colonial ideal.

Sudanese farmers contested forced cotton production in numerous ways. Since the cotton schemes were largely structured around the attempt to control peasant labor, struggles between Sudanese peasants and colonial authorities were waged largely in terms of labor inputs to cotton production. Tenants had no control over the decision to cultivate cotton and no control over their cotton crop once it was harvested. Farmers could express resistance primarily in the production process itself—by withholding labor. That tenants did resist by slacking is evidenced by, among other things, a continual stream of assertions by colonials that tenants were not doing enough work on cotton.

Rather than acknowledging Sudanese resistance, however, colonial discourse represents Sudanese farmers as lazy and incompetent.²⁶ A 1937 Sudan Plantations Syndicate report states, “The lethargy of Gezira natives makes independence of immigrants very improbable” (quoted in Voll 1981:242).²⁷ A 1942 entry in the Provincial Monthly Diary (an administrative record) characterizes tenants in terms of “the lethargic inertia of Equatoria” (quoted in Daly 1991:190). And Gaitskell comments that the threat of eviction and other sanctions “were of limited value when alternative tenants were no better,” as if “bad” farming was simply a genetic characteristic of the Sudanese rather than a response to oppressive conditions on the scheme (1959:103). The British also

used "tradition" to explain tenants' lack of enthusiasm for cotton production and their use of hired labor. Thus, for example, Gezira society before the scheme is described as having been composed of large landlords who had many slaves to do the farming, and Sudanese are said to have a cultural disdain for agriculture "owing to its former association with slavery" (Culwick 1955:177).

Colonial authorities represented tenants not only as lazy, incompetent, and disdainful of agriculture, but as "idle rich." Gaitskell uses this phrase in a 1928 correspondence (quoted in Daly 1986:426), while a 1942 entry in the Blue Nile Province Monthly Diary calls tenants "leisured landed gentry" (quoted in Daly 1991.190). Sir Harold Wooding derides tenants as "gentleman farmers" and "gentleman loafers" (quoted in Gaitskell 1959:257).²⁸ The British were particularly incensed by tenants' use of hired labor for cotton picking, the most labor-intensive task, and one carried out partly during the hottest months of the year, when temperatures above one hundred degrees Fahrenheit are common. Hired labor was a routine part of the cotton production process at Zeidab and on all subsequent schemes, and was formally institutionalized to the extent that scheme management routinely provided credit to tenants for paying laborers. The use of hired labor by tenants was, nonetheless, dismissed by the colonizers as an unnecessary luxury.²⁹ Gaitskell writes,

However much others might be planning the future society as one of hard-working peasant proprietors they [the tenants] showed a marked preference themselves for a future as gentleman farmers, and one of the first uses to which they put the additional money which the Scheme brought them was to hire others to do all the work. [1959:225]

The representation of tenants as not just lazy but also as leisured, along with the use of *gentleman* as a term of reproach, reveals something about the moral economy underlying colonial discourse about tenants. According to this moral economy, if tenants behaved differently than the colonial planners and scheme administrators intended, it was because of inherent Sudanese moral failings. From the colonial perspective, neglecting cotton, employing hired labor, or aspiring to be other than simply a cotton-farming tenant (or the cotton-farming wife or son of a tenant) was not simply inconvenient for the realization of colonial goals, it was evidence of bad character. Such behavior on the part of tenants contradicted fundamental colonial beliefs about the Sudanese peasant society the British were supposedly creating on the Gezira Scheme. The moral tone of the discourse on tenants makes it clear, moreover, that it was not simply cotton yields that were at stake, but an entire colonial order, one in which subject peoples knew their proper places and did not aspire to live like "gentlemen." A 1920s incident in which a district commissioner went to a school and sent every boy wearing Western shoes home to change into *merkoub* (local-style slippers) conveys some of the ambivalence of the colonial task: to "improve" the natives, without ever allowing them to feel entitled to the same things as the colonizer.³⁰

