The Institution for Social and Policy Studies at Yale University

The Yale ISPS Series

Seeing Like a State

How Certain Schemes to Improve the Human Condition Have Failed

James C. Scott

Yale University Press

New Haven and London

7 Compulsory Villagization in Tanzania: Aesthetics and Miniaturization

The ujamaa village campaign in Tanzania from 1973 to 1976 was a massive attempt to permanently settle most of the country's population in villages, of which the layouts, housing designs, and local economies were planned, partly or wholly, by officials of the central government. We shall examine the Tanzanian experience for three reasons. First, the campaign was by most accounts the largest forced resettlement scheme undertaken in independent Africa up to that time; at least 5 million Tanzanians were relocated.[1] Second, documentation of the villagization process is abundant, thanks to the international interest in the experiment and the relatively open character of Tanzanian political life. Finally, the campaign was undertaken largely as a development and welfare project and not, as has often been the case, as part of a plan of punitive appropriation, ethnic cleansing, or military security (as in South Africa's forced removals and homeland schemes under apartheid). Compared with Soviet collectivization, the ujamaa village campaign was a case of large-scale social engineering by a relatively benign and weak state.

Many other large-scale resettlement schemes can be subjected to much the same analysis. If, in the Tanzanian case, Chinese and Russian models as well as Marxist-Leninist rhetoric play an important ideological role, we should not imagine that these were the only sources of inspiration for such schemes.[2] We could as easily have examined the huge forced removals under apartheid policies in South Africa, which were far more brutal and economically destructive. We could also have analyzed any number of the many large-scale capitalist schemes for

production, often requiring substantial population movements, that have been undertaken with international assistance in poor countries.[3] Julius Nyerere, Tanzania's head of state, viewed the permanent resettlement in ways that were strikingly continuous with colonial policy, as we shall see, and his ideas about both mechanization and economies of scale in agriculture were part and parcel of international development discourse at the time. That discourse of modernization was, in turn, heavily influenced by the model of the Tennessee Valley Authority, the development of capital-intensive agriculture in the United States, and the lessons of economic mobilization from World War II.[4]

In contrast to Soviet collectivization, Tanzanian villagization was not conceived as an all-out war of appropriation. Nyerere made a point of warning against the use of administrative or military coercion, insisting that no one should be forced, against his or her will, into the new villages. And in fact the disruptions and inhumanities of Nyerere's program, however serious for its victims, were not in the same league as those inflicted by Stalin. Even so, the ujamaa campaign was coercive and occasionally violent. It proved, moreover, a failure, ecologically as well as economically.

Even in this "softer" version of authoritarian high modernism, certain family resemblances stand out. The first is the logic of "improvement." As in the "unimproved" forest, the existing patterns of settlement and social life in Tanzania were illegible and resistant to the narrow purposes of the state. Only by radically simplifying the settlement pattern was it possible for the state to efficiently deliver such development services as schools, clinics, and clean water. Mere administrative convenience was hardly the only objective of state officials, and that is our second point. The thinly veiled subtext of villagization was also to reorganize human communities in order to make them better objects of political control and to facilitate the new forms of communal farming favored by state policy. In this context, there are striking parallels between what Nyerere and Tanzanian African National Union (TANU) envisioned and the program of agriculture and settlement initiated by the colonial regimes in East Africa. The parallels suggest that we have stumbled across something generic about the projects of the modern developmentalist state.

Beyond this second criterion of bureaucratic management, however, lay a third resemblance that had nothing directly to do with efficiency. As in the Soviet case, there was also, I believe, a powerful aesthetic dimension. Certain visual representations of order and efficiency, although they may have made eminent sense in some original context, are detached from their initial moorings. High-modernist plans tend to

"travel" as an abbreviated visual image of efficiency that is less a scientific proposition to be tested than a quasi-religious faith in a visual sign or representation of order. As Jacobs suggested, they may substitute an apparent visual order for the real thing. The fact that they look right becomes more important than whether they work; or, better put, the assumption is that if the arrangement looks right, it will also, ipso facto, function well. The importance of such representations is manifested in a tendency to miniaturize, to create such microenvironments of apparent order as model villages, demonstration projects, new capitals, and so on.

Finally, like Soviet collectives, ujamaa villages were economic and ecological failures. For ideological reasons, the designers of the new society had paid virtually no attention to the local knowledge and practices of cultivators and pastoralists. They had also forgotten the most important fact about social engineering: its efficiency depends on the response and cooperation of real human subjects. If people find the new arrangement, however efficient in principle, to be hostile to their dignity, their plans, and their tastes, they can *make* it an inefficient arrangement.

Colonial High-Modernist Agriculture in East Africa

> For the colonial state did not merely aspire to create, under its control, a human landscape of perfect visibility; the condition of this visibility was that everyone, everything, had (as it were) a serial number.
> —Benedict Anderson, *Imagined Communities*

Colonial rule has always been meant to be profitable for the colonizer. This implied, in a rural society, stimulating cultivation for the market. A variety of such means as head taxes payable in cash or in valuable crops, private-sector plantations, and the encouragement of white settlers were deployed to this end. Beginning during World War II and especially after it, the British in East Africa turned to planning large-scale development projects and mobilizing the required labor. A straw in the wind was the conscription of nearly thirty thousand laborers for work on plantations (particularly sisal plantations) during the war. Postwar schemes, although they often had prewar precedents, were far more ambitious: a gigantic groundnut (peanut) scheme; various rice, tobacco, cotton, and cattle schemes; and, above all, elaborate soil-conservation plans mandating a strict regimen of practices. Resettlement and mechanization were integral parts of many schemes.[5] The vast majority of these projects were neither popular nor successful. In fact, one of the standard explanations for the successes of TANU in the

countryside was precisely the widespread popular resentment against colonial agricultural policy—particularly forced conservation measures and such livestock regulations as destocking and cattle dipping.[6]

The most searching account of the logic underlying these schemes of "welfare colonialism" is William Beinert's study of neighboring Malawi (then Nyasaland).[7] Although the ecology is different in Malawi, the broad lines of its agricultural policy varied little from that attempted elsewhere in British East Africa. For our purposes, what is most striking is the degree to which the assumptions of the colonial regime matched those of the independent, and far more legitimate, socialist state of Tanzania.

The point of departure for colonial policy was a complete faith in what officials took for "scientific agriculture" on one hand and a nearly total skepticism about the actual agricultural practices of Africans on the other. As a provincial agricultural officer in the Shire (Tchiri) Valley put it, "The African has neither the training, skill, nor equipment to diagnose his soil erosion troubles nor can he plan the remedial measures, which are based on scientific knowledge, and this is where I think we rightly come in."[8] Although the officer's sentiment was no doubt perfectly sincere, one cannot fail to note how it justified, at the same time, the importance and authority of agricultural experts over mere practitioners.

In keeping with the planning ideology of the time, the experts were inclined to propose elaborate projects—a "total development scheme," a "comprehensive land usage scheme."[9] But there were enormous obstacles to imposing a complicated and draconian set of regulations on a population of cultivators well aware of environmental constraints and convinced of the logic of their own farming practices. Pushing ahead autocratically only courted protest and evasion. It was in just such contexts that the strategy of resettlement was so appealing. Opening new land or repurchasing the estates of white settlers allowed officials to start from scratch with compact village sites and consolidated individual plots. The newly recruited settlers could then be relocated to a prepared, legible site replacing the scattered residences and complex tenure patterns found elsewhere. The more the planners filled in the details—that is, the more that huts were built or specified, sites demarcated, fields cleared and plowed, and plants selected (and sometimes sown)—the greater the chance of controlling the scheme and keeping it to its designed form.

The planning of the lower Shire Valley along these lines, Beinert makes clear, was not an entirely scientific exercise. The scheme's designers were deploying a set of technical beliefs associated with modern agriculture, very few of which had been verified in the context of local conditions. They were also deploying a set of aesthetic and visual standards, some of them obviously originating in the temperate West, which had come to symbolize an ordered and productive agriculture.[10] They were driven by what Beinert called the "technical imagination of what might be possible."

> In the case of ridging and bunding in the lower river, the imagination had an almost pictorial quality: they looked forward to a valley of regular fields, neatly ridged, between long straight contour bunds, below a line of storm drains topped by forests. It was a rectangular contoured order which would render the environment susceptible to control, facilitate technical transformation of, and controls over, peasant agriculture and, perhaps, accord with their sense of planned beauty. It was this solution which would make adequate production possible. But driven by their technical conviction and imagination, they were unresponsive to the effects of their interventions on peasant society and peasant culture.[11]

Aesthetic order in the agricultural and forest landscape was replicated in the human geography as well.[12] A series of model villages, spread evenly across the rectangular grid of fields and linked by roads, would become the center of technical and social services. The fields themselves were so arrayed as to facilitate the dryland rotational farming built into the scheme. In fact, the Shire Valley project was to be a miniature version of the Tennessee Valley Authority, complete with dams along the river and sites indicated for capital-intensive processing plants. A three-dimensional model, along the lines of an architect's model of a new town, was constructed to show, in miniature, what the whole project would look like when completed.[13]

The plans for human settlement and land use in the lower Shire Valley "failed almost completely." The reasons for their failure presage the fiasco of the ujamaa villages. Local cultivators, for example, resisted the generic colonial solution to soil erosion: ridging. As later research showed, in this context their resistance was both economically and ecologically sound. Ridging on sandy soil was unstable, tending to create larger erosion gullies in the rainy season, and ridging caused the soil to dry out quickly during the dry season, encouraging white ants to attack the roots of crops. Would-be settlers hated the regimentation of the government schemes; a "model settlement with communal farming" drew no voluntary migrants and had to be converted into a government maize farm using wage labor. The prohibitions on farming the settlement's rich marshland (*dimba*) deterred volunteers. Later, officials conceded that they, and not the peasants, had been mistaken in this respect.