The refusal of the colonizers to officially acknowledge tenant resistance to the imposed (cotton) regime reinforced the British view of Sudanese farmers as

incapable of responsibility, and this in turn helped to justify the authoritarian structure of the scheme. Colonial discourse on Sudanese farmers' "need" for supervision can thus be understood as another way of talking about coercion. While the British saw themselves as emancipating Sudanese from traditional authority, they regarded any involvement of Sudanese in the administration of the scheme as fraught with danger. Nonetheless, in the 1930s, growing nationalist movements in the Sudan and elsewhere in the British empire compelled British authorities to consider giving some positions on the Gezira Scheme to leaders drawn from the tenant population and to educated Sudanese. As Sir Douglas Newbold wrote in 1940, "unless the Sudanese can soon have some more intelligent participation in the Scheme than that of a labourer, we are bound to have trouble" (quoted in Henderson 1974[1953]:516).³¹

The policy goal of including Sudanese in administration was called *devolution*, a term that in itself conveys misgivings. While evolution is clearly associated with natural processes and "progress," one can only guess what images *devolution* conjured up for colonials—evolution in reverse, perhaps. One of the word's dictionary definitions is, in fact, "degeneration." Colonial fears of allowing Sudanese to assume positions of authority were expressed in terms of the dangers of creating "local despots" (Barnett 1977:127) or, in Gaitskell's words, "petty autocrats" and "petty official[s] of the worst type" (1959:210). These phrases suggest that the colonizers did not even imagine that Sudanese could act in any official capacity beyond a "petty" one. Like the "half-educated" native and "'bastard' Westernization"—dangerous hybrids that threatened to blur the racial/colonial boundaries between rulers and ruled—the petty Sudanese official was inherently inferior and therefore could only be of "the worst type." Outside the scheme, "devolution" was rejected in the same terms. As late as 1944, the governor of the Blue Nile Province could not envision any reduction of British staff before 1964, while another official thought 40 or 50 more years were needed before Sudanese could move into positions of responsibility (Daly 1991:144–45). Gaitskell, sounding several colonial themes, describes the Gezira Scheme population in the 1940s as "a society of *half-knowledge* . . . increasingly resentful of *nursery* orders yet with little mechanism to understand the *complex technical background* to such orders and with none of the *responsibility of association with decisions*" (1959:225, emphasis added). While by current standards Gaitskell seems to epitomize imperialist attitudes, he may actually have been relatively progressive for his time; some colonial government officials regarded him as "too modern and socialistic" (Daly 1991:308). Gaitskell's self-definition as superior to the Sudanese yet in service to them was, however, quite typical (see also Shoettler 1984:129–131).

Just as the resistance of Sudanese farmers to the cotton regime was taken as evidence of laziness and incompetence, necessitating colonial discipline, the hierarchical administrative structure of the Gezira Scheme was justified in terms of a lack of initiative on the part of Sudanese. Discussing prospects for Sudanese involvement in managing the scheme, Gaitskell states, "*Spoon-feeding* had been wise in the early years, and drive and direct control essential through the depression,

but if the tenants were ever going to stand on their own feet *the habit of waiting to have everything organized for them had to be changed*" (1959:206, emphasis added).³² A former District Commissioner justified British colonialism in the Sudan in similar terms, arguing that "the peoples of the Sudan had done little on their own to make their passage through this world more comfortable" (Sandison, quoted in Shoettler 1984:108).

Of course, the British colonial project was not to make the Sudanese "more comfortable," nor had the population of the Gezira simply been waiting for "a new system of agriculture to descend." The Gezira Scheme was established by colonial fiat and, through its hierarchical bureaucracy and rigid production routines, the scheme imposed colonial authority on farmers to such an extent that they had little opportunity to exercise managerial ability or initiative. The important exception to this was tenant initiative outside of, or in opposition to, scheme regulations. This included tenants giving the cultivation of sorghum (their subsistence grain) priority over cotton and pursuing nonagricultural sources of livelihood, such as pastoralism, trade, and various commercial activities, all of which were less directly under colonial control than cotton production (Bernal 1991, 1995).