The lower Shire Valley project miscarried for two larger reasons that are crucial to our understanding of the limits of high-modernist planning. The first is that the planners operated with a model of the agricultural environment that was standardized for the entire valley. It was precisely this assumption that made it possible to specify the generic, and apparently permanent, solution of a particular dryland rotation for all cultivators. The solution was a static, freeze-frame answer to a dynamic and variegated valley environment. In contrast, the peasants possessed a flexible repertoire of strategies depending on the timing and extent of the floods, the microlocal soil compositions, and so on—strategies that were to some degree unique to each farmer, each plot of land, and to each growing season. The second reason behind the failure was that the planners also operated with a standardized model of the cultivators themselves, assuming that all peasants would desire roughly the same crop mix, techniques, and yields. Such an assumption completely ignored key variables, such as family size and composition, sideline occupations, gender divisions of labor, and culturally conditioned needs and tastes. The fact was that each family had its own particular mix of resources and goals that would affect its agricultural strategy year by year in ways that the overall plan did not provide for. As a plan, it was both aesthetically pleasing to its inventors and also precise and consistent within its own strict parameters. As a scheme for development, however, it was the kind of environmental and social taxidermy that doomed it almost from the start. Ironically, successful, voluntary, pioneer settlement outside the government's purview and without any financial assistance continued apace. This disorderly, illegible, but more productive settlement was castigated as squatting and severely reproved, although without much practical effect.

The abject failure of the ambitious groundnuts scheme in Tanganyika just after World War II is also instructive as a dress rehearsal for massive villagization.[14] The joint venture between the United African Company (a subsidiary of Unilever) and the colonial state proposed the clearing of no fewer than 3 million acres of bush that would, when cultivated, yield more than half a million tons of peanuts to be converted to cooking oil for export. The scheme was conceived during the postwar high tide of faith in the economic prowess of a command economy joined to large capitalist firms. By 1950, when less than 10 percent of the acreage had been cleared and not as many nuts had been grown as seeds had been sown, the project was abandoned.

The reasons for the failure were legion. In development circles, in fact, the groundnuts scheme is one of a handful of legendary failures cited as examples of what not to do. At least two of the ingredients of this disaster relate to the failure of the lower Shire Valley project and to the later disaster of large-scale villagization. First, the design for the scheme was narrowly agronomic and abstract. Very general figures for the tractor hours needed to clear land, the amounts of fertilizer and pesticide needed to attain a given yield per acre, and so forth were applied to the new terrain. No detailed mapping of soils, rainfall patterns, or topography and certainly no experimental trials had been undertaken. Field reconnaissance was allotted a mere nine weeks, much of it conducted from the air! The general figures proved wildly erroneous precisely because they were heedless of the particularities of the locality: clayey soil that compacted in the dry season, irregular rainfall, crop diseases for which there were no resistant plant varieties, inappropriate machinery for the soil and terrain.

The second fatal premise in the design of the scheme was its "blind faith in machinery and large-scale operation."[15] The project's founder, Frank Samuel, had a motto: "No operation will be performed by hand for which mechanical equipment is available."[16] The scheme was essentially a quasi-military operation perhaps derived from wartime experience and designed to be technically self-contained. The plan's level of abstraction resembles that of the Soviet collective wheat farm laid out by Wilson, Ware, and Riggin in their Chicago hotel room in 1928 (see chapter 6). The groundnuts scheme intentionally bypassed African smallholders in order to create a colossal industrial farm under European management. As such, the project might have reflected relative factor prices on, say, the plains of Kansas, but surely not in Tanganyika. Had it succeeded in growing peanuts in any quantities, it would have grown them on grossly uneconomic terms. Capitalist high modernism of the utopian kind that inspired the groundnuts scheme was no more appropriate to Tanzania than would be the template of villagization and collectivist, socialist production that inspired Nyerere.

Villages and "Improved" Farming in Tanzania Before 1973

The vast majority of the Tanzanian rural population was, in terms of legibility and appropriation, outside the reach of the state. At independence, an estimated 11 out of 12 million rural dwellers lived "scattered" across the landscape. With the exception of densely settled areas in the cool, wet highlands where substantial amounts of coffee and tea were grown and marketed, much of the population practiced subsistence farming or pastoralism. Much of what they did sell was offered at local markets largely outside the ambit of state supervision and taxation. The objective of colonial agricultural policy and also of the inde-

pendent state of Tanzania (and seconded, early on, by the World Bank) was to assemble more of the population into fixed, permanent settlements and to promote forms of agriculture that would yield a greater marketable surplus, especially for export.[17] Whether these policies took the form of private ventures or socialized agriculture, they were strategies designed, as Goran Hyden has said, "to capture the peasantry."[18] The nationalist regime of TANU was, of course, much more legitimate than its colonial predecessor. But we should not forget that much of the popularity of TANU in rural areas rested on its endorsement of resistance to the onerous and mandatory agricultural regulations of the colonial state.[19] As in Russia, the peasantry had taken advantage of the interregnum at independence to ignore or defy policies declared in the capital.

At the outset, villagization was a central goal of Nyerere and of TANU. The purpose of village formation was at this stage threefold: the delivery of services; the creation of a more productive, modern agriculture; and the encouragement of communal, socialist forms of cooperation. Nyerere outlined the importance of village living as early as 1962, in his inaugural address to Tanzania's parliament.

> And if you ask me why the government wants us to live in villages, the answer is just as simple: unless we do we shall not be able to provide ourselves with the things we need to develop our land and to raise our standard of living. We shall not be able to use tractors; we shall not be able to provide schools for our children; we shall not be able to build hospitals, or have clean drinking water; it will be quite impossible to start small village industries, and instead we shall have to go on depending on the towns for all our requirements; and if we had a plentiful supply of electric power we should never be able to connect it up to each isolated homestead.[20]

By 1967, in a major policy statement called "Socialism and Rural Development," Nyerere elaborated on the specifically socialist aspect of the campaign for village living. It was clear to him that if the present pattern of capitalist development continued, Tanzania would eventually develop a class of wealthy "kulak" (the Russian term then in vogue in TANU circles) farmers who would reduce their neighbors to the status of wage laborers. Ujamaa villages (that is, socialist cooperatives) would set the rural economy on a different path. "What is here being proposed," Nyerere explained, "is that we in Tanzania should move from being a nation of individual peasant producers who are gradually adopting the incentives and ethics of the capitalist system. Instead we should gradually become a nation of ujamaa villages where the people co-operate directly in small groups and where these small groups co-operate together for joint enterprises."[21]

For Nyerere, village living, development services, communal agriculture, and mechanization were a single indissoluble package. Farmers who were scattered hither and yon could not easily be educated or treated for common illnesses, could not learn the techniques of modern agriculture, could not even cooperate, unless they first moved to villages. He declared: "The first and absolutely essential thing to do, therefore, if we want to be able to start using tractors for cultivation, is to begin living in *proper* villages. . . . We shall not be able to use tractors [if we have no villages]."[22] Modernization required, above all, physical concentration into standardized units that the state might service and administer. Little wonder that electrification and tractors, those emblems of development, were on the tip of Nyerere's tongue as well as Lenin's.[23] There is, I believe, a powerful aesthetic of modernization at play here. A modern population must live in communities with a certain physical layout—not just villages, but *proper* villages.

Nyerere, unlike Stalin, at first insisted that the creation of ujamaa villages be gradual and completely voluntary. He imagined that a few families would move their houses to be closer together and would plant their crops nearby, after which they might open a communal plot. Success would attract others. "Socialist communities cannot be established by compulsion," he declared. They "can only be established with willing members; the task of leadership and of Government is not to try and force this kind of development, but to explain, encourage, and participate."[24] Later on, in 1973, having gauged the general resistance to villagization on government terms, Nyerere would change his mind. By then the seeds of coercion had been sown, by a politicized, authoritarian bureaucracy and also by Nyerere's underlying conviction that the peasants did not know what was good for them. Thus, immediately after disavowing "compulsion" in the sentence just quoted, Nyerere concedes, "It may be possible—*and sometimes necessary*—to insist on all farmers in a given area growing a certain acreage of a particular crop until they realize that this brings them a more secure living, and then do not have to be *forced* to grow it."[25] If the peasants could not be persuaded to act in their own interest, they might have to be coerced. This logic was a replication of that in the 1961 World Bank report associated with Tanganyika's first five-year plan. That report was laced with the era's standard discourse about having to overcome the habits and superstitions of a backward and obstinate peasantry. The report also doubted whether persuasion alone would get the job done. While its authors hoped that "social emulation, cooperation, and the expansion of community development services" would transform attitudes, they warned darkly that "where incentives, emulation and propaganda

are ineffective, enforcement or coercive measures of an appropriate sort will be considered."[26]

Scores of village settlements and cultivation schemes were initiated in the 1960s. Despite their great variety—some were joint ventures between the state and foreign firms, some were government or parastatal schemes, and others were spontaneous popular initiatives—most were judged to be failures and closed down, either by decree or by attrition. Three aspects of these schemes seem especially relevant to understanding the all-out villagization campaign that began in 1973.

The first was a penchant for creating pilot schemes. In itself this approach made sense, since policy makers could learn what would work and what would not before embarking on more ambitious plans. Many such schemes, however, became showpiece demonstration farms absorbing huge amounts of scarce equipment, funds, and personnel. For a time, a few of these precious miniatures of progress and modernization were maintained. One influential scheme involving a mere three hundred settlers managed to acquire four bulldozers, nine tractors, a field car, seven lorries, a maize mill, an electric generator, and a cadre of about fifteen administrators and specialists, 150 laborers, and twelve artisans.[27] It was, after a fashion, a successful example of a modern farm, providing that one overlooked its truly legendary inefficiency and the fact that it was irrelevant to the Tanzanian situation.

The second aspect prefiguring the Tanzanian experience was that, given single-party rule, an authoritarian administrative tradition, and a dictator (albeit a rather benevolent one)[28] who wanted results, the normal bureaucratic pathologies were exaggerated. Sites for new settlements were often chosen, not by economic logic, but by finding "blank spots" on the map (preferably near roads) where the settlers might be dumped.[29] In the West Lake (west of Lake Victoria) region (1970), a member of Parliament and five technical specialists descended briefly to design a four-year plan (1970–1974) for all ujamaa villages in the region. They were obviously under great pressure to please their superiors by promising huge increases in cultivation and production which were "utterly unrealistic and completely out of touch with any possible development in the village."[30] The plans were promulgated without any real consultation and were based on abstract assumptions about machine use, days of labor, rates of land clearance, and a new crop regimen, not unlike the groundnut scheme or the Soviet collective hatched in a Chicago hotel room.