The Sudan Plantations Syndicate, which directly managed the Gezira Scheme, was even more resistant to sharing power with Sudanese than the colonial government (Daly 1991). This split has been described as a debate between those who saw the British role as that of trusteeship and those for whom economic profit was key (Barnett 1977). But it can also be understood as expressing tensions between a government with limited resources and a capitalism that could not be contained by administrative structures. Some British officials in England and Sudan apparently felt their own authority threatened by the power of private capital in setting Sudan's course. In seeking to protect the Sudanese from the Syndicate, officials were also asserting that they were ultimately in charge. Yet despite debates among colonialists, policies and practices on the Gezira were monolithic and enduring. Colonial and Sudanese critics of the scheme's design and administration had little impact. (In fact, to this day the call for greater farmer participation continues to be heard.³³) As it happened, World War II created a shortage of British staff, which made Sudanese participation in the lower levels of scheme administration a necessity.

Gezira tenants also began to organize collectively in the late 1940s, leading to the creation of an official representative organization, the Tenants' Representative Body. What tenants chose to demand is significant; they did not simply ask for a larger share of cotton profits, but demanded participation in decisions about cotton production, grading, and sales, as well as the right to audit the scheme's accounts (Barnett 1977). Tenants did gain a larger percentage of cotton profits, but they were unsuccessful in the other demands that would have fundamentally altered the power structure of the scheme.

Colonial arguments against Sudanese participation in running the scheme were (predictably) phrased largely in terms of the dangers of inefficiency and poor performance that might result (see Swan 1954:33, for example). Underlying

these arguments, however, it is clear that a moral order was also at stake: the British right to rule and the rightness of British rule. Thus Gaitskell apparently saw no contradiction between “independence” and British domination when he wrote in 1940 that it would be “indefensible to relegate tenants who have tasted economic independence back under selected natives and to pass over to these latter the power over their food and their money which is today exercised by British officials” (quoted in Barnett 1977:126–127). British loathing for Sudanese merchants and landlords, their disdain for “traditional” authorities, and their fears of “petty autocrats” and “half-educated natives” suggest that any Sudanese whose status was more exalted than that of a peasant constituted an implicit threat to the colonial order in which wealth and power were to be British prerogatives.

For the British in colonial Sudan, it was a truism that “there were only a handful of Sudanese who could fill posts of responsibility” (Dr. John Bloss, quoted in Fuller 1984:162). As Sir Hubert Huddleston, governor-general of Sudan, put it in 1945, “a high standard of efficiency” was required, and for important jobs, “a good knowledge of English and a period of education in the U.K. were absolutely essential, [moreover,] it was most unfair to put Sudanese into jobs which they clearly could not hold down” (quoted in Daly 1991:199). In the words of another British colonialist, it was “illogical and undesirable” that a British official serve under a Sudanese (quoted in Daly 1991:145). Gaitskell reports that the British staff of the Gezira Scheme in the 1940s, including himself, opposed placing any Sudanese in a managerial position: “A manager, we felt, could not learn his job by starting at the top [but] by working his way up” (1959:324). He and his colleagues apparently ignored the fact that under the colonial system in place up until that time, British men had occupied all positions of authority, while thousands of Sudanese had worked on the Gezira Scheme for 20-odd years with no possibility of “working their way up.”

Colonial discourse on individual economic freedom and emancipation focused on relations among Sudanese, precluding examination of the inequality *between* the British and the Sudanese, which for the British was part of the taken-for-granted order of the world. This allowed them to represent as emancipating what was in essence a system of forced labor.

Conclusion

The postcolonial world is one in which we may live after colonialism but never without it.

—Nicholas Dirks, *Colonialism and Culture*

The Gezira Scheme and cotton production are not simply the stuff of colonial memory; they occupy a central place in Sudan today. The Gezira Scheme itself has operated continuously for over 70 years without substantial modification. Moreover, this single development project has had a dominant role in setting the course of subsequent development initiatives in Sudan and in shaping the Sudanese economy as a whole.³⁴ The legacy of the Gezira Scheme is not only

the profound economic transformations it entailed, but also the vision of modernity that it represented. In the most literal sense, the Gezira Scheme was a model of development for the Sudanese. Successive Sudanese regimes and Gezira Scheme administrators not only maintained scheme structures and policies uncritically, but developed new areas using the Gezira framework.