Finally, where the pressure was greatest to create new villages, TANU activists and officials ignored Nyerere's advice against compulsion. Thus, when he decided in 1970 that the entire population of

Dodoma (a drought-prone region in central Tanzania) should be relocated to ujamaa villages within fourteen months, officials sprang into action. Relying on everyone's sharp memories of a regional famine in 1969, the officials let it be understood that only those dwelling in ujamaa villages would ever receive famine relief. Those who already lived in ujamaa villages with fewer than the stipulated minimum of 250 families were often forced to amalgamate with another settlement to reach the required size. Communal plots were built into the new settlements, as were, in theory, labor regulations and cropping schedules. When an agricultural officer insisted that there be no discussion of the official decision to enlarge one village's communal field to 170 acres, absorbing the adjacent private plots, he was thrown out of the village meeting in a rare open revolt. An M.P. who sided with the village was barred from running again and placed under surveillance, while the district's TANU chairman, who did likewise, was removed and placed under house arrest. Dodoma was a preview of what was to come.

Lest there be any doubt that villagization meant central control and not simply village formation and communal farming, the sorry fate of the Ruvuma Development Association (RDA) settled the matter.[31] The RDA was an umbrella organization representing fifteen communal villages scattered over one hundred miles in the Songea, a remote and poor district in the southwestern part of the country. Unlike most ujamaa villages, these were the spontaneous creation of young local militants in TANU. They began in 1960, long before Nyerere's policy declaration of 1967, with each village inventing its own forms of communal enterprise. Early on, Nyerere singled out one of the villages, Litowa, heralding it as a place where he could send people to see rural socialism in action.[32] Its school, milling cooperative, and marketing association were the envy of neighboring villages. Given the high level of patronage and financial backing the villagers attracted, it is hard to tell how economically sound their enterprises were. They did, however, anticipate Nyerere's declared policy of local control and nonauthoritarian cooperation. The villagers were, on the other hand, independent and assertive vis-à-vis the state. Having won over many of the local party officials and having pioneered village cooperation on their own, they were not about to let themselves simply be absorbed into bureaucratic party routines. When each family in these villages was ordered to grow one acre of fire-cured tobacco, a crop they considered to be labor-intensive and without profit, they openly protested through their organization. In 1968, following a high-level visit by TANU's central committee, the RDA was officially banned as an illegal organization, its assets seized, and its functions assumed by the party and bureaucracy.[33]

Although it put into practice Nyerere's espoused goals, its refusal to fit into the centralized scheme of the party was fatal.

"To Live in Villages Is an Order"

With his order of December 1973,[34] Nyerere ended a period of villagization marked by sporadic but unauthorized coercion and put the entire machinery of the state behind compulsory, universal villagization.[35] Whatever restraining influence that his public disavowal of the use of force had provided was now nullified; it was replaced by the desire of the party and bureaucracy to produce the quick results he wanted. Villagization was, after all, for their own benefit, as Juma Mwapachu, an official in charge of forced settlement in the district of Shinyanga, explained. "The 1974 Operation [Planned] Villages was not to be a matter of persuasion but of coercion. As Nyerere argued, the move had to be compulsory because Tanzania could not sit back seeing the majority of its people leading a 'life of death.' The State, had, therefore, to take the role of the 'father' in ensuring that its people chose a better and more prosperous life for themselves."[36] New villages and communal farming had been an official policy priority at least since 1967, but the results had been a disappointment. Now it was time to insist on village living, Nyerere claimed, as the only way to promote development and increased production. The official term employed after 1973 was "planned" villages (not "ujamaa" villages), presumably to distinguish them both from the communal-production regime of ujamaa villages, which had failed, and from the unplanned settlements and homesteads in which Tanzanians now resided.

The actual campaign was called *Operation* Planned Villages, conjuring in the popular mind images of military operations. And so it was. The operational plan specified, by the book, a six-phase sequence: "educate [or "politicize"] the people, search for a suitable site, inspect the location, plan the village and demarcate the land clearly, train the officials in the methodology of ujamaa, and resettlement."[37] The sequence was both inevitable and involuntary. Given the "crash" nature of the campaign, educating the people did not mean asking their consent; it meant telling them that they had to move and why it was in their best interest. The pace was, moreover, double-quick. The dress rehearsal in Dodoma in 1970 had allowed planning teams one day per village plan; the new campaign stretched the planning apparatus even thinner.

Nor was the speed of the operation a mere by-product of administrative haste. The planners felt that the shock of lightning-quick settlement would have a salutary effect. It would rip the peasantry from their traditional surroundings and networks and would put them down in entirely new settings where, it was hoped, they could then be more readily remade into modern producers following the instructions of experts.[38] In a larger sense, of course, the purpose of forced settlement is always disorientation and then reorientation. Colonial schemes for state farms or private plantations, as well as the many plans to create a class of progressive yeoman farmers, operated on the assumption that revolutionizing the living arrangements and working environments of people would transform them fundamentally. Nyerere was fond of contrasting the loose, autonomous work rhythms of traditional cultivators with the tight-knit, interdependent discipline of the factory.[39] Densely settled villages with cooperative production would move the Tanzanian population toward that ideal.

Rural Tanzanians were understandably reluctant to move into new communities planned by the state. Their past experience, whether before independence or after, warranted their skepticism. As cultivators and pastoralists, they had developed patterns of settlement and, in many cases, patterns of periodic movements that were finely tuned adaptations to an often stingy environment which they knew exceptionally well. The state-mandated movement threatened to destroy the logic of this adaptation. Administrative convenience, not ecological considerations, governed the selection of sites; they were often far from fuelwood and water, and their population often exceeded the carrying capacity of the land. As one specialist foresaw: "Unless villagization can be coupled with infrastructural inputs to create a novel technology to master the environment, the nucleated settlement pattern may, by itself, be counter-productive in economic terms and destructive of the ecological balance maintained under the traditional settlement pattern. Nucleated settlement will mean over-crowding . . . with people and domestic animals and the accompanying soil erosion, gully formation, and dust bowls which are common features in situations where the human initiative has suddenly overtaxed the carrying capacity of the land."[40]

Given the resistance of the population and the bureaucratic-military imperative of a crash program, violence was inevitable. Threats were all but universal. Those slated to move were again told that famine relief would be accorded only to those who moved peacefully. The militia and the army were mobilized to provide transport and to compel compliance. People were told that if they did not pull down their houses and load them into the government trucks, the authorities would pull down the houses. In order to prevent those forcibly moved from re-

turning, many homes were burned. Typical of the reports that came out of Tanzania was the following description by a student in the poor region of Kigoma: "Force and brutality was used. The police were the ones empowered together with some government officials. For example at Katanazuza in Kalinzi, . . . the police had to take charge physically. In some areas where peasants refused to pack their belongings and board the Operation lorries and trucks, their houses were destroyed through burning or pulling them down. House destruction was witnessed in Nyange village. It became a routine order of the day. And the peasants had unconditionally to shift. It was a forceful villagization in some villages."[41] When the peasantry realized that open resistance was dangerous and probably futile, they saved what they could, often fleeing the new village at the first opportunity.[42]

Such incentives as clinics, piped water, and schools were offered to those who went peacefully. Sometimes they did, although they tried to insist on a written contract with officials and to require that the new services promised them be established *before* they moved. Positive inducements were, apparently, more typical of the early, voluntary phase of villagization than the later, compulsory phase. A few regions were little affected; officials there simply designated many existing settlements as planned villages and left it at that. There was both an economic and political logic to the exclusions. Wealthy, densely settled areas such as West Lake and Kilimanjaro were largely spared for three reasons: farmers there were already living in populous villages; their undisturbed productivity in cash crops was vital for state revenues and foreign exchange; and the groups residing in these areas were overrepresented among the bureaucratic elite. Some critics suggested that the higher the proportion of government officials from an area, the later (and more desultory) its villagization.[43]

When Nyerere learned exactly how thin was the fiction of persuasion and how widespread were the brutalities, he expressed his dismay. He decried the failure to compensate peasants for their destroyed huts and allowed that some officials had moved people to unsuitable locations that lacked water or sufficient arable land. "Despite our official policies and despite all our democratic institutions, some leaders do not listen to the people," he admitted. "They find it much easier to tell people what to do."[44] But it was "absurd to pretend that these cases were typical of villagization,"[45] let alone to call off the campaign. Nyerere wanted local authorities to be knowledgeable, close to the people, and persuasive in putting across state policy; he did not, any more than Lenin did, want them to obey the people's wishes. Not surprisingly, the sources agree that virtually all village meetings were one-

way affairs of lectures, explanations, instructions, scoldings, promises, and warnings. The assembled villagers were expected to be what Sally Falk Moore has appropriately called "ratifying bodies public," giving populist legitimacy to decisions made elsewhere.[46] Far from achieving this populist legitimacy, the villagization campaign created only an alienated, skeptical, demoralized, and uncooperative peasantry for which Tanzania would pay a huge price, both financially and politically.[47]

A Streamlined People and Their Crops

The planned new villages followed both a bureaucratic logic and an aesthetic logic. Nyerere and his planners had a visual idea of just how a modern village should look. Such visual ideas become powerful tropes. Take the word "streamline," for example. "Streamlining" has become a powerful image for modern forms, conveying economy, sleekness, efficiency, and minimal friction or resistance. Politicians and administrators hasten to cash in on the symbolic capital behind the term by declaring that they will streamline this agency or that corporation, allowing the audience's visual imagination to fill in the details of a bureaucratic equivalent of a sleek locomotive or jet. Thus it is that a term that has a specific, contextual meaning in one field (aerodynamics) comes to be generalized to subjects where its meaning is more visual and aesthetic than scientific. Above all, as we shall see, the aesthetic of the new village was a negation of the past. First, however, to the administrative logic.

What greeted Nyerere when he visited new villages in the district of Shinyanga (northwest Tanzania) in early 1975 was fairly typical of bureaucratic haste and insensibility.[48] Some of the villages were laid out as "one long street of houses stretching for miles like the wagons of a locomotive."[49] It appeared to Nyerere that this was a crude case of simply "dumping" the settlers. But such linear villages did have a curious logic behind them. Administrators had a penchant for locating new villages along the major roads, where they could be most easily reached and monitored.[50] Roadside siting rarely made economic sense; it did, on the other hand, demonstrate how the goal of extending the state's control over the peasantry often trumped the state's other goal of raising agricultural production. As Stalin had learned, a captured peasantry was not necessarily a productive peasantry.

The visual aesthetics of how a proper new village should look combined elements of administrative regularity, tidiness, and legibility linked to an overall Cartesian order. This was the modern administra-

tive village, and it was implicitly associated with a modern, disciplined, and productive peasantry. One astute observer, sympathetic to the aims of villagization, noted the overall effect. "The new approach," he explained, "was more in line with bureaucratic thinking and with what a bureaucracy can do effectively: enforced movement of the peasants into new 'modern' settlements, i.e., settlements with houses placed close together, in straight lines, along the roads, and with the fields outside the nucleated village, organized in block farms, each block containing the villager's individual plots, but with only one type of crop, and readily accessible for control by the agricultural extension officer and eventual cultivation by government tractors."[51]

As the exercise of village creation was repeated, the administrative image of the modern village became increasingly codified, a known protocol that almost any bureaucrat could reproduce. "The first response of the West Lake leaders, when they were called upon to implement ujamaa in the Region, was to think of resettlement. Creating new settlements had several advantages. They were highly visible, and easy to organize right from the beginning in the orderly, nice looking way preferred by bureaucrats with the houses and shambas [gardens, farms] in straight lines, etc."[52] Reconstructing the historical lineage of this composite picture of modern rural life would be fascinating, although tangential to our purposes. No doubt it owes something to colonial policy and hence to the look of the modern European rural landscape, and we also know that Nyerere was impressed with what he saw on his trips to the Soviet Union and to China. What is significant, however, is that the modern planned village in Tanzania was essentially a point-by-point negation of existing rural practice, which included shifting cultivation and pastoralism; polycropping; living well off the main roads; kinship and lineage authority; small, scattered settlements with houses built higgledy-piggledy; and production that was dispersed and opaque to the state. The logic of this negation seemed often to prevail over sound ecological or economic considerations.

Communal Farming and Intensive Production

Collecting Tanzanians into villages was seen from the very beginning as a necessary step in establishing completely new forms of agricultural production in which the state would play the major role. The first five-year plan was explicit.

> Although the improvement approach [as opposed to the transformation approach] can contribute to increasing production in . . . zones [with low and irregular rainfall], it cannot in all events give rise to very substantial results because of the dispersal of the farm producers, the impoverishment of the soils by the practice of bush burning and considerable difficulties in marketing products. The policy which Government has decided to pursue with respect to all these zones consists in *re-grouping* and *re-settling* farmers on the most favorable soil, installing there a system of private or collective ownership and introducing *supervised crop rotation and mixed farming* that would permit the maintenance of soil fertility.[53]

The population concentrated in planned villages would, by degrees, grow cash crops (as specified by the agricultural experts) on communal fields with state-supplied machinery. Their housing, their local administration, their agricultural practices, and, most important, their workdays would be overseen by state authorities.

The forced villagization campaign itself had such a disastrous effect on agricultural production that the state was in no position to press ahead immediately with full-scale communal farming. Huge imports of food were necessary from 1973 through 1975.[54] Nyerere declared that the 1.2 billion shillings spent for food imports would have bought one cow for every Tanzanian family. Roughly 60 percent of the new villages were located on semiarid land unsuitable for permanent cultivation, requiring peasants to walk long distances to reach viable plots. The chaos of the move itself and the slow process of adapting to a new ecological setting meant further disruptions of production.[55]

Until 1975, the state's effort to control production outside its own state schemes took the classic colonial form: laws mandating that each household grow certain crops on a minimum number of acres. A variety of fines and penalties were deployed to enforce these measures. In one region, officials announced that no one would be allowed to go to market or ride a bus unless he could prove that he was cultivating the required seven and one-half acres of land. In another case, famine relief was withheld until each villager had planted one acre of cassava in accordance with the minimum acreage law.[56] One major source of the conflict leading to the dissolution of the Ruvuma ujamaa villages was the forced cultivation of fire-cured tobacco at what the villagers took to be confiscatory prices. As the colonizers had understood long before, forced cultivation of this kind could be successfully imposed only on a peasantry that was physically concentrated and therefore able to be monitored and, if necessary, disciplined.[57]

The next step was regulated, communal production.[58] This form of cultivation was anticipated in the Villages and Ujamaa Villages Act (1975), which established "village collective farms" and required village authorities to draw up annual work plans and production targets.

In practice, the size of each communal field and its production plan were typically set by an agricultural field officer (who was eager to please his superiors) and the village chief, with little or no wider consultation.[59] The result was a labor plan that bore no relation to the seasonal supply of local labor, let alone the peasants' own goals. Work on the collective village farm was experienced as little different from corvée labor. Villagers had no choice in the matter, and it was rare for their work to yield a profit. Even though extension agents were directed to devote their efforts exclusively to the communal fields, the crops were often unsuitable, the soil infertile, the seed and fertilizer late to arrive, and the promised tractor with plow nowhere in sight. These shortcomings, plus the provision that any profit (a very rare event) from the communal field could be counted as revenue for the village committee, meant that the work was deeply resented.

In theory, the system of political and labor control was thorough and inescapable. Villages were divided into sections (*mitaa*) and each section into several cells (*mashina*, made up of ten households). The residential order was replicated on the communal fields. Each section was responsible for the cultivation of a segment of the communal field, and within that segment, each cell was responsible for a corresponding fragment. Again in theory, the cell leader was responsible for labor mobilization and surveillance.[60] Structurally, then, the parallels in the residential and labor-disciplinary hierarchies were designed to make them perfectly transparent and legible to the authorities.

In practice, the system broke down quickly. The areas actually under communal cultivation were typically far smaller than the figures officially reported.[61] Most section and village authorities were content to go through the motions when it came to communal cultivation. And they were reluctant to impose fines on their neighbors who neglected the labor rules in order to tend to their all-important private plots.

As a response to such pervasive foot-dragging, many communal fields were divided up, and each household was made responsible for cultivating, say, half an acre.[62] It was no longer necessary to coordinate labor for working a single large field, and the responsibility for cultivation, and hence sanctions, could now be pinpointed. The new system resembled the colonial forced cultivation system, with one difference: the plots were physically consolidated for easier supervision. Still, the absence of any appreciable return from this labor meant that each household focused on its private holding and treated the communal plot as an onerous residual activity, despite occasional official warnings that the priorities should be inverted.[63] The disparity in yields naturally reflected the disparity in attention.

The aim of Tanzanian rural policy from 1967 through the early 1980s was to reconfigure the rural population into a form that would allow the state to impose its development agenda and, in the process, to control the work and production of cultivators. Nowhere is this more explicit than in the document for the third five-year plan (1978): "In the rural sector, the Party has had great success in resettling the rural peasantry in villages *where it is now possible to identify able-bodied individuals able to work* and also to identify the acreage available for agricultural purposes. . . . The plan intends to make sure that in every workplace, rural or urban, *our implementing organs set specific work targets each year*. . . . The village government will see to it that all Party policies in respect of development programmes are adhered to."[64] In case the purpose of visibility and control was doubted, the plan went on to explain that agricultural development "in our present conditions" calls for "setting up work timetables and production targets."[65] Communal farms (now called village government farms) were mandated. But as Henry Bernstein notes, with the incomplete collectivization of land and the unwillingness to resort to truly draconian enforcement measures, these communal farms were bound to founder.[66]

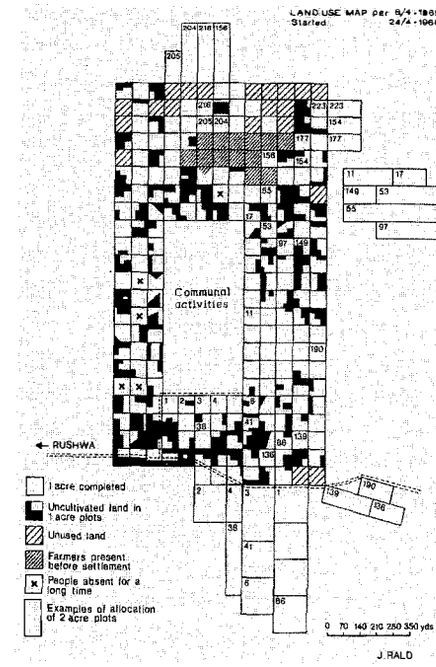
The underlying premise of Nyerere's agrarian policy, for all its rhetorical flourishes in the direction of traditional culture, was little different from that of colonial agrarian policy. That premise was that the practices of African cultivators and pastoralists were backward, unscientific, inefficient, and ecologically irresponsible. Only close supervision, training, and, if need be, coercion by specialists in scientific agriculture could bring them and their practices in line with a modern Tanzania. They were the problem to which the agricultural experts were the solution.

It was precisely the assumption, to quote a Tanzanian civil servant, of a "traditional outlook and unwillingness to change"[67] that *required* the entire series of agricultural schemes, from ujamaa villages to forced relocation to the supervised cultivation launched by the colonial and the independent regimes. This view of the peasantry permeates the 1964 World Bank report and the first Tanganyikan five-year plan. Although the plan notes that "significant inroads have been made into the conservatism of the rural population, who as they become organized into co-operatives, respond encouragingly,"[68] it argues that more extensive measures are called for. Thus the 1964 plan declares: "How to overcome the *destructive conservatism of the people*, and generate the drastic agrarian reforms which must be effected if the country is to survive is one of the most difficult problems the political leaders of Tanzania have to face."[69]

Nyerere entirely agreed with the majority of the extension officials, who believed that their job was to "overcome [the farmers'] apathy and attachment to outmoded practices."[70] He and the World Bank saw eye-to-eye in having the first plan provide for sixty new settlement schemes in which farmers who followed the rules would receive land. There is no mistaking this picture of a willfully ignorant and less than diligent class of cultivators in Nyerere's first broadcast as prime minister in 1961: "If you have cotton unpicked on your shamba, if you have cultivated half an acre less than you could cultivate, if you are letting the soil run needlessly off your land, or if your shamba is full of weeds, if you deliberately ignore the advice given you by the agricultural experts, then you are a traitor in the battle."[71]

The logical counterpart to the lack of faith of the ordinary cultivator was the hyperfaith of the agricultural experts and the "blind faith in machines and large scale operations."[72] Just as the planned village was a vast "improvement" in legibility and control over past settlement practices, the planned agriculture offered by the experts was, in its legibility and order, an "improvement" on the infinite variety and muddle of smallholdings and their existing techniques.[73] In the new villages, the settlers' private plots (*shambas*) were generally mapped out by surveyors and were trim, square or rectangular plots of equal size, placed side by side in straight rows (figure 31). Their design followed the same logic as the segmented communal plots: a logic of clarity and administrative ease rather than agronomic sense. Thus when a scheme for tea cultivation was begun, the smallholders were required to plant their tea in a single block "because it was easier for the extension staff to work on tea that was planted in the same place."[74]