At independence in 1956, some 840,000 hectares were under irrigation in the Gezira (Frost 1984); by the 1980s, the total irrigated area of Sudan (mostly in Gezira-like schemes) approached 2 million hectares, and it may reach 2.5 million by the year 2000 (Horowitz 1989; A. Ibrahim 1984).³⁵ Over 2 million Sudanese live or work on such schemes.³⁶ In recent decades, cotton has contributed about half of Sudan's export revenues (Zakaria 1986), and the Gezira Scheme remains the centerpiece of development in this agricultural economy. The lack of other productive investments makes the Gezira Scheme vital to the Sudanese state, since the cotton it produces is one of the only secure sources of export revenues (Barnett and Abdelkarim 1991). Cotton, however, is a secure source of revenue not because tenants are able to produce it profitably, but rather because the state is able to exercise such complete control over the cotton that is produced (Bernal 1988a). Like their British predecessors, moreover, Sudanese bureaucrats and field inspectors continue to see problems (such as poor cotton yields) as stemming from the laziness and irresponsibility of farmers, rather than as negative reflections on the schemes themselves (Barnett 1977: Bernal 1991).

The Gezira Scheme and irrigated cotton production are not solely the concern of statesmen and technocrats, however. They have entered the national imagination as a part of Sudanese identity. References to the schemes crop up, for example, in the fictional accounts of rural life by Sudanese writer Tayeb Salih. In one of Salih's stories, the colonial government plans to establish a pump at the very site where a majestic tree stands:

[T]he government said that the best place for setting up the pump was where the doum tree stood. However, when [the villagers] heard about cutting down the doum tree they all rose up as one man and barred the district commissioner's way. That was in the time of foreign rule. The flies assisted them too—the horse-flies. The man was surrounded by the clamouring people shouting that if the doum tree were cut down they would fight the government to the last man, while the flies played havoc with the man's face. As his papers were scattered in the water we heard him cry out: "All right—doum tree stay—scheme no stay!" [1970:4]

In fact, it is the schemes that have stayed. Moreover, for some Sudanese, the schemes have become a source of national pride and a symbol of "modern Sudan." Thus, for example, a Sudanese postage stamp depicts women harvesting cotton. And a Sudanese acquaintance, in response to my critical comments about the Gezira Scheme, muttered in frustration, "Yes, there are some problems with it. But the Gezira Scheme is the *best* thing we have in the Sudan." He seemed to feel Sudan once again was being measured against Western standards and found wanting. Visitors from the West might be expected to find little in Sudan

that conformed to their sense of order and efficiency, but surely they could at least appreciate the Gezira Scheme. The scheme still serves as much more than a production site; it is a monument to modernity and civilization. A pamphlet published by the Sudan Gezira Board in 1980 boasts that the scheme is a “magnificent example of the ability of the Sudanese people to plan, execute, and run Agricultural Schemes” (SGB 1980). The scheme has come to represent the character of the Sudanese; the pamphlet makes no mention of colonial rule even in a section called “Historical Background,”³⁷ and its cover displays a portrait of then-President Jaafar Nimeiri. However, the colonial legacy echoes in the text, where, for example, the government, the Gezira Board, and the tenant are still referred to as “partners” who carry out “their obligations according to an ordinance which allows the maximum manoevrability [*sic*] for the highest possible production” (SGB 1980).

The analysis of the Gezira Scheme presented here challenges the narrow economic view of colonialism and reveals the limitations of conceptualizing power simply in terms of exploitation (or resistance to it). Neither colonialism nor capitalism stand outside of culture. And in some contexts, like that of the Gezira, science and rationality are best understood not as principles of action, but rather as bases for claiming power and authority. In the case of the Gezira, science and rationality, representing modernity in opposition to “mindless tradition,” can be read as elements of colonial discourse through which the British sought to constitute and legitimate relations of inequality between themselves and the Sudanese.