The order of the fields was replicated in the order of the plants within the fields. Tanzanian farmers often planted two or more crops together in the same field (a technique variously called polycropping, intercropping, or relay cropping). In the coffee-growing areas, for example, coffee was often interplanted with bananas, beans, and other annuals. For most agronomists, this practice was anathema. As one dissenting specialist explained, "The agricultural extension service has been encouraging farmers to plant *pure-stand* coffee and considering this practice the *sine qua non* of modern farming."[75] If the crop were bananas, the banana trees must also be in pure stands. Agricultural field officers judged their accomplishments by whether each crop under their supervision was planted in straight, properly spaced rows and was not mixed with any other cultigen.[76] Like large-scale mechanized farming, monocropping had a scientific rationale *in particular contexts*, but extension officers often promoted monocropping uncritically as an article



31. Plan for a ujamaa village: Makazi Mapya, Omulunazi, Rushwa, Tanzania

of faith in the catechism of modern farming. While empirical evidence was even then mounting in favor of the ecological soundness and productivity of some intercropping regimes, the faith continued unabated. What is clear, however, is that monocropping and row planting vastly facilitate the work of administrators and agronomists. Both techniques facilitate inspection and calculations of acreage and yield; they greatly simplify field trials by minimizing the number of variables at play in any one field; they streamline the job of extension recommendations and the supervision of cultivation; and, finally, they simplify control of the harvest. The simplified and legible field crop offers to state agricultural officers many of the same advantages that the "stripped-down" commercial forest offered to scientific foresters and revenue officers.

Bureaucratic Convenience, Bureaucratic Interests

Authoritarian social engineering is apt to display the full range of standard bureaucratic pathologies. The transformations it wishes to effect cannot generally be brought about without applying force or without treating nature and human subjects as if they were functions in a few administrative routines. Far from being regrettable anomalies, these

behavioral by-products are inherent in high-modernist campaigns of this kind. I am purposely ignoring here the more obvious inhumanities that are inevitable whenever great power is placed in the hands of largely unaccountable state authorities who are under pressure from above to produce results despite popular resistance. Instead, I stress two key elements of the bureaucratic response typified by the ujamaa village campaign: first, the civil servants' inclination to reinterpret the campaign so that it called for results that they could more easily deliver, and second, their disposition to reinterpret the campaign in line with what was in their corporate interests.

The first tendency was most readily apparent in the displacement of goals toward strictly quantitative criteria of performance. What might be called a "substantive ujamaa village," whose residents had freely consented to move, had agreed on how to manage a communal plot, and were productive farmers managing their own local affairs (Nyerere's initial vision), was replaced by a "notional ujamaa village," an integer that could be added to an avalanche of statistics. Thus party cadres and civil servants, in showing how much they had accomplished, emphasized the numbers of people moved, new villages created, house lots and communal fields surveyed, wells drilled, areas cleared and plowed, tons of fertilizer delivered, and TANU branches set up. No matter if a given ujamaa village was not much more than a few truckloads of angry peasants and their belongings, unceremoniously dumped at a site marked off with a few surveyors' stakes; it still counted as one ujamaa village to the officials' credit. In addition, a pettifogging aesthetics might prevail over substance. The desire to have all the houses in a planned village perfectly aligned, which was presumably linked to easy surveying and the desire to please the inspecting officials, might require that a house be dismantled in order to move it a scant fifty feet to the surveyor's line.[77]

The "productivity of the political apparatus" was judged by numerical results that permitted aggregation and, perhaps more important, comparisons.[78] And when officials realized that their futures depended on producing impressive figures quickly, a process of competitive emulation was unleashed. One official described the atmosphere that caused him to abandon an initial strategy of selective implementation and to plunge ahead.

> This [strategy] was found to be unworkable, for two main reasons. First, there was a competitive attitude (particularly between regions) with all its political overtones. Here was a moment for self-aggrandizement by proving ability to mobilize a rural population wholesale. Reports were coming in from Mara Region that they were about to complete their operation when we had not started at all. Top party officials were heralding and positively reinforcing the achievements of resettlement in Geita District. Who, in such circumstances, would have wished to lag behind? Political leaders therefore called for quick measures to complete the resettlement exercise in a short time. Such a rushed exercise caused problems, of course, in the form of poorly planned villages.[79]

Nyerere, necessarily perceiving the campaign largely through sets of statistics and self-congratulatory official reports, exacerbated the competitive atmosphere. His glowing report to TANU was a delirium of numbers, targets, and percentages.[80]

> Consider, for example, the question of villagization. In my report to the 1973 TANU Conference I was able to say that 2,028,164 people were living in villages. Two years later, in June 1975, I reported to the next TANU Conference that approximately 9,100,000 people were living in village communities. Now there are about 13,065,000 people living together in 7,684 villages. This is a tremendous achievement. It is an achievement of TANU and Government leaders in cooperation with the people of Tanzania. It means that something like 70% of our people have moved their homes in the space of about three years.[81]

The second, and surely most ominous, deflection of the ujamaa campaign brought off by state authorities was to see that its implementation systematically served to underwrite their status and power. As Andrew Coulson has perceptively noted, in the actual process of creating new villages, the administrators and party officials (themselves competitors) effectively evaded all those policies that would have diminished their privileges and power while exaggerating those that reinforced their corporate sway. Thus such ideas as allowing small ujamaa villages like Ruvuma to operate free of government interference (before 1968), pupils' involvement in decision making in schools (1969), workers' participation in management (1969–70), and the power to elect village councils and leadership (1973–75) were all honored in the breach.[82] High-modernist social engineering is ideal soil for authoritarian pretensions, and Tanzanian officialdom made the most of this chance to consolidate its position.[83]

The Idea of a "National Plantation"

Villagization was meant to radically concentrate Tanzania's peasantry in order to regiment it politically and economically. If it worked, it would transform the dispersed, autonomous, and illegible populations that had thus far eluded most of the state policies they found onerous. The planners pictured, instead, a population settled in government-

designed villages under tight administrative control, planting communal fields in which pure-stand crops were grown according to state specifications. If we allow for the continued existence of substantial private plots and the (related) weakness of labor control, the whole scheme came perilously close to looking like a vast, albeit noncontiguous, state plantation. What a neutral observer might have taken as a new form of servitude, however benevolent, was largely unquestioned by the elites, for the policy sailed under the banner of "development."

It seems incredible, in retrospect, that any state could proceed with so much hubris and so little information and planning to the dislocation of so many million lives. It seems, again in retrospect, a wild and irrational scheme which was bound to fail both the expectations of its planners and the material and social needs of its hapless victims.

The inhumanities of compulsory villagization were magnified by the deeply ingrained authoritarian habits of the bureaucracy and by the pell-mell rush of the campaign. To concentrate on such administrative and political shortcomings, however, is to miss the point. Even if the campaign had been granted more time, more technical skill, and a better "bedside manner," the party-state could not possibly have assembled and digested the information necessary to make a fundamentally schematic plan succeed. The existing economic activity and physical movement of the Tanzanian rural population were the consequences of a mind-bogglingly complex, delicate, and pliable set of adaptations to their diverse social and material environment.[84] As in the customary land-tenure arrangements examined in chapter 1, these adaptations defy administrative codification because of their endless local variability, their elaboration, and their plasticity in the face of new conditions. If land tenure defies codification, then, it stands to reason that the connections structuring the entire material and social life of each particular group of peasants would remain largely opaque to both specialists and administrators.

Under the circumstances, wholesale, by-the-book resettlement made a havoc of peasant lives. Only a few of the most obvious ecological failures of villagization will serve to illustrate the pattern of ignorance. Peasants were forcibly moved from annually flooded lands that were vital to their cropping regime and shifted to poor soils on high ground. They were, as we have seen, moved to all-weather roads where the soil was unfamiliar or unsuitable for the crops envisaged. Village living placed cultivators far from their fields, thus thwarting the crop watching and pest control that more dispersed homesteads made possible. The concentration of livestock and people often had the unfortunate consequence of encouraging cholera and livestock epidemics. For the highly mobile Maasai and other pastoralists, the scheme of creating ujamaa ranches by herding cattle to a single location was an unmitigated disaster for range conservation and pastoral livelihoods.[85]

The failure of ujamaa villages was almost guaranteed by the high-modernist hubris of planners and specialists who believed that they alone knew how to organize a more satisfactory, rational, and productive life for their citizens. It should be noted that they did have something to contribute to what could have been a more fruitful development of the Tanzanian countryside. But their insistence that they had a monopoly on useful knowledge and that they impose this knowledge set the stage for disaster.

Settling people into supervised villages was emphatically *not* uniquely the brainchild of the nationalist elites of independent Tanzania. Villagization had a long colonial history in Tanzania and elsewhere, as program after program was devised to concentrate the population. The same techno-economic vision was shared, until very late in the game, by the World Bank, United States Agency for International Development (USAID), and other development agencies contributing to Tanzanian development.[86] However enthusiastic they were in spearheading their campaign, the political leaders of Tanzania were more consumers of a high-modernist faith that had originated elsewhere much earlier than they were producers.

What was perhaps distinctive about the Tanzanian scheme was its speed, its comprehensiveness, and its intention to deliver such collective services as schools, clinics, and clean water. Although considerable force was applied in seeing the scheme through, even then its consequences were not nearly as brutal or irremediable as those of Soviet collectivization.[87] The Tanzanian state's relative weakness and unwillingness to resort to Stalinist methods[88] as well as the Tanzanian peasants' tactical advantages, including flight, unofficial production and trade, smuggling, and foot-dragging, combined to make the practice of villagization far less destructive than the theory.[89]

The "Ideal" State Village: Ethiopian Variation

The pattern of compulsory villagization in Ethiopia uncannily resembles that of Russia in its coerciveness and Tanzania in its ostensible rationale. Beyond the obvious shared socialist terrain and official visits by Ethiopian officials to Tanzania to observe its program in action,[90] there seems to be a deeper affinity at work between the assertion of state authority in the countryside, on one hand, and the results in terms of process and actual physical plans, on the other. The continuity of

Nyerere's plans with those of the colonizers is obvious in the Tanzanian case. In Ethiopia, which was never colonized, resettlement can be seen as a century-old project of the imperial dynasty to subjugate non-Amharic-speaking peoples and, more generally, to bring fractious provinces under central control.