While much work has been done on political symbolism and colonial culture as reflected in colorful spectacles and exhibitions (Corbey 1993; Hobsbawm and Ranger 1983; Mitchell 1988), development projects are less obvious sites for the creation and expression of cultural and political symbols (see, however, Brow 1988; Tennekoon 1988; Woost 1993). Yet it is clear that productive relations are always culturally constructed and can never be solely economic arrangements (Downs 1995). Indeed, even in the West, where capitalism might be thought to exist in unadulterated form, it has been argued that, far from being free of cultural baggage, “the economy is the main site of symbolic production” (Sahlins 1976:211). The Gezira Scheme certainly lacks the pageantry of a coronation or an exhibition: in fact, it is striking for its drabness and monotonous routine. But it is no less an artifact of culture. For how is such ordinariness of routine constructed and perpetuated over decades if not by the naturalization of the political order? Seen in this light, the Gezira Scheme is as much about discipline as it is about development. In fact, from the colonial perspective it would seem that discipline *was* development, since discipline was regarded as intrinsically beneficial to the colonized regardless of whether it increased their income or productivity. The case of the Gezira Scheme challenges the view of capitalist institutions as necessarily rationalizing, and calls into question the central role of the market in disciplining economic behavior under capitalism. The Gezira Scheme was, in fact, largely a command economy in which the paramount value was not so much a capitalist value like efficiency or profit-maximization,

but rather a moral and political value, that of colonial authority over subject peoples and the world's natural resources.

The Gezira Scheme is not unique; its qualities as a technology of power that above all established relations of authority over rural populations give us insights into contemporary as well as colonial development projects (see Ferguson 1991). The case of the Gezira suggests that development projects cannot be fully understood unless they are recognized as systems for ordering social relations and as vehicles for expressing and encoding moral values.

Notes

Acknowledgments. I am grateful to the National Science Foundation, the Social Science Research Council, and the American Council of Learned Societies for funding my 1980–82 research in Sudan, and to the Kirkland Endowment and Hamilton College for supporting a short research trip in 1988. Archival research in the Public Records Office (London) was supported by the University of California. I am most grateful to the many Sudanese who facilitated my research and offered me their friendship, particularly the villagers of Wad al Abbas. Many thanks to Richard Roberts, James Ferguson, Tekle Woldemikael, and Allen Isaacman for their helpful comments on various drafts of this article. Finally, thanks to Daniel Segal and three anonymous reviewers for their careful readings and constructive criticism.

1. Sudan was not technically a colony of Britain, but administered by Britain jointly with Egypt as the Anglo-Egyptian Condominium. For all practical purposes, however, Sudan was ruled by Britain. Sudan's history, moreover, must be seen in the context of the European colonization of Africa. For these reasons, I use the term *colonial* throughout this article when referring to Britain's relationship to Sudan.

2. I first developed the idea of a colonial moral economy in my article "Cotton and Colonial Order in Sudan: A Social History with Emphasis on the Gezira Scheme" (Bernal 1995). Some of the material presented there is reprised here as I amplify my analysis of the symbolic and cultural dimensions of the Gezira Scheme and situate my discussion in terms of anthropological concerns with development, modernity, and colonialism.

3. Upon leaving the Gezira, Gaitskell (never one to leave well enough alone) headed a mission to investigate the possibility of developing ranching in the Kalahari.

4. "Few British agents concerned themselves to any degree with consequences for the Sudanese of these [economic and social] changes" (Fuller 1984: 166).

5. Like many of the phenomena described in this article, such practices are by no means unique to British colonialism, and in fact, they continue in the postcolonial era. See, for example, Raikes's (1988) wonderful unmasking of the Food and Agriculture Organization's agricultural production figures for Africa.

6. The Sudan Plantations Syndicate fared considerably better, running at a loss in only one year, 1931.

7. The expansion of irrigated cotton production by postcolonial Sudanese regimes has continued until the present. The stagnation of productivity on existing schemes (rather than discouraging further development of this type) drives the state to incorporate new populations into the system of cotton production (Bernal 1988a).

8. One of the aims of the schemes was to make Sudan support the cost of its colonial administration. Ironically, given the great involvement of the colonial government in the

schemes, the colonizers did not believe government should invest in the economy (Sanderson 1985). Thus, private investors like Hunt were sought.

9. Egypt played an important role in Sudan's colonial history. The strategic importance of Sudan to Britain, in fact, was largely to secure the southern border and Nile waters of British-dominated Egypt. Egyptians served in the Condominium administration, and many of the British who served in Sudan were drawn from Egypt.

10. For example, an anonymous colonial document states that wealth was concentrated in the hands of a few large landowners and merchants on whom the general population were dependent clients (Barnett 1977). Others say the Gezira was populated mostly by small owner-cultivators, or predominantly by seminomads, and still others argue that the Gezira was cultivated mainly by slave labor (Daly 1986; Issawi 1966). There is little evidence of a large landlord class in the Gezira or of land shortage or fractionalization. One source of misunderstanding may be colonial land registers, since multiple Gezira families sometimes registered their lands collectively to save on registration fees (Miskin 1950). Some local leaders also registered communal lands as their own property at the establishment of the scheme (Niblock 1987). Even so, Gaitskell reports that large holdings were rare among those whose land was incorporated into the scheme. Individual land tenure itself was not introduced by the British, however, but it has a long history in northern and central riverain Sudan (Awad 1971). The extent of women's participation in agriculture also is a matter of debate (Bernal 1988b).

11. The Wad al Abbas scheme was started by Sudanese merchants licensed and regulated by the colonial government after the model of the Gezira.

12. Over time, there was some experimentation with different rotation systems and tenancy sizes. Lubia was eliminated from the crop mix. Tenancies were increased to 40 feddans on the Gezira, but set at 15 feddans on extensions of the Gezira and most of the other schemes, typically with 5 feddans cotton, 5 feddans sorghum, and 5 feddans fallow each year. This was the cropping pattern instituted at Wad al Abbas.

13. Many Sudanese communities had suffered greatly during the Mahdiya, which caused massive population movements, the disruption of economic life, and famine. Riverain populations, in particular, were treated harshly by the Baggara and Taisha ethnic groups, who formed the core of the Mahdi's supporters.

14. Another example is the rent paid for land that was incorporated into the scheme. Rent was set at ten piastres (two shillings) per feddan, a rate supposedly based on the highest rent paid for rainland prior to the scheme (Gaitskell 1959:85). However, Gaitskell himself states that fixed rents were "strange" to the Sudanese. Abdel Salam (1987) argues that there never was a ten piastre per feddan rent prior to the scheme, but rather a payment of ten percent of the harvest. Rental of land, moreover, probably was not common in the Gezira, where land shortage does not appear to have been a problem before the scheme.

15. Moreover, sagia arrangements themselves varied (Shaw 1966b; Thornton 1966).

16. Furthermore, just as accounting maneuvers were used to give an artificially bright picture of the Gezira Scheme's potential profitability to authorities in England, control over accounting allowed the British to manipulate tenants' profit levels. Sometimes tenants' profits were inflated so that they did not give up on cotton altogether, and sometimes profits were withheld without tenants' knowledge (Gaitskell 1959).

17. Gaitskell describes the payment system as "complicated and altogether remote" (1959:86). The actual payment of profits was spread out in installments with at least a year's delay. Furthermore, the payments of past cotton profits were interspersed

with advances against future profits (to help cover tenants' expenses in producing the current crop). These practices made it difficult for tenants to keep track of cotton returns and avoid falling into debt.

18. The Arabic-language newspaper *Al Nil* was owned by Sayyid Abdel-Rahman (Daly 1991:77). In 1937, it published a series of articles entitled, "What I Have Seen in the Gezira" (Barnett 1977).

19. While one might expect irrigation to reduce variation, such was not the case as pests and other problems plagued the Gezira Scheme, and the price of cotton on the world market rose and fell precipitously.