Although the Marxist revolutionary elite that seized power in early 1974 resorted to forced settlement at an early stage, its leader, Lieutenant Colonel Mengistu Haile Mariam and the Dergue—the shadowy ruling body of the revolutionary regime—did not call for full-scale villagization until 1985. The policy anticipated the eventual resettlement of all 33 million rural Ethiopians. Echoing Nyerere, Mengistu declared, "The scattered and haphazard habitation and livelihood of Ethiopian peasants cannot build socialism. . . . Insofar as efforts are dispersed and livelihood is individual, the results are only hand-to-mouth existence amounting to fruitless struggle and drudgery, which cannot build a prosperous society."[91] The other explanations for village settlement were no different from those given in Tanzania: concentration would bring services to scattered populations, permit state-designed social production (producer cooperatives), and allow mechanization and political education.[92]

Socialism and its precondition, villagization, were virtually Mengistu's way of saying "modern." In his justification for massive resettlement, he decried Ethiopia's reputation as "a symbol of backwardness and a valley of ignorance." He called on Ethiopians to "rally together to free farming from the ugly forces of nature." Finally, he condemned pastoralism per se, praising villagization as a way "to rehabilitate our nomad society."[93]

The pace of resettlement, however, was far more brutal in Ethiopia, inadvertently helping to lay the groundwork for the subsequent rebellions that brought down the regime. By March 1986, a scant year into the operation, the regime claimed that 4.6 million peasants had been settled in 4,500 villages.[94] Only three months were allotted between the first "agitation and propaganda" (read, "command") and the move itself—often over huge distances. All accounts suggest that many of the new settlements received almost nothing in the way of services and had more of the aspect of a penal colony than of a functioning village.

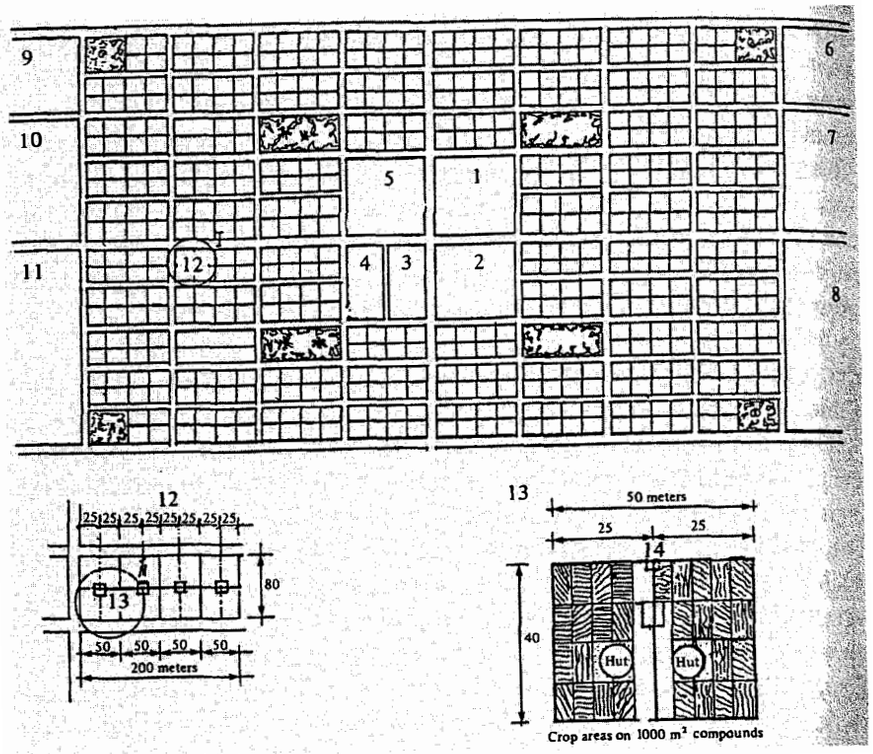
Forced villagization in the Arsi region was apparently planned directly from the center in Addis Ababa, with little or no local participation. There was a strict template which local surveyors and administrators were ordered to follow. The plan was carefully replicated in each location, inasmuch as this was not a regime inclined to tolerate local improvisation. "But the local recruits learned their jobs well, for

the villages and their 1,000 [square] meter compounds, carefully marked by pegs and sod cuts, have followed the geometric grid pattern required by the guidelines. In fact, some villages have been too rigidly laid out; for example, one farmer had to move his large, well-constructed *tukul* [traditional thatched house] some 20 feet so that it would be 'in line' with all the other buildings in its row."[95]

The close alignment between theory and practice can be seen by comparing the layout of a government plan for an ideal village with an aerial photograph of a new village (figures 32 and 33). Notice the central location of all key government functions. A standardizing, round-number, bureaucratic mentality is obvious from the fact that each village was expected to have one thousand inhabitants and each compound one thousand square meters.[96] If every village had the same population and the same land allotment, a single model could simply be applied everywhere; no local knowledge would be required. The identical disposition of land in each settlement would make it that much easier for the authorities to send out general directives, to monitor crop production, and to control the harvest through the new Agricultural Marketing Corporation (AMC). The generic plan was particularly convenient for the hard-pressed surveyors, precisely because it bore no relation whatever to local ecological, economic, or social patterns. In order to facilitate the uniform design of the cookie-cutter villages, the planning officials were directed to choose flat, cleared sites and to insist on straight roads and similar, numbered houses.[97]

The objects of this exercise in geometry were under no illusions about its purpose. When they were finally free to talk, refugees in Somalia told their interviewers that the new settlement pattern was devised to control dissidence and rebellion, to prevent people from leaving, to "make it easier to watch the people," to control the crops, to register possessions and livestock, and (in Wollega) to "allow them to take our boys to war more easily."[98]

In "model producer cooperatives," standardized housing was provided: square, tin-roofed houses (*chika bets*). Elsewhere, traditional housing (*tukuls*) were disassembled and reconstructed in the rigidly stipulated order. As in Russia, all the private shops, tea houses, and small trading establishments were abolished, leaving only such state spaces as the village's mass organization and peasant association offices, literacy shed, health clinic, or state cooperative shop as public gathering places. In contrast to the Tanzanian experience, the Ethiopian campaign had a much stronger military component, as peasants were moved great distances with a view to military pacification and political emasculation.[99] Needless to say, the draconian conditions of Ethiopian

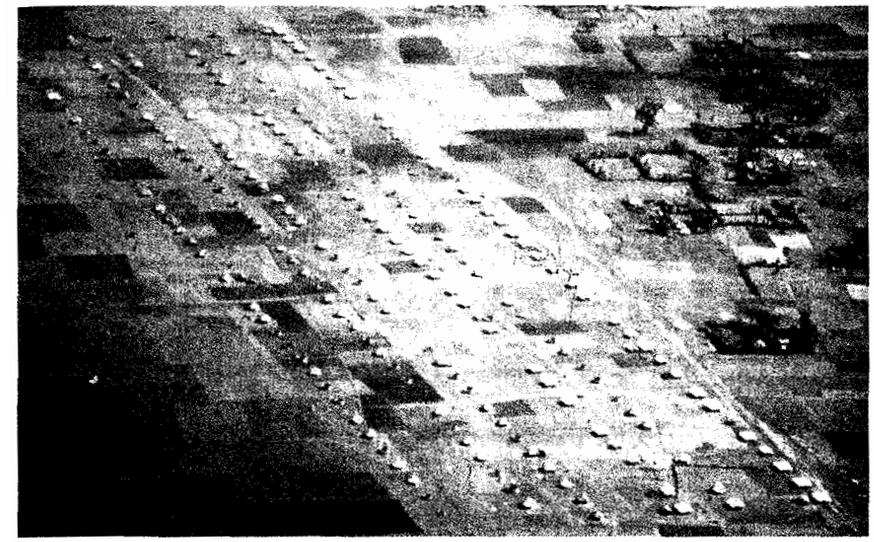


32. A government plan for a standard socialist village, Arsi region, Ethiopia. The layout shows *1*, a mass organization office; *2*, a kindergarten; *3*, a health clinic; *4*, a state cooperative shop; *5*, peasant association office; *6*, reserve plots; *7*, a primary school; *8*, a sports field; *9*, a seed-multiplication center; *10*, a handicrafts center; and *11*, an animal-breeding station. Detail *12* depicts an enlargement of compound sites, and detail *13* is an enlargement of two sites, showing the neighborhood latrine at *14*.

villagization meant that it was even more destructive of peasant livelihoods and of the environment than its Tanzanian counterpart.[100]

A full appreciation of the toll of forced resettlement in Ethiopia extends far beyond the standard reports of starvation, executions, deforestation, and failed crops. The new settlements nearly always failed their inhabitants as human communities and as units of food production. The very fact of massive resettlement nullified a precious legacy of local agricultural and pastoral knowledge and, with it, some thirty to forty thousand functioning communities, most of them in regions that had regularly produced food surpluses.

A typical cultivator in Tigray, a location singled out for harsh measures, planted an average of fifteen crops a season (such cereal crops



33. Aerial view of a resettlement site in southwestern Ethiopia, 1986

as teff, barley, wheat, sorghum, corn, millet; such root crops as sweet potatoes, potatoes, onions; some legumes, including horsebeans, lentils, and chickpeas; and a number of vegetable crops, including peppers, okra, and many others).[101] It goes without saying that the farmer was familiar with each of several varieties of any crop, when to plant it, how deeply to sow it, how to prepare the soil, and how to tend and harvest it. This knowledge was *place specific* in the sense that the successful growing of any variety required local knowledge about rainfall and soils, down to and including the peculiarities of each plot the farmer cultivated.[102] It was also place specific in the sense that much of this knowledge was stored in the collective memory of the locality: an oral archive of techniques, seed varieties, and ecological information.