20. This is presumably a reference to fines for cattle trespass on the schemes.

21. See, for example, the debate in British Parliament of July 10, 1924, and Daly 1986:360–379.

22. This view of the individual being emancipated through connection to colonial rule was expressed by the journalist Sidney Peel, for example, who praised the tax system introduced by the British for the fact that "the Government deals directly with the individual taxpayer" (1969[1904]:251).

23. The tenant initially was responsible for sowing, weeding, and picking. The pulling out of cotton plants and sweeping up of debris after the harvest were added later.

24. Agricultural timetables on the schemes, moreover, were expressed according to Western (solar) calendar dates rather than according to the Islamic lunar calendar familiar to the Sudanese.

25. And, in fact, the only legally binding form of the contract was the English-language one, which very few tenants would have been able to read.

26. Postcolonial literature on the schemes similarly abounds with references to the need to instruct farmers in their duties and enforce compliance to scheme regulations. At the end of a 1966 volume devoted to agricultural development in the Sudan is one short paragraph entitled "Farmer," which concludes, "Until the farmer himself and others are taught to realize their national responsibility, control and supervision are essential to the policy of *Do it at the correct time and do it properly*" (Shaw 1966c:D27, emphasis in original). Another article on the Gezira originally published in 1972, nearly 50 years after the establishment of the scheme, still speaks about the possibilities for growth of "motivation and ability to farm" among tenants (Thornton 1987:350). Kontos describes Gezira farmers as having a "seemingly self-defeating attitude" (1991:138).

27. The immigrants referred to were primarily migrants of West African origin and people from the western region of Sudan, some of whom were granted tenancies, while others made up a large portion of the agricultural laborers, required particularly for picking cotton.

28. Many colonial sentiments continue to echo more than half a century after the establishment of the Gezira Scheme. A 1973 World Bank report on the Gezira states, "Experience has shown that tenant families do relatively little for two reasons. Firstly, there is a strong tradition against landowner families doing farm labour. Secondly, farm wages are so low that most tenants can afford more labourers than necessary" (World Bank 1973, quoted in Olsson and Keddeman 1978:17). Along the same lines, Warburg asserts that the heritage of slavery in Sudan led to "gentlemen farmers" in Gezira (1978:242). Osman and Suleiman write, "In the Gezira and elsewhere tenants apparently prefer to devote a large proportion of their cash incomes to employing casual labour" (1969:455), and the authors go on to equate expenditure on hired labor with the "consumption of leisure" (1969:458).

29. A November 1942 entry in the official monthly diary for the Blue Nile Province makes the exaggerated claim that “a large proportion [of tenants] never do a hands [*sic*] turn themselves,” relying instead on hired labor (Daly 1991:90).

30. This incident is recounted by Francis Deng as told to him by Yusaf Badri (Deng 1984:217).

31. By this time, moreover, Syndicate management was drawing to a close, as the colonial state was scheduled to assume full control of the Gezira Scheme in 1950.

32. One subsequent Gezira administrator defined devolution as “the handing over of power to the local people, thus encouraging them to take more interest in running their own affairs” (Swan 1954:31), as if the Sudanese had no interest in their own affairs without British encouragement.

33. Barnett states, “Attempts to devolve decision-making power on to the tenants have always failed, because effective achievement of such a goal would contradict the entire rationale of the Scheme” (1977:114).

34. Indeed, as Barnett and Abdelkarim (1991) note, the greatest significance of the scheme may lie in the transformations it brought about outside its borders through migrant labor and other influences.

35. The Gezira Scheme and its extensions in Managil and Guneid account for about half of Sudan’s irrigated area.

36. In 1978, it was estimated that over one million people lived or worked on the schemes (Keddeeman and Abdel Gadir 1978). A more recent study estimates that seasonal workers alone number one million, while tenants comprise another 200,000 (Shaaeldin 1986). Given that tenants are usually members of households that include several landless individuals and that there are settled communities of laborers and sharecroppers on the schemes, the resident population of the schemes easily comprises another million.

37. A British engineer’s report and the British Treasury are mentioned, but given no context.

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