Once the farmer was moved, often to a vastly different ecological setting, his local knowledge was all but useless. As Jason Clay emphasizes, "Thus, when a farmer from the highlands is transported to settlement camps in areas like Gambella, he is instantly transformed from an agricultural expert to an unskilled, ignorant laborer, completely dependent for his survival on the central government."[103] Resettlement was far more than a change in scenery. It took people from a setting in which they had the skills and resources to produce many of their own basic needs and hence the means of a reasonably self-sufficient independence. It then transferred them to a setting where these skills were of little or no avail. Only in such circumstances was

it possible for camp officials to reduce migrants to mendicants whose obedience and labor could be exacted for subsistence rations.

Although the drought that coincided with forced migration in Ethiopia was real enough, much of the famine to which international aid agencies responded was a product of the massive resettlement.[104] The destruction of social ties was almost as productive of famine as were the crop failures induced by poor planning and ignorance of the new agricultural environment. Communal ties, relations with kin and affines, networks of reciprocity and cooperation, local charity and dependence had been the principal means by which villagers had managed to survive periods of food shortage in the past. Stripped of these social resources by indiscriminate deportations, often separated from their immediate family and forbidden to leave, the settlers in the camps were far more vulnerable to starvation than they had been in their home regions.

The immanent logic, never achieved, of the Dergue's rural policy is telling. If implemented successfully, rural Ethiopians would have been permanently settled along the main roads in large, legible villages, where uniform, numbered houses would have been set in a grid centered on the headquarters of the peasant association (that is, the party), where the chairman, his deputies, and the militia maintained their posts. Designated crops would have been grown collectively, with machinery, on flat fields laid out uniformly by state surveyors and then harvested for delivery to state agencies for distribution and sale abroad. Labor would have been closely supervised by experts and cadres. Intended to modernize Ethiopian agriculture and, not incidentally, to strengthen the control of the Dergue, the policy was literally fatal to hundreds of thousands of cultivators and, finally, to the Dergue itself.

Conclusion

> In quiet and untroubled times, it seems to every administrator that it is only by his efforts that the whole population under his rule is kept going, and in this consciousness of being indispensable every administrator finds the chief reward of his labor and efforts. While the sea of history remains calm the ruler-administrator in his frail bark, holding it with a boat hook to the ship of the people and himself moving, naturally imagines that his efforts move the ship he is holding on to. But as soon as a storm arises and the sea begins to heave and the ship to move, such a delusion is no longer possible. The ship moves independently with its own enormous motion, the boat hook no longer reaches the moving vessel, and suddenly the administrator, instead of appearing a ruler and a source of power, becomes an insignificant, useless, feeble man.
>
> —Leo Tolstoy, *War and Peace*

The conflict between the officials and specialists actively planning the future on one hand and the peasantry on the other has been billed by the first group as a struggle between progress and obscurantism, rationality and superstition, science and religion. Yet it is apparent from the high-modernist schemes we have examined that the "rational" plans they imposed were often spectacular failures. As units of production, as human communities, or as a means of delivering services, the planned villages failed the people they were intended, sometimes sincerely, to serve. In the long run they even failed their originators as units of growing appropriation or as a way of securing the loyalty of the rural population, although they may have still served effectively, in the short run at least, as a way of detaching a population from its customary social network and thus thwarting collective protest.

High Modernism and the Optics of Power

If the plans for villagization were so rational and scientific, why did they bring about such general ruin? The answer, I believe, is that such plans were not scientific or rational in any meaningful sense of those terms. What these planners carried in their mind's eye was a certain aesthetic, what one might call a visual codification of modern rural production and community life. Like a religious faith, this visual codification was almost impervious to criticism or disconfirming evidence. The belief in large farms, monocropping, "proper" villages, tractor-plowed fields, and collective or communal farming was an aesthetic conviction undergirded by a conviction that this was the way in which the world was headed—a teleology.[105] For all but a handful of specialists, these were not empirical hypotheses derived from particular contexts in the temperate West that would have to be carefully examined in practice. In a given historical and social context—say, wheat growing by farmers breaking new ground on the plains of Kansas—many elements of this faith might have made sense.[106] As a faith, however, it was generalized and applied uncritically in widely divergent settings with disastrous results.

If the proverbial man from Mars were to stumble on the facts here, he could be forgiven if he were confused about exactly who was the empiricist and who was the true believer. Tanzanian peasants had, for example, been readjusting their settlement patterns and farming practices in accordance with climate changes, new crops, and new markets with notable success in the two decades before villagization. They seemed to have an eminently empirical, albeit cautious, outlook on their own practices. By contrast, specialists and politicians seemed to

be in the unshakable grip of a quasi-religious enthusiasm made even more potent in being backed by the state.

This was not just any faith. It had a direct relation to the status and interests of its bearers. Because the bearers of this visual codification saw themselves as self-conscious modernizers of their societies, their vision required a sharp and morally loaded contrast between what looked modern (tidy, rectilinear, uniform, concentrated, simplified, mechanized) and what looked primitive (irregular, dispersed, complicated, unmechanized). As the technical and political elite with a monopoly on modern education, they used this visual aesthetic of progress to define their historic mission and to enhance their status.

Their modernist faith was self-serving in other respects as well. The very idea of a national plan, which would be devised at the capital and would then reorder the periphery after its own image into quasi-military units obeying a single command, was profoundly centralizing. Each unit at the periphery was tied not so much to its neighboring settlement as to the command center in the capital; the lines of communication rather resembled the converging lines used to organize perspective in early Renaissance paintings. "The convention of perspective . . . centers everything in the eye of the beholder. It is like a beam from a lighthouse—only instead of travelling outward, appearances travel in. The conventions called those appearances reality. Perspective makes the single eye the center of the visible world. Everything converges on the eye as to the vanishing point of infinity. The visible world is arranged for the spectator as the universe was once thought to be arranged for God."[107]

The image of coordination and authority aspired to here recalls that of mass exercises—thousands of bodies moving in perfect unison according to a meticulously rehearsed script. When such coordination is achieved, the spectacle may have several effects. The demonstration of mass coordination, its designers hope, will awe spectators and participants with its display of powerful cohesion. The awe is enhanced by the fact that, as in the Taylorist factory, only someone outside and above the display can fully appreciate it as a totality; the individual participants at ground level are small molecules within an organism whose brain is elsewhere. The image of a nation that might operate along these lines is enormously flattering to elites at the apex—and, of course, demeaning to a population whose role they thus reduce to that of ciphers. Beyond impressing observers, such displays may, in the short run at least, constitute a reassuring self-hypnosis which serves to reinforce the moral purpose and self-confidence of the elites.[108]

The modernist visual aesthetic that animated planned villages has a

curiously static quality to it. It is rather like a completed picture that cannot be improved upon.[109] Its design is the result of scientific and technical laws, and the implicit assumption is that, once built, the task then becomes one of maintaining its form. The planners aim to have each new village look like the last. Like a Roman military commander entering a new camp, the official arriving from Dar es Salaam would know exactly where everything could be found, from the TANU headquarters to the peasant association and the health clinic. Every field and every house would also, in principle, be nearly identical and located according to an overall scheme. To the degree that this vision had been realized in practice, it would have made absolutely no connections to the particularities of place and time. It would be a view from nowhere. Instead of the unrepeatable variety of settlements closely adjusted to local ecology and subsistence routines and instead of the constantly changing local response to shifts in demography, climate, and markets, the state would have created thin, generic villages that were uniform in everything from political structure and social stratification to cropping techniques. The number of variables at play would be minimized. In their perfect legibility and sameness, these villages would be ideal, substitutable bricks in an edifice of state planning. Whether they would *function* was another matter.

The Failure of Grids

> Ideas cannot digest reality.
> —Jean-Paul Sartre

It is far easier for would-be reformers to change the formal structure of an institution than to change its practices. Redesigning the lines and boxes in an organizational chart is simpler than changing how that organization in fact operates. Changing the rules and regulations is simpler than eliciting behavior that conforms to them.[110] Redesigning the physical layout of a village is simpler than transforming its social and productive life. For obvious reasons, political elites—particularly authoritarian high-modernist elites—typically begin with changes in the formal structure and rules. Such legal and statutory changes are the most accessible and the easiest to rearrange.

Anyone who has worked in a formal organization—even a small one strictly governed by detailed rules—knows that handbooks and written guidelines fail utterly in explaining how the institution goes successfully about its work. Accounting for its smooth operation are nearly endless and shifting sets of implicit understandings, tacit coor-

dinations, and practical mutualities that could never be successfully captured in a written code. This ubiquitous social fact is useful to employees and labor unions. The premise behind what are tellingly called work-to-rule strikes is a case in point. When Parisian taxi drivers want to press a point on the municipal authorities about regulations or fees, they sometimes launch a work-to-rule strike. It consists merely in following meticulously all the regulations in the *Code routier* and thereby bringing traffic throughout central Paris to a grinding halt. The drivers thus take tactical advantage of the fact that the circulation of traffic is possible *only* because drivers have mastered a set of practices that have evolved outside, and often in contravention, of the formal rules.

Any attempt to completely plan a village, a city, or, for that matter, a language is certain to run afoul of the same social reality. A village, city, or language is the jointly created, partly unintended product of many, many hands. To the degree that authorities insist on replacing this ineffably complex web of activity with formal rules and regulations, they are certain to disrupt the web in ways that they cannot possibly foresee.[111] This point is most frequently made by such proponents of laissez-faire as Friedrich Hayek, who are fond of pointing out that a command economy, however sophisticated and legible, cannot begin to replace the myriad, rapid, mutual adjustments of functioning markets and the price system.[112] In this context, however, the point applies in important ways to the even more complex patterns of social interaction with the material environment that we call a city or a village. Cities with a long history may be called "deep" or "thick" cities in the sense that they are the historical product of a vast number of people from all stations (including officialdom) who are long gone. It is possible, of course, to build a new city or a new village, but it will be a "thin" or "shallow" city, and its residents will have to begin (perhaps from known repertoires) to make it work in spite of the rules. In cases like Brasília or Tanzania's planned villages, one can understand why state planners may prefer a freshly cleared site and a "shocked" population moved abruptly to the new setting in which the planners' influence is maximized. The alternative is to reform in situ an existing, functioning community that has more social resources for resisting and refashioning the transformation planned for it.

The thinness of artificially designed communities can be compared to the thinness of artificially designed languages.[113] Communities planned at a single stroke—Brasília or the planned village in Tanzania or Ethiopia—are to older, unplanned communities as Esperanto is to, say, English or Burmese. One can in fact design a new language that in many respects is more logical, simpler, more universal, and less irregular and that would technically lend itself to more clarity and precision. This was, of course, precisely the objective of Esperanto's inventor, Lazar Zamenhof, who also imagined that Esperanto, which was also known as international language, would eliminate the parochial nationalisms of Europe.[114] Yet it is also perfectly obvious why Esperanto, which lacked a powerful state to enforce its adoption, failed to replace the existing vernaculars or dialects of Europe. (As social linguists are fond of saying, "A national language is a dialect with an army.") It was an exceptionally thin language, without any of the resonances, connotations, ready metaphors, literature, oral history, idioms, and traditions of practical use that any socially embedded language already had. Esperanto has survived as a kind of utopian curiosity, a very thin dialect spoken by a handful of intelligentsia who have kept its promise alive.

The Miniaturization of Perfection and Control

The pretense of authoritarian high-modernist schemes to discipline virtually everything within their ambit is bound to encounter intractable resistance. Social inertia, entrenched privileges, international prices, wars, environmental change, to mention only a few factors, ensure that the results of high-modernist planning will look substantially different from what was originally imagined. Such is even the case where, as in Stalinist collectivization, the state devotes great resources to enforcing a high degree of formal compliance with its directives. Those who have their hearts set on realizing such plans cannot fail to be frustrated by stubborn social realities and material facts.

One response to this frustration is a retreat to the realm of appearances and miniatures—to model cities and Potemkin villages, as it were.[115] It is easier to build Brasília than to fundamentally transform Brazil and Brazilians. The effect of this retreat is to create a small, relatively self-contained, utopian space where high-modernist aspirations might more nearly be realized. The limiting case, where control is maximized but impact on the external world is minimized, is in the museum or the theme park.[116]

This miniaturization of perfection, I think, has a logic all its own, in spite of its implicit abandonment of large-scale transformations. Model villages, model cities, military colonies, show projects, and demonstration farms offer politicians, administrators, and specialists an opportunity to create a sharply defined experimental terrain in which the number of rogue variables and unknowns are minimized. If, of course, such experiments make it successfully from the pilot stage to general

application, then they are a perfectly rational form of policy planning. There are advantages to miniaturization. The constriction of focus makes possible a far higher degree of social control and discipline. By concentrating the material and personnel resources of the state at a single point, miniaturization can approximate the architecture, layout, mechanization, social services, and cropping patterns that its vision calls for. Small islands of order and modernity, as Potemkin well understood, are politically useful to officials who want to please their superiors with an example of what they can accomplish. If their superiors are sufficiently closeted and misinformed, they may mistake, as Catherine the Great apparently did with Potemkin's convincing scenery, the exemplary instance for the larger reality.[117] The effect is to banish at one place and one time, in a kind of high-modernist version of Versailles and Le Petit Trianon, the larger loss of control.

The visual aesthetic of miniaturization seems significant as well. Just as the architectural drawing, the model, and the map are ways of dealing with a larger reality that is not easily grasped or manageable in its entirety, the miniaturization of high-modernist development offers a visually complete example of what the future looks like.

Miniaturization of one kind or another is ubiquitous. It is tempting to wonder whether the human tendency to miniaturization—to create "toys" of larger objects and realities that cannot so easily be manipulated—does not also have a bureaucratic equivalent. Yi-fu Tuan has brilliantly examined how we miniaturize, and thereby domesticate, the larger phenomena that are outside our control, often with benign intentions. Under this elastic rubric, he includes bonsai, bonseki, and gardens (a miniaturization of the plant world) along with dolls and dollhouses, toy locomotives, toy soldiers and weapons of war, and "living toys" in the form of specially bred fish and dogs.[118] While Tuan concentrates on more or less playful domestication, something of the same desire for control and mastery can also, it would seem, operate on the larger scale of bureaucracies. Just as *substantive* goals, the achievement of which are hard to measure, may be supplanted by thin, notional statistics—the number of villages formed, the number of acres plowed—so may they also be supplanted by microenvironments of modernist order.

Capital cities, as the seat of the state and of its rulers, as the symbolic center of (new) nations, and as the places where often powerful foreigners come, are most likely to receive close attention as veritable theme parks of high-modernist development. Even in their contemporary secular guises, national capitals retain something of the older tradition of being sacred centers for a national cult. The symbolic power

of high-modernist capitals depends not, as it once did, on how well they represent a sacred past but rather on how fully they symbolize the utopian aspirations that rulers hold for their nations. As ever, to be sure, the display is meant to exude power as well as the authority of the past or of the future.

Colonial capitals were fashioned with these functions in mind. The imperial capital of New Delhi, designed by Edwin Lutyens, was a stunning example of a capital intended to overawe its subjects (and perhaps its own officials) with its scale and its grandeur, with its processional axes for parades demonstrating military power and its triumphal arches. *New* Delhi was naturally intended as a negation of what then became *Old* Delhi. One central purpose of the new capital was captured nicely by the private secretary to George V in a note about the future residence of the British viceroy. It must, he wrote, be "conspicuous and commanding," not dominated by the structures of past empires or by the features of the natural landscape. "We must now let [the Indian] see for the first time the power of Western science, art, and civilization."[119] Standing at its center for a ceremonial occasion, one might forget for a moment that this tiny gem of imperial architecture was all but lost in a vast sea of Indian realities which either contradicted it or paid it no heed.

A great many nations, some of them former colonies, have built entirely new capitals rather than compromise with an urban past that their leaders were determined to transcend; one thinks of Brazil, Pakistan, Turkey, Belize, Nigeria, the Ivory Coast, Malawi, and Tanzania.[120] Most were built following the plans of Western or Western-trained architects, even when they attempted to incorporate references to vernacular building traditions. As Lawrence Vale points out, many new capitals seem intended as completed and self-contained objects. No subtraction, addition, or modification is contemplated—only admiration. And in their strategic use of hills and elevation, of complexes set behind walls or water barriers, of finely graded structural hierarchy reflecting function and status, they also convey an impression of hegemony and domination which was unlikely to prevail beyond the city limits.[121]

Nyerere planned a new capital, Dodoma, that was to be somewhat different. The ideological commitments of the regime were to be expressed in an architecture that was purposely *not* monumental. Several interconnected settlements would undulate with the landscape, and the modest scale of the buildings would eliminate the need for elevators and air conditioning. Dodoma was very definitely, however, intended to be a utopian space that both represented the future and explicitly

negated Dar es Salaam. The master plan for Dodoma condemned Dar as a "dominant focus of development, . . . the antithesis of what Tanzania is aiming for, and is growing at a pace, which if not checked, will damage the city as a humanist habitat and Tanzania as an egalitarian socialist-state."[122] While planning villages for everyone else whether they liked it or not, the rulers also designed for themselves a new symbolic center incorporating, not by accident, I think, a hilltop refuge amidst manicured, orderly surroundings.

If the intractable difficulties of transforming existing cities can lead to the temptation to erect a model capital city, so can the difficulties of transforming existing villages prompt a retreat into miniaturization. One major variant of this tendency was the creation of carefully controlled production environments by frustrated colonial extension officers. Coulson notes the logic involved: "If a farmer could not be forced, or persuaded, the only alternatives were to ignore them altogether and go for mechanized agriculture controlled by outsiders (as in the Groundnuts Scheme, or on settler farms controlled by Europeans), or to take them right away from the traditional surroundings, to settlement schemes where in return for receiving land they might perhaps agree to follow the instructions of the agricultural staff."[123]

Still another variant was the attempt to distill out of the general population a cadre of progressive farmers who would then be mobilized to practice modern agriculture. Such policies were followed in elaborate detail in Mozambique and were important in colonial Tanzania as well.[124] When the state confronted a "brick wall of peasant conservatism," notes a 1956 document from the Tanganyika Department of Agriculture, it became necessary "to withdraw the effort from some portions so as to concentrate on small selected points, a procedure which has come to be known as the 'focal-point approach.' "[125] In their desire to isolate the small sector of the agricultural population that they thought would respond to scientific agriculture, the extension agents frequently overlooked other realities that bore directly on their substantive mission—realities that were under their nose but not under their aegis. Pauline Peters thus describes an effort in Malawi to depopulate a rural area of all but those whom the agricultural authorities had designated "master farmers." Extension agents were attempting to create a microlandscape of "neatly-bounded, mixed-farming lot[s] based on rotation of single-stand crops which would replace the scattered, multi-cropped farming they considered backward. In the meantime, they entirely ignored an autonomous and general rush to plant tobacco—the very transformation they were trying to bring about by force."[126]

The planned city, the planned village, and the planned language (not to mention the command economy) are, we have emphasized, likely to be thin cities, villages, and languages. They are thin in the sense that they cannot reasonably plan for anything more than a few schematic aspects of the inexhaustibly complex activities that characterize "thick" cities and villages. One all-but-guaranteed consequence of such thin planning is that the planned institution generates an unofficial reality—a "dark twin"—that arises to perform many of the various needs that the planned institution fails to fulfill. Brasília, as Holston showed, engendered an "unplanned Brasília" of construction workers, migrants, and those whose housing and activities were necessary but were not foreseen or were precluded by the plan. Nearly every new, exemplary capital city has, as the inevitable accompaniment of its official structures, given rise to another, far more "disorderly" and complex city *that makes the official city work*—that is virtually a condition of its existence. That is, the dark twin is not just an anomaly, an "outlaw reality"; it represents the activity and life without which the official city would cease to function. The outlaw city bears the same relation to the official city as the Parisian taxi drivers' actual practices bear to the *Code routier*.

On a more speculative note, I imagine that the greater the pretense of and insistence on an officially decreed micro-order, the greater the volume of nonconforming practices necessary to sustain that fiction. The most rigidly planned economies tend to be accompanied by large "underground, 'gray,' informal," economies that supply, in a thousand ways, what the formal economy fails to supply.[127] When this economy is ruthlessly suppressed, the cost has often been economic ruin and starvation (the Great Leap Forward and the Cultural Revolution in China; the autarkic, moneyless economy of Pol Pot's Cambodia). Efforts to force a country's inhabitants to maintain permanent, fixed residences tend to produce large, illegal, undocumented populations in urban areas where they have been forbidden to go.[128] The insistence on a rigid visual aesthetic at the core of the capital city tends to produce settlements and slums teeming with squatters who, as often as not, sweep the floors, cook the meals, and tend the children of the elites who work in the decorous, planned center.[129]